



VAASAN YLIOPISTO

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(Eds)

Responsible Leadership

*Proceedings of the Corporate Responsibility Research
(CRR) 2009 Conference*

PROCEEDINGS OF THE UNIVERSITY OF VAASA

REPORTS 157

VAASA 2009

Julkaisija Vaasan yliopisto	Julkaisuajankohta Joulukuu 2009	
Tekijä(t) Amos Mumba (toim.) Tarja Ketola (toim.)	Julkaisun tyyppi Toimitettu julkaisu	
	Julkaisusarjan nimi, osan numero Vaasan yliopiston julkaisuja. Selvityksiä ja raportteja, 157	
Yhteystiedot Vaasan yliopisto PL 700 65101 Vaasa	ISBN 978-952-476-285-4	
	ISSN 1238-7118	
	Sivumäärä 884	Kieli englanti
Julkaisun nimike Vastuullinen johtajuus. Corporate Responsibility Research (CRR) 2009 konferenssin julkaisu		
Tiivistelmä <p>Viides yritys vastuun kansainvälinen Corporate Responsibility Research (CRR) -konferenssi pidettiin Vaasan yliopistolla 7.–9.9.2009. Järjestäjänä oli tuotantotalouden yritys vastuutiimi. Konferenssin teemana oli vastuullinen johtajuus.</p> <p>CRR-konferenssit kuvastavat yritysten tämänhetkistä reaalityöntekijäsuutta ja etsivät tutkimuspapereita koko yritys vastuun laajalta kentältä. Vastuullinen liiketoiminta on yritysten tapa edesauttaa kestävä kehitys. Nykyinen yritys vastuun ja kestävä kehitys tutkimus pohjautuu monen vuosikymmenen pituiseen tutkimusperintöön. Varsinkin viime vuosina kiinnostus vastuulliseen liiketoimintaan ja kestävä kehitykseen on lisääntynyt ennennäkemättömällä vauhdilla.</p> <p>Tästä huolimatta teot jäävät usein jälkeen sanoista. Vaikeissa tilanteissa, joissa vastuullista yritysjohtajuutta tarvittaisiin, ei ehkä löydykään ketään, joka ottaisi ohjokset käsiinsä ja kääntäisi vastuulliset sanat teoiksi. Tämä ongelma ilmenee monissa ympäristövastuukysymyksissä, kuten ilmastonmuutos; taloudellisen vastuun kysymyksissä, kuten pankkikriisit; ja sosiaalis-kulttuurisissa vastuun kysymyksissä, kuten alkuperäisasukkaiden oikeudet</p> <p>CRR 2009 -konferenssi toivotti tervetulleiksi tutkimuspapereita kaikilta yritys vastuun ja kestävä kehitys aloilta ja haastoi kaikki osanottajat miettimään, miten heidän tutkimustensa tuloksista voisi luoda esikuvia vastuullisesta johtajuudesta.</p> <p>Konferenssiin lähetettiin 115 abstraktia ja konferenssissa pidettiin 75 esitystä. Suurin osa esittäjistä lähetti tutkimuspaperinsa myös tähän konferenssijulkaisuun. Toivomme, että nämä paperit edistävät vastuullista johtajuutta sekä tutkimuksessa että käytännössä.</p>		
Asiasanat Yritysvastuu, vastuullinen liiketoiminta, kestävä kehitys, tutkimus, johtajuus		

Publisher Vaasan yliopisto	Date of publication December 2009	
Author(s) Amos Mumba (ed.) Tarja Ketola (ed.)	Type of publication Edited publication	
	Name and number of series Proceedings of the University of Vaasa. Reports, 157	
Contact information University of Vaasa P.O. Box 700 FI-65101 Vaasa Finland	ISBN 978-952-476-285-4	
	ISSN 1238-7118	
	Number of pages 884	Language English
Title of publication Responsible Leadership. Proceedings of the Corporate Responsibility Research (CRR) 2009 Conference		
Abstract <p>The fifth international Corporate Responsibility Research (CRR) conference was held at the University of Vaasa, Finland, during 7-9 September 2009. It was organized by the CR-team of Industrial Management. The conference theme was Responsible Leadership.</p> <p>The CRR conferences reflect the current corporate reality and seek research papers from a wide field of corporate responsibility. Corporate responsibility is the companies' way of enhancing sustainable development. Research in corporate responsibility and sustainability today is founded on a tradition spanning several decades. Especially in recent years interest in corporate responsibility and sustainability has accelerated at an unprecedented pace.</p> <p>Yet actions often lag behind words. In serious situations, when responsible corporate leadership would be needed, there may not be anyone to take charge and turn the words of responsibility into action. This problem is evident in many environmental responsibility issues, such as climate change; economic responsibility issues, such as the bank crises; and socio-cultural responsibility issues, such as the rights of indigenous peoples.</p> <p>The CRR 2009 conference welcomed research papers from all fields of corporate responsibility and sustainability and challenged all participants to consider how their findings can become examples of responsible leadership. 115 abstracts were submitted and 75 presentations given. The majority of the presenters submitted their paper also to these conference proceedings. We hope that these papers will advance responsible leadership both in research and in practice.</p>		
Keywords Corporate responsibility, responsible business, sustainable development, research, leadership		

CORPORATE RESPONSIBILITY & SUSTAINABILITY RESEARCH (CRR) 2009.

Responsible Leadership

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**PART ONE. COPORATE SUSTAINABILITY
MANAGEMENT**

THE NEED FOR A PRODUCT STEWARDSHIP SCHEME TO IMPROVE SUSTAINABILITY IN THE UK PRECAST CONCRETE INDUSTRY.

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Abstract

The UK precast concrete industry is widely seen as one of the major players towards the delivery and achievement of the targets of sustainable construction. To improve its sustainability credentials, the precast concrete industry is committed to a more sustainable precast sector through a continuous measurement of performance and improvements across the sector. These have led to the development of a set of sustainability policies base on key issues facing the industry.

Product stewardship schemes help all stakeholders within businesses, companies, organisations and multinational corporations to mitigate the environmental impacts associated with their products throughout the entire life cycle of the product from ‘cradle to cradle’ by taking responsibility to address such impacts.

This is a visioning paper for the UK precast concrete industry on how to improve sustainability through product stewardship. The paper introduces the concept of product stewardship, highlights the significance of developing a product stewardship scheme for the industry, explores its benefits and explains why product stewardship should serve as the next step forward for the industry to take voluntarily. The paper will identify useful lessons for the sectors which are intending to develop or deliver a product stewardship scheme.

Keywords: sustainable development; sustainability; sustainable construction; concrete and precast concrete industry; product stewardship

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Introduction

Introduction

The sustainability discourse has become an integral part of UK government policies over the years (DETR, 1999; DEFRA, 1999; DEFRA, 2005; CLG, 2008; BERR, 2008). Government, policy makers, engineers, architects, specifiers, designers, clients and all stakeholders within the construction industry have recognised the need for a major change in relation to the way sustainability is tackled within the construction industry (BERR, 2008) and construction product manufacturers and suppliers have been identified as crucial components of the supply chain (CPA, 2007). Hence, an increase in demand for more sustainable construction products is a key part of the achievement of sustainable construction in the UK.

As part of this, the UK precast concrete industry's sustainability programme aims to achieve a more sustainable built environment through the use and reuse of precast concrete products, measurement, improvements and promotion of the health and safety performance of the sector, pollution/emission, waste and embodied energy reduction, efficient minimisation of resource use (materials and water), productivity, environmental impact reduction, supply chain management, stakeholder engagement, auditing of key performance indicators and the respect for people and their communities. However, the industry programme is ongoing and further work is required to ensure that precast manufacturing is in line with, but ideally ahead of new developments.

With this in mind, this paper provides an introduction to the UK precast concrete industry, its sustainability programme 'More from less' and, specifically, a discussion of the notion of product stewardship; it finishes with the case for a fully-fledged product stewardship (PS) scheme for the UK precast concrete industry to further improve its sustainability credentials.

Precast Concrete Products and The UK Industry's Progress on Sustainability

Precast concrete products are made in factories, transported to sites or cast on construction sites but remote from their last position or location (Clarke and Glass, 2008). In terms of products, precast concrete products range from:

“small hydraulically pressed items mass produced in highly automated factories, such as concrete bricks, paving and roof tiles, to larger mass produced items such as pipes, piles and floor beams, and individual structural units manufactured to specific engineering and architectural requirements” (Holton, 2008).

Precast products are manufactured and produced to the highest quality standards; the process of manufacture involves a combination of both skilled labour and automated processes. Precast concrete elements are well known globally as established methods of construction with flexibility and variety (Concrete Centre and British Precast, 2007). Precast concrete products help to shape the built environment through the provision of building envelopes, supporting structures and services for public and private housing, industrial and institutional buildings, retail and commercial buildings. The UK precast concrete industry's roots can be traced at the end of the 19th century when entrepreneurial engineers and builders realised the importance of high quality and the economic advantages offered by casting concrete with the use of machines (Clarke, 2003). Today in the UK, precast concrete production stands at over 36 million tonnes of products annually, worth in excess of £2.3 billion (Holton, 2008).

There are over 800 precast concrete companies in the UK (Sustainable Concrete, 2009) with around 23,000 employees (BIBM, 2008) and more in the upstream and downstream sector of the UK economy. This forms part of the wider construction industry which employs 7% of the UK population (BCA, 2006) and accounts for 8% of Gross Domestic Product (GDP) (BERR, 2008). The precast concrete industry in the UK is an important sector of the UK construction products industry and by extension the construction industry, which includes building, civil engineering, construction materials and products, and associated services (Holton et.al, 2008). According to the Construction Products Association (CPA), the largest amongst the four different, but related, activities is the construction materials and products, which has a total annual turnover of more than £40 billion (CPA, 2009).

The British Precast Concrete Federation (BPCF), the umbrella body for the UK precast concrete industry, devised a sustainability programme “More from Less” in 2004 to address the sustainability issues and activities of the industry. Still ongoing, the programme was purposefully aimed at measuring, improving, promoting and boosting the environmental, social and economic credentials of precast concrete products in the UK. As a result, a sector sustainability strategy was developed and implemented to move the precast concrete industry forward (Holton et. al., 2009) and help the precast concrete industry better position its future profitability and competitiveness (Holton, 2006). That said, according to (Wolschner et al., 2008), the precast concrete industry depends more broadly on its suppliers' environmental

performances, e.g. cement production, carbon emissions, how suppliers of aggregates deal with landscape issues or the environmental performance of concrete additives. In the manufacturing process, precast concrete does consume energy, but its more energy intensive raw materials (i.e. cement) contribute the larger CO₂ emissions and impacts. The entire life-cycle of precast concrete products produce a range of impacts from all the various production processes to end of-life, i.e. from sourcing and extraction of raw materials to the final use and disposal stage. These are areas of particular concern and will be addressed later in this paper, after a more detailed examination of progress within the industry.

As the precast concrete trade association, BPCF is showing commitment to achieve a more sustainable precast concrete sector. According to the first sustainability report for the precast concrete industry (Holton, 2005), the precast concrete industry recorded major achievements on sustainability from 1999 with the formation of Environment, Health and Safety committees to provide a pan-sector approach in dealing with important sustainability issues facing the industry. By 2001, the Concrete Targets Award scheme was launched. This scheme was launched in a rapid response to the Government's 'Revitalising Health and Safety' initiative (HSE, 2009) and was followed by The Concrete Targets (CT 2010) scheme in 2006, to improve the health and safety performance of the industry by 50% reduction of RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) reportable accidents and lost time injury by 2010.

In 2002, the best practice awards were initiated to promote excellence and recognise members that had made progress on innovation, health, safety and the environment. In the same year, BPCF joined the DEFRA and DTI 'Pioneers Group' to demonstrate its intention to develop a sector sustainability strategy for the precast concrete industry. As a result, in 2003, BPCF's council approved sponsorship of an Engineering Doctorate (EngD) project in the Department of Civil and Building Engineering, Loughborough University to develop a sector sustainability strategy for the precast concrete industry which started in 2004. In 2005, a joint approach to sustainability from the cement and concrete industry was facilitated by the Concrete Sector Sustainability Working Group. Finally, a Sustainability programme was approved by the BPCF Council in 2007 to boost performance across the whole precast concrete industry on sustainability to include:

- Key Performance Indicators
- Sustainability Charter
- Certification Scheme
- Best Practice Forum
- Objective, Indicators and Targets for improvement

The sustainability charter was purposely launched to engender commitment of all BPCF member companies to a designed set of sustainability guided principles (BPCF and Construction News, 2008). The year 2008 saw an industry consultation and charter audits to encourage BPCF's member to go beyond legislation and to take deliberate actions in making their products and operations more sustainable. As can

be seen, there has been a clear demonstration of commitment and progress by BPCF and its member companies in making the precast concrete industry more sustainable, with a framework for management, measurement and monitoring now in place. However, further steps need to be taken to improve the level of 'responsibility' being demonstrated throughout the life-cycle of precast concrete products. To continue with the 'More from Less' sustainability programme of the precast concrete industry, a four year collaborative research - Engineering Doctorate (EngD) began in October, 2008 to further improve the sustainability of the precast concrete industry. In this case, the use of product stewardship was proposed as a possible way forward and is discussed next.

About Product Stewardship

To understand the term 'Product Stewardship' (PS), an extensive literature review was carried out from which it was clear that there was no single agreed definition, which is similar to the discrepancies found when attempting to characterise other terms in the field of environmental policy (Merlot, 1998, Lewis, 2004,) such as sustainability or sustainable development. Various authors, governmental organisations and Non-governmental organisations (NGO's) however agree that PS involves a 'shared responsibility' (Starke, 2003 Lewis, 2004; McKerlie, et.al, 2006a; PSI, 2009; PSF, 2009; USEPA, 2009; PPRC, 2009a). This section will look at various definitions of PS to gain a broad understanding of the concept as used in the fields of environmental policy and various industries.

Product stewardship encourages businesses to become more responsible through proper ethical management and helping business reduce cost and liabilities (Johnen et al., 2000). The concept of PS was introduced in 1972 by the then President of Dow Chemical, Ben Branch to alleviate risks in the use of chemicals (Rainey, 2006) and the company has now become one of the leaders in this area, defining PS as: "the process and activities of making health, safety and environmental protection an integral part of designing, manufacturing, marketing, distributing, using, recycling and disposing of our products" (Dow, 2008). However, the most widely used definition emanates from the United States Environmental Protection Agency (US EPA), which defines PS as:

"A product-centred approach to environmental protection. It calls on those in the product lifecycle—manufacturers, retailers, users, and disposers—to share responsibility for reducing the environmental impacts of products" (US EPA, 2009).

Indeed, The Product Stewardship Foundation (PSF, 2009) now defines product stewardship as a 'cradle to cradle' methodology that helps reduce the environmental impact of manufactured products.", whereas Carlton and Thompson (2009) see it as the "responsible use and management of products during the complete product lifecycle from discovery through manufacture and use to disposal". Taking the business management perspective a little further, Kodak attempt to describe PS as an integrated business process for:

“...identifying, managing and minimizing the health, safety and environmental risks throughout all stages of a product's life in the best interest of society and our key stakeholders; customers, employees and shareholders” (Kodak, 2009).

However, Nicol and Thompson (cited in Thorpe et al. 2004), argue that *“product stewardship programmes are a ‘step in the wrong direction because they will not lead to better and safer product design nor will they lead to the phase out of hazardous chemicals in the product”*. This view however, appears to have little support from the various industries that have implemented PS schemes and principles in their operations and businesses.

Product stewardship and Extended Producer Responsibility (EPR) vary in actual practice; however these terms are often used interchangeably (Worrell and Appleby 2000). According to Holton et al. (2009) product stewardship is often referred to as EPR, for example the US EPA suggests PS is also known as extended producer responsibility (US EPA, 2008). However, McKerlie et al. (2006) and Nicol and Thompson (2007) observe that there is confusion about the use of these terms noting that there are important differences between product and producer responsibility policies in their approaches to mitigate environmental impacts of products. That said, Europe, Latin America, Canada, Japan have enacted EPR policies (Lease, 2000, Veleva, 2009). In Europe, three directives by the European Union (EU) have been legislated and are being implemented, including:

- i. **Waste Directive; the Waste Electrical and Electronic Equipment (WEEE) directive and the associated Restriction of Hazardous Substances (RoHS);** WEEE directive took effect from January, 2007 (Environment Agency, 2009b). The objective of the scheme is to increase the level of recycling and/or re-use of electrical products (European Union, 2009). The directive focuses on the environmental performance of businesses of electrical and electronic equipment. It stipulates that manufacturers, suppliers and users to recycle and recover electrical and electronic equipment. All consumers are required to return all used e-waste without a charge.
- ii. **End-of-Life Vehicles (ELVs) Directive;** addresses the handling and disposal of vehicles at the end of their life. The directive instructed each EU member state to implement a National Regulations on ELVs. Published by the European Union (EU), the directive “aims at making vehicle dismantling and recycling more environmentally friendly, sets clear quantified targets for reuse, recycling and recovery of vehicles and their components and pushes producers to manufacture new vehicles also with a view to their recyclability” (European Commission, 2009).
- iii. **Packing and Packaging; Directive 94/62/EC** was adopted by the European parliament and the Council of Ministers in 1992, which aims to prevent and reduce impacts arising from packaging and packaging waste. It was also aimed at harmonising national measures to reduce such impacts (European

Commission, 2009a). Lewis (2004) note that for more than 20 years, the packaging industry has been under pressure to reduce its environmental impacts.

Product Stewardship principles have been developed (PPRC, 2009) to help in the development of voluntary agreements between councils, environmental groups, organisations and trade associations on how to reduce health and environmental impacts of products. According to the Product Stewardship Institute (PSI, 2009), the principles of product stewardship are:

Responsibility: reducing the environmental impact of products should be shared amongst the industry (designers, manufactures and retailers of products including product components).

Internalise costs: the total product cost should include the whole life cycle of the product from the resources use to the final disposal which should be minimised.

Incentives for cleaner products and sustainable management practices: implementing and promoting policies that create incentives from designing to the manufacture of cleaner products.

Flexible management strategies: effectively looking at ways to address products environmental impacts.

Roles and relationships: the collaboration of all parties involved from industry, government and consumers will help in the promoting the practices of product stewardship throughout the product's lifecycle.

These principles were designed to promote and develop appropriate practices, creating an efficient and effective way of mitigating environmental and social impacts in a products' life cycle through shared and multi-stakeholder responsibility. But it is not easy to interpret and hence operationalise these principles; indeed, Roy and Whelan (1992) are of the view that the main components of product stewardship are much less easy to define, but they suggest that these could include:

- Equipment design and material selection;
- Environmental impact of manufacturing processes;
- Logistics of collection at the end-of-life;
- Disassembly of equipment, and reclamation of scrap;
- Recycling;
- Economics of recycling;
- Safe disposal of any hazardous residual components; and,
- Communication with external organisations – consumer groups, legislature, and industry at large.

The above list places emphasis across the entire product life-cycle from design and material selection to end-of-life stages, in addition to communication with relevant stakeholders. The application of this approach to the precast concrete industry is discussed later in the paper, but the next section considers a few selected case studies of industries that have applied PS schemes.

Case Studies of Product Stewardship

In North America and some parts of Europe, several major companies within key sectors of the economy have implemented PS schemes and several stewardship councils that represent key sectors of the economy have also implemented these schemes, including the Marine Stewardship Council and the Forestry Stewardship Council. Various national governments and multinational corporations have implemented Product Stewardship schemes to manage the environmental, health and safety issues in the life-cycle of their products, from manufacture to final use stages (cradle to cradle). These have included the agricultural, petrochemical, steel, chemical, IT, automobile and other industries – two examples are shown below.

Chemical industry: here, product stewardship reduces the risks associated with process and chemical hazards in a company's supply chain (Snir, 2001, p.190). The Chemical Industry, under the International Council of Chemical Associations (ICCA) adopted the Strategic Approach to International Management (SAICM) in 2006 (ICCA, 2009), which is an international framework for global chemicals management (ICCA, 2007). The ICCA has also introduced the Global Product Strategy (GPS) which includes product stewardship activities and also a Responsible care® initiative. These initiatives serve as the industry's mechanisms for managing environmental, health and safety aspects of a chemical throughout its life cycle.

Agrochemical industry: presently, a handful of major companies are taking leading stewardship roles in the agrochemical industry through advice to users, distributors, farmers and contractor applicators (Carlton and Thompson, 2009). This advice will significantly improve the safety of growers and farmers, safe storage and disposal methods, reduce environmental impacts, help stakeholders within the sector to understand best practices in handling products and promote further stewardship management measures and programmes.

A comparative analysis of these industries and different product stewardship councils' models will be considered in a future paper to understand and synthesize their approaches, implementation methods and criteria. Having a closer look at some of the benefits of PS indicate that it helps to induce a rich variety of product innovations, reducing waste management costs by waste prevention, re-use, recycling and toxin reduction (Michaelis, 1995), reducing cost and liabilities (Johnen et al., 2000), serving as a marketing tool to help create business value, competitive advantage and strengthen relationships with stakeholders (Shell, 2008). It is possible to summarise the benefits associated with PS; indeed, these are numerous and generic, but the ability to capitalise on these will depend on the industry within which PS is applied:

- Building social responsibility through increased awareness and collaborative responses to environmental issues across stakeholders
- Reducing the number, scale and costs of landfills and waste treatment facilities and their accompanying environmental impacts
- Decreasing or eliminating potentially hazardous components of products
- Promoting cleaner production and products
- Promoting more efficient use of natural resources and materials
- Closing of material loops to promote sustainable development
- Encouraging more efficient and competitive manufacturing, and
- Promoting more integrated environmental management by emphasising the product's life cycle.

In addition, businesses can gain longer term market advantage through environmental leadership, achieve a greater adaptability within the Government policy/legislative frameworks, together with some direct returns, such as energy and resource savings, reduced cost of pollution control measures and better product design (Department of Environment and Conservation, and Waste Management Board, Australia, 2006). As a specific example, Arch Chemicals (2009) outline the following as long term benefits of PS:

- Helps to increase productivity: due to evidence of health and safety measures taken by companies to safeguard workers and their working environments.
- Enhances credibility of products and businesses investment in health, safety and environmental protection early in the product life cycle to pre-empt far greater expenditure for remediation or corrective measures.
- Provides competitive advantages: PS anticipates and addresses increasing demand for safer, more environmentally sound products - demands that translate into sales. PS also involves strengthening relationships with customers, thus improving the quality and timeliness of market information.
- Reduction of liabilities: because of its focus on customer education and involvement, an effective PS initiative should help to reduce future liability claims. Similarly, the active participation of manufacturers, distributors, suppliers and employees should help ensure the proper handling of raw materials and finished products, thus mitigating potential liabilities.

The final section considers the possible introduction of a PS scheme within the UK precast concrete industry.

Discussion: What Could Product Stewardship Offer the Precast Concrete industry?

The precast industry designs, produces and consumes precast concrete products for use in the built environment. As a major player within the construction industry, the precast concrete sector needs to face these challenges to manufacture products that suit these requirements in relation to government, client and other stakeholder requirements for more sustainable construction. For example, UK and EU legislation, product standards, government strategy and market mechanisms are all putting pressure on the industry to change (CPA, 2007). According to DEFRA, the Government needs a more sustainable approach on resources use and a reduction of waste going to landfill (DEFRA, 2009). With the construction industry producing around 90 million tonnes of construction, demolition and excavation (CD&E) inert waste, UK government intends to halve waste to landfill by 2012 (BERR, 2008). This also corresponds to the target set by the UK Concrete Industry's Sustainable Construction Strategy for the UK Concrete Industry (Optimat, 2008).

Mehta (2001) suggests that the concrete industry can reduce its environmental impact through resource productivity by energy and material conservation in making concrete and by improved concrete durability of products. In addition, Sinclair and Quinn (2006) believe that some of the major reasons why there is an increase in wastes are as a result of societal over consumption, ineffective production process and poor product design. So, there is scope to improve the product stewardship of precast concrete products at various stages. Figure 1 represents a typical sequence of a precast concrete product through its entire life-cycle. By sharing responsibility by all stakeholders, this can guarantee a reduced environmental impact of products since there are people to be held responsible for these impacts. It means all stakeholders associated with the sourcing, production, manufacture, transportation, use, disposal, retail, reuse, recycling and disposal of precast concrete products take responsibility to abate or mitigate the environmental and social impacts of the product.

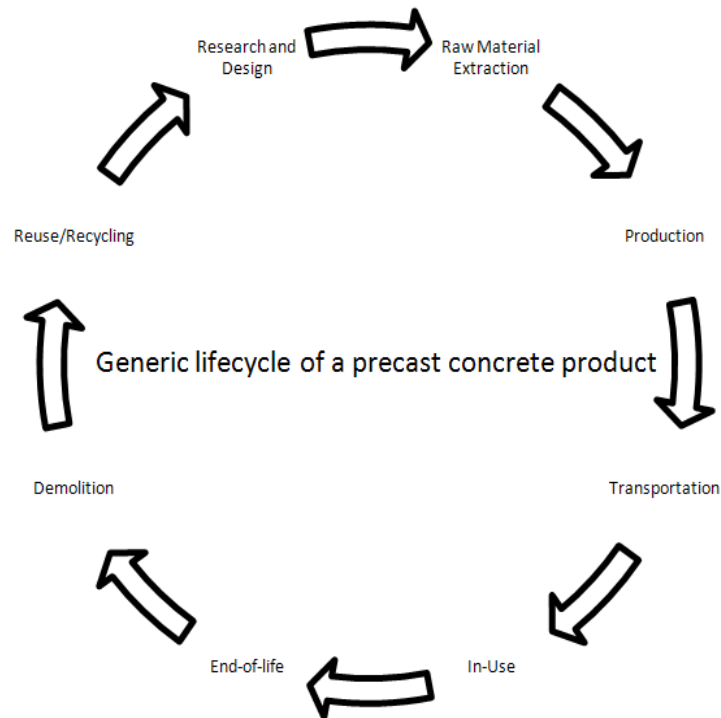


Figure 1: A generic Life-cycle of a precast concrete product

The established “More from Less” sustainability programme could use a sustained product stewardship approach, by looking at the entire life cycle of precast concrete products from cradle to cradle, i.e. by efficient and effective use of constituent ingredients in the whole precast production processes from extraction and sourcing of raw materials, mix design, production, consumption and end-of-life usage. This could help the industry to contribute meaningfully to the UK government’s policies, plus clients’ and stakeholders’ demands for more sustainable construction. For example, it could help mitigate impacts arising from transport, energy, resource use (materials, water and waste) among others. The UK concrete industry’s guidance document on responsible sourcing of construction products provides an indication of its willingness to adopt this approach, espousing;

“...a holistic approach to managing the social, environmental and economic impacts of a product from the sources of its raw materials, through its manufacture and delivery, and, ideally, through its use, re-use and recycling, until its final disposal as waste with no further value” (CISFC, 2008).

Furthermore the Building Research Establishment (BRE) in collaboration with the UK precast concrete industry and others have developed a framework standard for the Responsible sourcing of construction products (BRE BES6001: 2009 Issue 2). According to BRE Global (2009), “Responsible sourcing of materials (RSM) is demonstrated through an ethos of supply chain management and **product stewardship** and encompasses social, economic and environmental dimensions”. BES 6001 provides a route to BREEAM family certification scheme through obtaining credits. It has set a standard with some compulsory elements that each organisation must meet in addition to a higher compliance level that leads to higher

performance being awarded. Currently, the British Standards Institution (BSI, 2009) is also developing BS8902, a draft standard on Responsible sourcing sector certification schemes. Notwithstanding these developments, a certified and fully-fledged Product Stewardship scheme for the UK precast concrete industry could help in the overall improvement of the environmental, social and economic performance of all precast concrete products not just from responsible sourcing of precast concrete products but throughout the entire products lifecycle, i.e. from cradle to cradle.

Conclusion

The UK precast concrete sectors' sustainability credentials could be improved through a voluntary, but thorough and in-depth improvement of environmental, social and economic issues affecting the industry. These key issues can be bridged by a dedicated Product Stewardship scheme for the UK precast concrete industry which will be all encompassing in the reduction of environmental and social impacts at all the key stages involved in a precast concrete product's life cycle. A Product Stewardship scheme will provide a framework to help the UK precast concrete industry identify and mitigate the environmental and social impacts of its products throughout their life-cycle. The scheme should help in enhancing the environmental credentials and performance of precast products through impact reduction. It will pave the way towards a successful delivery of sustainable construction and, by extension, help create a more sustainable built-environment in the UK and globally. The benefits of a precast PS scheme may not only be continued and sustained growth, sustainable environments and social wellbeing, but it could also produce an efficient and effective index to measure and improve the entire performance of the concrete and precast concrete sector globally.

References

- Arch Chemical. 2009. Product stewardship - Benefits. [Online] Available at: <http://www.archchemicals.com/Fed/Urethane/About/benefits.htm>. [Accessed on: 15th July, 2009].
- BERR. 2008. Strategy for Sustainable Construction. Department for Business, Enterprise and Regulatory Reform (BERR) HM Government.
- BIBM. 2008. British Precast Concrete Federation. European Precast Book 2008, Galazzano: Bureau International du Béton Manufacturé.
- BCA. 2006. Performance: A corporate responsibility report from the UK cements industry, British Cement Association, 2006. Surrey.
- British Precast and Construction News. 2008. Building Excellence in Precast; Sustainability, Health and Safety, Innovation and Projects, London: BPCF.
- BRE Global. 2009. BRE Environmental and Sustainability Standard; Framework Standard for the Responsible Sourcing of Construction Products. Issue 2.0.pp.1-28. British Research Establishment.
- BSI. 2009. BS8902 - a draft standard on Responsible sourcing sector certification schemes for the construction products-specification. British Standards Institution [Online] Available at: <http://www.bsi-global.com/en/Shop/PublicationDetail/?pid=000000000030191222>. [Accessed on 9th July, 2009].
- Carlton, R. and Thompson, H. 2009. Product Stewardship - Is there a role for better collaboration? Outlooks on Pest Management, Volume 20, Number 3, June 2009, pp. 126-127(2). Research Information. ISSN 1743-1026, Online ISSN: 1743-1034.
- Clarke, M. 2003. British Precast - a Profile. Concrete for the Construction Industry; Precast focus Vol. 37, Part 11, p. 6-7. The Concrete Society: London. ISSN 0010-5317.
- Clarke, M. A and Glass, J. 2008. Forget the Concrete: It's the added Value that counts. Proceedings of the International Conference on Concrete: Construction's Sustainable Options, 8-10 July, 2008. University of Dundee: Dundee, pp.1-8.
- Concrete Centre and British Precast. 2007. Precast Concrete in Buildings; a guide to design and construction. Concrete Centre and British Precast 2007.
- CISFC. 2008. Concrete Industry Guidance Document to support BRE Global BES 6001. Issue 1. Concrete Industry Sustainable Construction Forum [Online] Available at: www.sustainableconcrete.org.uk. [Accessed on: 8th July, 2009].
- CLG, 2008. Sustainable Development Action Plan 2007-2008. Department for Communities and Local Government, London.

CPA. 2007. Delivering sustainability; the contribution of construction products. Construction Product Association. London.

CPA. 2009. The Construction Products Industry. Construction Product Association website. [Online] Available at: <http://www.constprod.org.org.uk>. [Accessed on: 21st June, 2009].

CT 2010. 2009. Concrete Targets 2010 Health and Safety Scheme. [Online] Available at: <http://www.britishprecast.org/documents/SustainabilityMatters06.pdf>. [Accessed on: 10th January, 2009].

DEFRA. 1999. Securing the future; the UK Governments sustainable development strategy. Department of Environment, Food and Rural Affairs, London.

DEFRA. 2005. One future – different paths; the UK’s shared framework for sustainable development. Department of Environment, Food and Rural Affairs, London.

DEFRA. 2009. Producer Responsibility. [Online] Available at: <http://www.defra.gov.uk/environment/waste/producer/index.htm>. [Accessed on: 10th August, 2009].

DETR, 1999. A Better Quality of Life: a strategy for sustainable development in the UK. Department of the Environment, Transport and the Regions, London.

Dow Chemical. 2009. Our Company, [Online] Available at: <http://www.dow.com/about/> [Accessed on: 2nd February, 2009].

Eli M. Snir. 2001. Liability as a catalyst for product stewardship. Production and Operations Management. Vol. 10, Issue 2, pp. 190-206.

Environment Agency. 2009. Waste electrical and electronic equipment (WEEE), [Online] Available at: <http://www.environment-agency.gov.uk/business/topics/waste/32084.aspx>. [Accessed on: 29th January, 2009].

Environment Agency. 2009b. End of Life Vehicles Directive. [Online] Available at: <http://www.environment-agency.gov.uk/business/regulation/31887.aspx>. [Accessed on: 8th July, 2009].

European Commission. 2009. Waste; End of Life Vehicles. [Online] Available at: http://ec.europa.eu/environment/waste/elv_index.htm. [Accessed on: 8th July, 2009].

European Commission. 2009a. Packaging and Packaging Waste, [Online] Available at: http://ec.europa.eu/environment/waste/packaging_index.htm. [Accessed on: 9th July, 2009].

EU. 2009. Waste electrical and electronic equipment . European Union [Online] Available at: http://ec.europa.eu/environment/waste/weee/index_en.htm [Accesses 29 January, 2009].

Holton, I, Glass, J, and Clarke, M.A. 2009. More from Less – Outcomes from the UK precast concrete industry sustainability programme. Concrete: 21st Century Superhero. Fib symposium, London, June, 2009.

Holton, I. 2005. Sustainability Matters; 1st Annual progress report from the Precast Industry, BPCF, Leicester: British Precast, December, 2005, p.1-6.

Holton, I. 2006. Sustainability Matters; 2nd Annual progress report from the Precast Industry, BPCF, Leicester: British Precast, December, 2006, p.1-8.

Holton, I. 2008. Sustainability Matters; 3rd Annual progress report from the Precast Industry, BPCF, Leicester: British Precast, February, 2008, p. 1-12.

Holton, I. 2009. Sustainability Matters; 4th Annual progress report from the Precast Industry, BPCF, Leicester: British Precast, March, 2009, p. 1-12.

Holton, I, Glass, J, and Price, A. 2008. Developing a Successful Sector Sustainability Strategy: Six Lessons from the UK Construction Products Industry. Corporate Social Responsibility and Environmental Management, Vol.15, pp. 29-42.

HSE. 2009. Health and Safety Commission (HSC) Case study; Revitalising Health and Safety. [Online] Available at: <http://www.hse.gov.uk/revitalising/casestudyconcrete.pdf>. [Accessed 13th June, 2009].

ICCA. 2007. Product Stewardship Guidelines. International Council of Chemical Associations [Online]. Available at: www.icca-chem.org/Home/ICCA-publications/Publications-Search-Results/?topic=Product+Stewardship. [Accessed on: 8th July, 2009].

ICCA. 2006. ICCA Commits to Improve Chemicals Management; Launches Two New Initiatives to Support SAICM. International Council of Chemical Associations [Online] Available at: <http://www.icca-at-dubai.org/dbfiles/1853%20ICCA%20RC%20GPS%20Dubai%2005%2002%2006.pdf>. [Accessed on: 8th July, 2009].

Johnen, B, Foster, L and Thomas, M. 2000. Stewardship in the Agrochemical Industry. Zeneca Agrochemicals. [Online] Available at: <http://www.rsc.org/delivery/ArticleLinking/DisplayArticleForFree.cfm?doi=b0062460&JournalCode=PO>. [Accessed on: 13th July, 2009].

Kodak. 2009. Product Stewardship, [Online] Available at: <http://wwwuk.kodak.com/US/en/corp/HSE/stewardship.jhtml?pq-path=7207>. [Accessed on: 3rd February, 2009].

Lease K. 2000. Facts to Act; Product Stewardship in British Columbia, Institute for Local Self-Reliance. [Online]. Issue 39, p. 1-8. Available at: <http://www.productstewardship.us/associations/6596/files/PSBC.pdf>. [Accessed on: 27th January, 2009].

Lewis, H. 2004. Defining product stewardship and sustainability in the Australian packaging industry. *Environmental Science and Policy*. [Online] Vol.8, Issue 1 pp. 45-55. [Accessed on: 8th July, 2009].

Mehta K. P. 2001. Reducing the Environmental Impact of Concrete; Concrete can be durable and environmentally friendly. *Concrete International*. Autumn edition. USA.

McKerlie., K, Knight., N and Thorpe., B. 2006. Advancing Extended Producer Responsibility in Canada. *Journal of Cleaner Production*, Vol. 14. 2006. pp. 616 - 628.

Merlot, R. 1998. Product Stewardship: the case of digital equipment corporation. In: M. M. Kostecki (editor). *The Durable Use of Consumer Products; new options for business and consumption*. Illustrated edition, pp.97-104. Springer, 1998. ISBN 0792381459, 9780792381457.

Michaelis P. 1995. Product Stewardship, Waste Minimization and Economic Efficiency: Lessons from Germany. *Journal of Environmental Planning and Management*, Vol. 38, No. 2, 1995. pp. 231 - 243.

Nicol, S. and Thompson, S. 2007. Policy options to reduce consumer waste to zero: comparing product stewardship and Extended Producer Responsibility for refrigerator waste. *Waste Management and Research*, Vol. 25. No. 3, pp. 227-233.

Nicol and Thompson. 2001 cited in Thorpe, B., Kruszewska, I. and McPherson, A. 2004. Extended producer responsibility: a waste management strategy that cuts waste, creates a cleaner environment and saves taxpayers money. *Clean Production Action*. [Online] p. 3–28. Available at: http://www.cleanproduction.org/epr/tool_kit.htm. [Accessed on: 10th January, 2009].

Optimat. 2008. *Sustainable Construction Strategy for the UK Concrete Industry (SCSCI)*. Commercial in confidence. 2008.

PPRC, 2009. Product Stewardship: Principles of Product Stewardship. Pacific Northwest Pollution Prevention Resource Centre [Online] Available at: <http://www.pprc.org/hubs/subsection.cfm?hub=1009&subsec=11&nav=11&CFID=1334960&CFTOKEN=41804874>. [2nd February, 2009].

PPRC, 2009a. Product Stewardship for manufacturers; what is Product Stewardship? Pacific Northwest Pollution Prevention Resource Centre [Online] Available at: <http://www.pprc.org/pubs/epr/intro.cfm>. [Accessed on: 16th July, 2009].

PSI. 2009. What is Product stewardship? Product Stewardship Institute. [Online] Available at: <http://www.productstewardship.us/displaycommon.cfm?an=1&subarticlenbr=55>. [Accessed at: 27th July, 2009].

PSF. 2009. What is Product Stewardship?. Product Stewardship Foundation. [Online] <http://www.productstewardship.org.nz/>. Available at: [Accessed at: 27th July, 2009].

Rainey, D., L. 2006. Sustainable Business Development - Inventing the Future through Strategy, Innovation, and Leadership. Cambridge University Press. Cambridge. ISBN 0521862787, 9780521862783.

Quinn, L. and Sinclair, A.J. 2006. Policy challenges to implementing extended producer responsibility for packaging. *Canadian Public Administration*, 49(1): 60-79.
 Roy, R. and Whelan, R., 1992. Successful recycling through value chain collaboration. *Long Range Planning* 25 (4), 62–71.

Snir, E. M., 2001. Liability as a Catalyst for Product Stewardship, *Production and Operations Management*, Vol. 10, No. 2, Summer 2001, pp. 190-206.

Shell. 2008. Creating business value through strong Product Stewardship. [Online] Available at: http://www.shell.com/home/content/chemicals/aboutshell/ourstrategy/regional_focus/focus_on_asia/creating_business_stewardship/creating_business_stewardship.htm. [Accessed on: 6th December, 2008].

Starke, L. (Editor). 2003. Breaking new ground: mining, minerals, and sustainable development : the report of the MMSD project. Earthscan Publications Ltd. (February 2003) ISBN-10: 1853839426.

Sustainable concrete. 2009. Sustainable Concrete website [Online] Available at: www.sustainableconcrete.org. [Accessed on: 9th July, 2009].

The Department of Environment and Conservation and Waste Management Board. 2006. Product Stewardship for West Australians; an Invitation to Participate. [Online] Available at: http://www.zerowasterwa.com.au/documents/product_stewardship_invite.pdf [Accessed on: 13th July, 2009].

US EPA (United States Environmental Protection Agency), 2008. What is Product Stewardship? United States Environmental Protection Agency [Online] (Updated 25 September 2008) Available at: <http://www.epa.gov/epawaste/partnerships/stewardship/basic.html#prod> [Accessed on: 24th October, 2008].

Veleva, V. 2009. Product stewardship in the United States: the changing policy landscape and the role of business. *Sustainability: Science, Practice, & Policy*, 2009, Vol. 5, Issue 1, pp. 29-35. [Online] Available at: <http://ejournal.nbll.org>. [Accessed on: 16th July, 2009].

Wolschner, B.H and Brandweiner, G., 2008. European Concrete Precast Industry: from technology to sustainability. In: Dhir, R.K., Newlands, M.D., Jones, M.R and Halliday, J.E. (editors). (2008). *Precast Concrete: Towards Lean Construction*. Proceedings of International Conference held at the University of Dundee, Scotland 8-9 July 2008. UK. pp. 453-462.

Worrell, R. And Appleby, M., 2000. Stewardship of natural resources: definition, ethical and practical aspect. *Journal of Agricultural and Environmental Ethics*, 12, 263–277.

ICRISAT – FROM A SUSTAINABLE POINT OF VIEW

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Abstract

ICRISAT – The International Crops Research Institute for the Semi-Arid Tropics – a non-profit, international organization for science-based agricultural development. ICRISAT works to improve soil and crop productivity in Africa and India; e.g. desalinizing land, developing biopesticides, organizing seed fairs and researching genetically resistant crop-strains. This work studies ICRISAT from the sustainability point of view – environmentally, socially and economically.

The results are ambiguous. While otherwise environmentally responsible, the controversy surrounding GMO adds some caution to the evaluation. From the economical perspective, ICRISAT is not self-sustainable, being dependent on donorship. This has led to closer ties between ICRISAT and the corporate seed sector, and a stronger focus on their genetic engineering activities.

Finally, this work highlights the difficulties in evaluating an NGO on the sustainability criteria of a classical enterprise. Especially in the economic perspective there is a need for other performance indicators than those relating to profit and financial return on investment.

Keywords: ICRISAT, NGO, sustainability, performance indicators

Introduction and Aim

In today's more aware, green and active consumer society, the corporate world has had to change their accountancy. There have been drives to introduce more sustainable measures for corporate success, to stand beside the classical financial indicators. The results, systems such as the green bottom line and similar, are gaining wider use amongst the bigger companies around the world.

However, the research into more holistic accountancy is still a cutting edge field, where much remains to be investigated. One such niche, lies in the Non-Government Organisations' (NGO) activities, and the accountability of the same. While the industrial company produces a physical good which can be followed throughout its lifecycle to observe its impact on the environment and its surroundings, and makes a financial profit on said product which can be measured according to rules of financial soundness – the NGO's target is only to produce an "ideal".

As such, the NGO naturally seems the more environmentally and socially sustainable of the two, if not yet economically. There is little reason to worry about the sustainability of NGO's when there are other, more obvious culprits to focus on. On the other hand, an ideal can be a very double-edged sword: in practise, there are very few universal truths. Because of this simple fact, the activities and accountability of the NGO:s are worth a second look.

The purpose of this work is to highlight this issue by presenting a case NGO: ICRISAT, or The International Crops Research Institute for the Semi-Arid Tropics – an internationally approved and highly respected organisation, aimed at reducing crop and drought-related poverty in the semi-arid tropics (mainly Africa and India). Their methods are diverse, but a main focus of the organisation is the development of hardier and more productive strains of plants and crops by genetic modification and processing.

Two issues arise from this study: the difficulty of assessing the sustainability of largescale development projects, even when these are done in the service of sustainability – in this case using environmentally untested methods to promote a larger scale development by relieving poverty. Is ICRISAT really a sustainable undertaking?

Secondly, the more general problem of finding suitable performance indicators for organisations that operates on a non-profit, non-production basis. Even those indicators that are applicable to an NGO as well as to an industrial company, may not be directly comparable either way; the sustainability performance standards on a NGO should in many cases be considered different from those on an industrial producer. What performance indicators would, in fact, be suitable to assess the development NGO?

By presenting three case examples of ICRISAT's activities, taken from their own annual reports, and studying these in the light of contrasting articles, it should be possible to gain a clearer view of what ICRISAT hopes to achieve, and the methods it uses to attain its goals. Based on these cases, an attempt will be made to evaluate ICRISAT's sustainability on the five scale leap introduced by Ketola (2009). The poor fit of the industrial sustainability in assessing an NGO is obvious, and in the final section some ideas for new performance measures will be discussed.

ICRISAT Presented

ICRISAT, or The International Crops Research Institute for the Semi-Arid Tropics, is a non-profit, non-political, international organization for science-based agricultural development, as they themselves put it (ICRISAT 2004b). Their slogan: Science with a Human Face. On a more practical level, ICRISAT works to improve soil health and crop productivity in the poorest regions of Africa and India – the dry semi-arid tropics belt, characterised by desertification and drought. They conduct research on

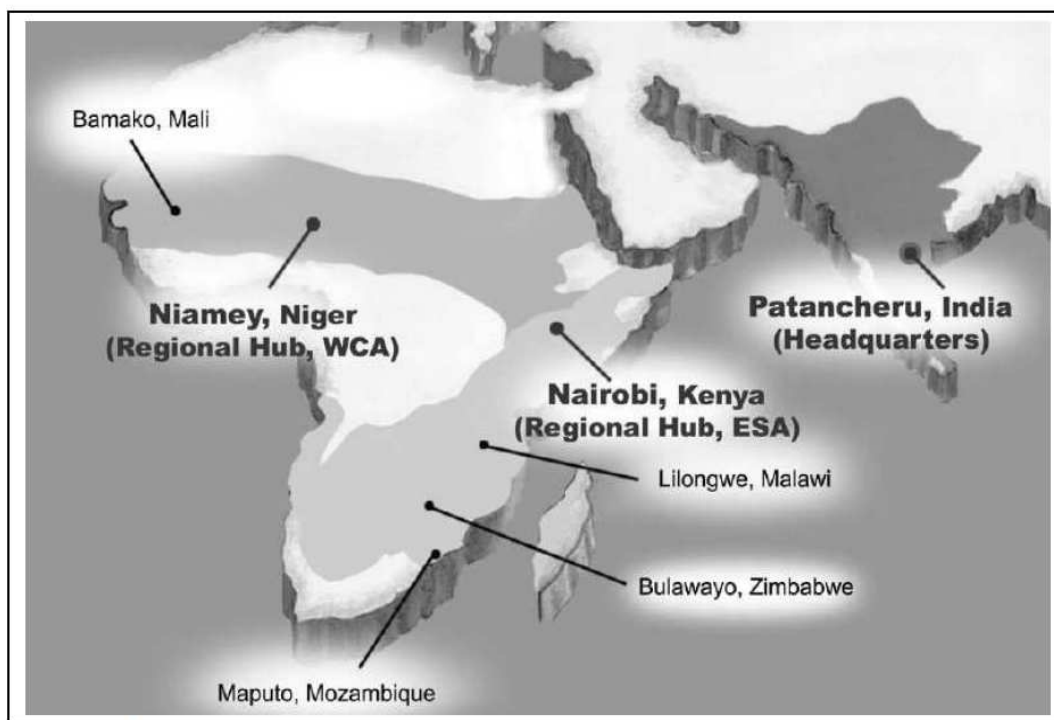
sorghum, pearl millet, chickpea, pigeonpea and groundnut, to find more hardy strains that are able to survive the harsh climate and feed the people dependent on them.

ICRISAT was established in 1972, and is one of 15 so called International Agricultural Research Centers supported by the Consultative Group on International Agricultural Research (CGIAR) (ICRISAT 2009a, CGIAR 2008). The origins of the CGIAR, according to their own website (2008), lie in the so-called Mexico-Rockefeller Foundation International Agriculture Program, a collaboration set up in 1943 by of US Vice President Henry Wallace and Mexico's Agriculture Minister Marte R. Gomez, with backing by the Rockefeller Foundation. A team of scientists were to help the Mexican agricultural sector by increasing the productivity of crops, by soil management and crop protection, and by improving the productivity of domestic animals.

At a later stage, knowledge attained in Mexico was transferred to India, to help stave off a then impeding famine, and it was recognized that there was a growing international need for similar efforts. The result – the establishment of four international agricultural centers - CIAT (tropical agriculture, Colombia, 1967), CIMMYT (maize and wheat, Mexico, 1966), IITA (tropical agriculture, Nigeria, 1967), and IRRI (rice, Philippines, 1960).

A series of conferences on agricultural development aid were held in 1969-1971, attended by representatives of USAID, the Rockefeller Foundation, the Ford Foundation, UNDP, IDRC, the World Bank, CIDA, the UK and Australia. Donorship was sought to further the action of the agricultural centers, and since the World Bank had already established numerous Consultative Groups for countries, it was tasked to set up one for agricultural research. In 1971 the CGIAR was founded, and directed to [1] *Examine the needs of developing countries for specialized efforts in agriculture;* [2] *Harmonize international, regional, and national efforts to finance and undertake agricultural research;* [3] *Provide finance for high priority agricultural research activities;* [4] *Undertake continuing review of priorities.* (CGIAR 2008)

ICRISAT was created the next year, and headquartered in Hyderabad, India. ICRISAT has a regional hub in Nairobi for Eastern and Southern Africa (with centers in Kenya, Malawi, Mozambique and Zimbabwe) and Niamey as the regional hub for West and Central Africa (with centers in Niger and Mali). For a closer look on the ICRISAT working presence, see figure 1.



(ICRISAT 2004b)

Figure 1: ICRISAT regional presence.

ICRISAT Activities– Three Case Examples

Case 1. Soil improvement in Senegal (ICRISAT 2008)

High soil salinity is one of the biggest hurdles to successful agriculture and environmental development in many places in the Semi-Arid Tropics. There are two main causes: 1.) the over-use of irrigation water coupled with lack of appropriate drainage, such as in the irrigated lands alongside the Senegal River, and 2.) salinization by seawater that moves inland. Senegal's coastal zones are low, and ocean tides can flow more than 100 km upriver – about one million hectares of arable land have been made unusable this latter process. But change is afoot.

A method for reclamation of saline soils was developed by a joint research team of Institut Sénégalais de Recherche Agricole (ISRA), the University of Dakar and ICRISAT. The first stage involves erecting high earth ridges circling an area, creating basins that retain rainwater. The rainwater in turn permeates into the soil and leaches away surface salt. The basins can be planted with a salt- and water-tolerant, fastgrowing tree type, *Tamarix aphylla* var. *erectus*. The tree has an economic value – producing very hard timber suitable for tools and quality furniture – but the trees furthermore suck up moisture from the deeper stratas of soil, allowing new rainwater to filter down faster.

This action plan seems to produce good results – the proportion of the ground in the basins covered by vegetation grew from 23% to 65% in three years, and a significant leaching of salts was achieved, in addition to the fact that the basins stopped salt movement in the soil, allowing for the eventual production of millet beside the forested area. The Tamarix trees grew to more than 2.5 meters in height during these three years, and also caught salt particles blown by the wind from the dried out salt pans towards cultivated fields. Research continues on the addition of salt tolerant fruit trees and annual crops.

Case 2. Bio fuel

According to Checkbiotech.org (2007) ICRISAT has initiated its own bio power strategy, aimed at helping farmers in India produce bio fuels in addition to their normal production – but being careful not to exclude food crops in the process. ICRISAT scientists are trying to produce sweet sorghum varieties and hybrids with higher sugar content of the juice in their stalks. In co-operation with local distilleries, who can convert the sweet sorghum juice to ethanol, the sorghum farmers can become self sufficient on bio fuels, even to the point of export. (ICRISAT 2007a) The most important thing about this solution, however, is that the ICRISAT-bred sweet sorghum allows the farmers to get additional income from the juice in the stalk, while still continuing to get the sorghum grains for food and the stalk biomass for animal fodder.

A second Indian bio power project of the ICRISAT works at generating bio diesel from *Jatropha* and *Pongamia* in the wastelands of the villages. About forty percent of India's oil imports are consumed in the form of diesel fuel, and much of this demand could be satisfied by an increased local bio diesel production, if there were enough supply of the raw material. Vast areas, estimated at 38 to 187 million hectares, are thus being planned for oil plant growth: *Pongamia pinnata*, a leguminous tree adapted to wetter lands with problem soils and *Jatropha curcas*, a more drought-tolerant shrub. Both produce fruits containing about 35% oil suitable for bio-diesel. (ICRISAT 2007b)

Case 3. Biotech

Perhaps the most important focus of the ICRISAT, however, is on the development of more productive, resistant crop types. According to Checkbiotech.org (2007), Pigeonpea hybrids based on cytoplasmic male sterility developed at ICRISAT produce from 30 to 150 percent greater yield than natural strains. The hybrids also produce 30– 40 percent more root mass, something which makes them more drought resistant. The yield advantages of the hybrids have quickly convinced seed producers: 22 private and three public seed companies in India have adopted the new seed technology.

Also, using molecular-marker assisted selection ICRISAT developed the Pearl millet hybrid HHB 67-2, capable of surviving the downy mildew disease that plagues Northern India. If there is no natural resistance in crops to pests or diseases, ICRISAT tries developing transgenic crops with resistant genes from outside the crop's own gene pool, such as the ICRISAT-bred transgenic groundnut resistant to the Indian Peanut Clump Virus.

A similar project developed by the ICRISAT aims for the cultivation of biopesticides, such as the Nuclear Polyhedrosis Virus (NPV) – a project also rewarded with the World Bank's Development Marketplace Award in 2005 (The Hindu Business Line 2005). This virus is effective in managing Pigeonpea pod borer insects (*Helicoverpa armigera*), and the project's high priority comes from the fact the pod borer infests nearly 200 crops types and that Pigeonpea is one of the crops most favoured by ICRISAT because of its high harvest yield and food content.

The traditional pod borer repellent method – the farmers' practice of shaking pigeonpea plants to dislodge the larvae, after which larvae are collected and burnt – forms the basis of the ICRISAT technique. Now, instead, the larvae are collected and used for local NPV cultivation. By applying the virus in collaboration with the traditional method pod borer infestations can be reduced by up to 85 percent.

Areas of Sustainability - The Ecological Perspective

The three cases reflect the ecological activities of the ICRISAT well. Agricultural development is their mission stated focus, combined with the collection and improvement of crops to help the farmers and the poor of the semi-arid tropics. A noble cause, but not one without controversy.

A reader will probably accept the first case with ease, since the process of reclaiming non-arable land for future cultivation and vegetation growth is so very positive. New land is in fact created. And if the land was wasted by human efforts in the first place, as could well happen by over-irrigation, it is only applaudable that it is being reclaimed by human efforts. However, case three will make most readers do a double take. Genetic modification is undoubtedly a touchy subject.

On one hand, the poorest and most mal nutritioned countries of the world are naturally in need of more productive foodstuffs. The starving man will not ask for all-natural food only. However, there are several ethical traps to be considered.

GM crops have so far been frowned upon in most of the industrialized countries, even though there is a tangible lobby to allow for greater leniency even there. There are many fears connected to the new crops; fears that may or may not be realistic, but the possibility of unexpected consequences to GM produce is still large enough that caution is advisable. There is the clear possibility that a modified crop will be a better competitor than local varieties, removing its peers by sheer strength. A resistencymodified crop may harmfully affect a vital part of a local eco-system (insects, worms, that serve to develop soil and are staple food to many larger animals), creating unbalancing effects in the food chain. And there may be subtle

effects on nutrition and trace element content of the crops, that are visible only later, and in unexpected forms.

In effect, the industrialized countries demand more research to be done before allowing clearly modified crops onto their approved lists. This is why the ICRISAT actions in the developing countries arouse some suspicion – are the semi-arid tropic countries being used as a testing ground? If this is the case, the organisation is in fact committing a form of waste dumping that is subtler than some.

According to the NGO Grain (2004) the CGIAR group has lately been advertising that its International Agricultural Research Centres need to take more creative measures to keep themselves afloat. Public funding for agricultural research is in decline and increased private sector investment in the seed industry is a fact. The result: partnership with the private sector, which, since the development of genetically modified crops, have become much more interested in the developing country seed markets. And none of the IARCs have succeeded better in attaining private sector partnerships than ICRISAT. Their partners number Advanta India, Mahyco-Monsanto, Proagro Seeds (Bayer), Syngenta India, Zuari Seeds, JK Agri-Genetics, Monsanto India and Mahindra Hybrid Seeds.

So in terms of Ecological sustainability, the ICRISAT rank must remain ambiguous. ICRISAT's programmes do provide large benefits to the poor, the starving and the struggling farmers of the semi-arid tropics region. They have improved the soil, the productivity of the crops, and substantially muted the drought-starvation relationship that reigns in these areas. There is much to be grateful for. But their methods... Since Ecological sustainability is not only about the needs of humans, you have to wonder as to the safety of what they are producing.

The Socio-Cultural Perspective

In the Socio-Cultural arena, on the other hand, ICRISAT fares much better. As an organisation, it has a good track record of working together with the people, rather than trying to impose change by political or economic force. Similarly, they seem to be doing their best in working around the old, traditional ways used by the poor farmers, to augment the conventional methods. There are several examples. In the case examples, we see the old method of removing the pigeonpea pod borer being utilized by the ICRISAT researchers for their own pesticide. In the organisation's annual report from 2001 (2002) we can read about a programme of micro fertilization much easier to adapt to poverty-stricken farm areas than today's whole-field approach – each seed is planted together with a bottle cap filled with fertilizer, resulting in precise point fertilization and heavily reduced costs, with only marginally more work.

Of course, choices have to be made on methods and distribution, all the time – and at times, the western approach to maximum efficiency shines through. Distribution of seeds, for instance. Seed relief is usually about distributing free seed to the affected communities. ICRISAT feels, however that the distribution form is flawed, since farmers may not get the crop or variety they want because the decision is made by an

external agency. Because of this, they organize seed fairs, where farmers instead of receiving free seed get vouchers that can be exchanged for seed. This makes for the most efficient, well-informed distribution, they argue. In addition, they aim to secure that the bulk of the seed is purchased from local farmers, so that the greater part of the relief dollars go to the affected community. The seed fairs have proved popular in Uganda, Burundi, Kenya, Sierra Leone, Tanzania and Sudan, among others. (ICRISAT 2004a.)

This slightly market-based approach to the redistribution, says something about the character of ICRISAT. It should not be said, however, that this is a bad thing – the seed market approach may well be a psychologically sound move when distributing aid. No farmer likes to think that he must accept alms to be able to support his production. Bargaining for seeds, in fact, may do much to re-establish a sense of pride and businessmanship in its participants.

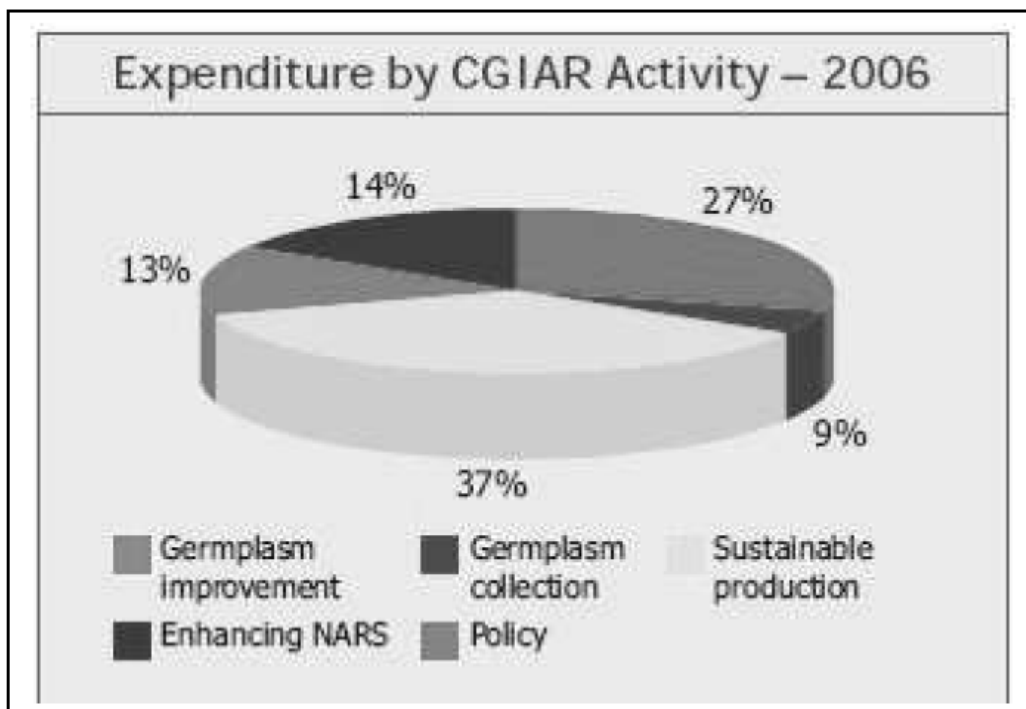
Furthermore, ICRISAT annually supports about a hundred research scholars in achieving their degrees, mainly focused in the agricultural sector. ICRISAT stresses educating farmers in more productive farming practises, and especially target the education of women in their programs. Because of these points, there is very little to complain about from a purely socio-cultural point of view.

The Economic Perspective

Of course, ICRISAT's activities are not capable of supporting themselves. They are the result of annual donations by several nations and pan-national organisations, numbering in the tens of millions of dollars (32,5 million dollars in 2007)(ICRISAT 2008). Figure three shows the sizes of individual contributions, for comparison, in the year 2006. The biggest contributor, by far, is the United States of America (the federal government), followed by the United Nations Environment Programme (UNEP), the United Kingdom and the World Bank. However, we see several private foundations involved, such as the Bill and Melinda Gates Foundation, the Sir Dorabji Tata Trust (Indian metal industrialist) and OPEC. Even Finland is a donor. This goes to show the extent to which ICRISAT is accepted as a credible and accomplished aid programme.

However, a donation-driven programme can never be totally economically sustainable. As such, it must operate within the boundaries of its annual allotment, which will naturally fluctuate with the economic booms and slumps. In an economic crisis, such as the one currently in action, donations tend to diminish, if not cease entirely. The best thing the organisation can strive for is to do as much as it can with its annual budget, in as effective a way as possible. Because of this, ICRISAT focuses its efforts on research and pilot projects, in hope that their success will show local actors a possible way forward. If done right, and the circumstances are cooperative, the original project may be the starting point for a chain reaction. It was originally calculated, also, that ICRISAT's and the other IARC's development role would only be transitional, focusing on the areas where development is needed, and gradually phasing out their activities in areas where the national agricultural ministries were able to take over the innovating role (CGIAR 2008).

In figure two we can see the expenditure of ICRISAT by sector. Enhancing NARS (National Agricultural Research Systems) is a tangible post, as is sustainable production. A post that has been growing recently, though, is the Germplasm improvement.



(ICRISAT 2008) **Figure 2. ICRISAT expenditure by sector, 2006.**

Research and education are activities that are unfortunately under-funded by most market mechanisms. ICRISAT too, turning to the private market for additional funding, has certainly been influenced by this, turning their focus increasingly in the GMO direction. This helps them keep their budget sustainable, certainly, but at what price? Their mission mandate specifically says, however, that their aim is “*to improve people’s livelihoods in crop-livestock-tree production systems in the semi-arid tropics through integrated genetic and natural resource management*“. And it must be agreed that they are certainly doing just that. They are not hiding what they do.

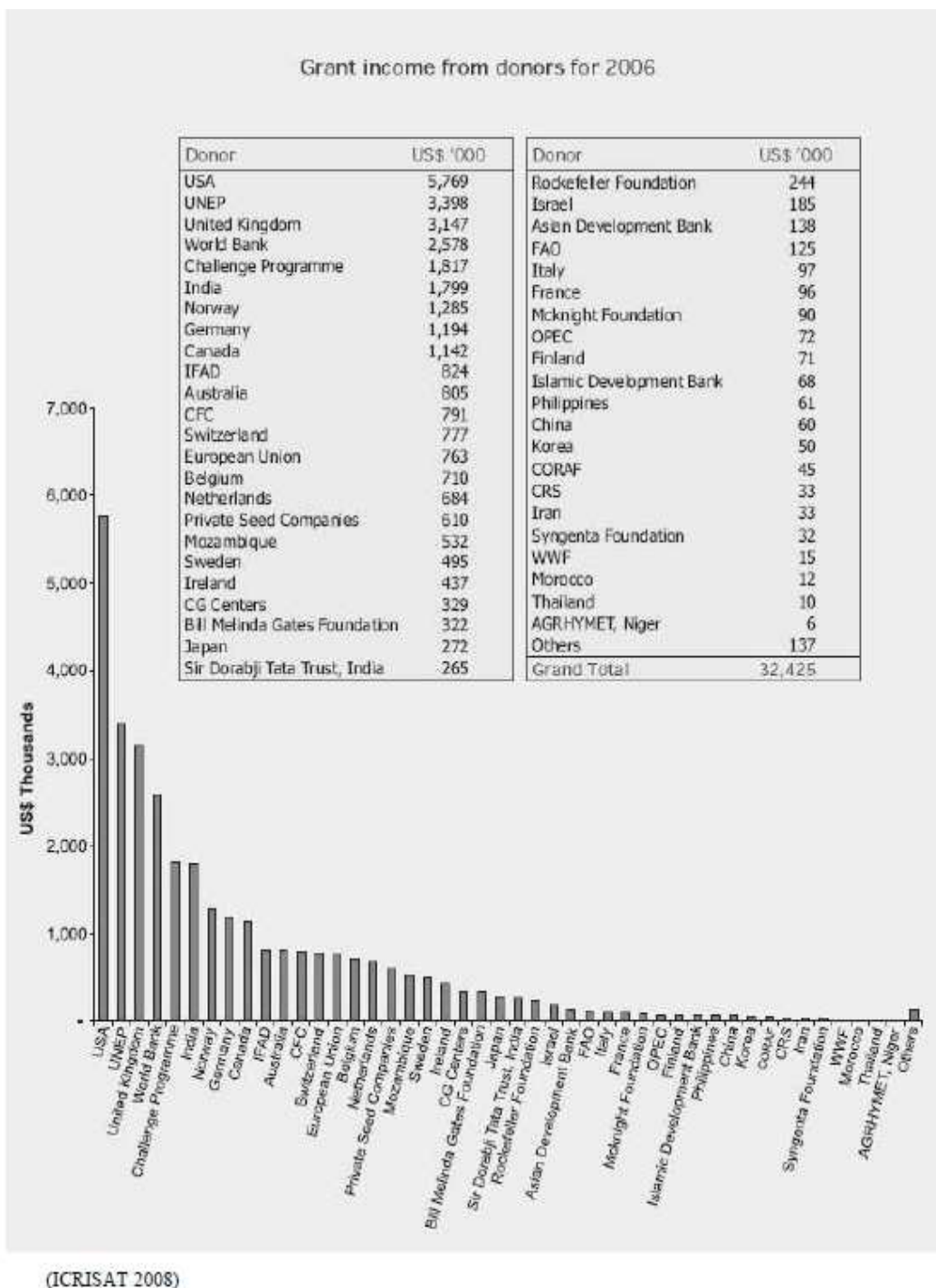


Figure 3. Donations to ICRISAT, 2006.

The Five Scale Leap Evaluation

Now, evaluating the sustainability of ICRISAT’s actions on the five scale leap scale is relatively difficult. They are not a company, per se, even though they work under certain obligations of efficiency. They are not exactly focused on the production of

goods, but rather on insubstantial things such as research, aid, education and change. As such, they do not possess many of the metrics that measure whether a company is successful in the business world, economically or culturally.

Because of this one can only try to interpret the ranking criteria as they would apply to ICRISAT. In tables one to four we see the resulting rankings, together with motivation why they should apply. In cases where no numerical evaluation has been possible, only an approximate ranking level (very high, high, moderate, etc.) has been used.

Table 1. ICRISAT, Environmental sustainability

Level of environmental responsibility	Energy used	Emissions	Recycling	Environmental incidents	Investments in biodiversity
5 (very high)	100 % renewables		5 (very high)	zero for 10 years	> 3% of net sales
4 (high)		4 (high)			
3 (moderate)	While probably using conventional	No emissions per se, but playing dangerously			A great part of the ICRISAT work revolves
2 (low)	energy sources in day to day matters, their promotion of	with genetically modified crops.	While there is no available knowledge about ICRISAT recycling waste, they do	No evidence of such an incident	around increasing biodiversity. More than 3%, certainly
1 (very low)	bio fuels should compensate.		recycle land, bringing it back to productive use.		

Table2. ICRISAT, Socio-cultural sustainability.

Level of sociocultural responsibility	Dismissals or layoffs	Product incidents	Donations for socio-cultural purposes	Gender equality care	Cultural equality care	Education
5 (very high)			> 3% of net sales	in global society	in global society	5 (very high)
4 (high)		4 (high)				ICRISAT helps
3 (moderate)	3 (moderate)	Protests are being voiced that the	The ICRISAT research scholarships can be considered a big	ICRISAT strives to further gender equality to a degree. Their board of directors and	Cultural equality is not ICRISAT's main focus, but they do	spread agricultural education to a great degree.
2 (low)	ICRISAT does focus on project based	Jathapa-plant is in fact a pest carrier.	investment in socio-cultural purposes	lead staff are relatively evenly distributed	further socio-economic equality by working with poor producers.	
1 (very low)	employment.					

Table 3. ICRISAT, Economic sustainability.

Level of economic responsibility	Profit % (-profit / net sales)	Return on investment (ROI)	Equity-to-assets ratio	Breaches against laws, fines	Stakeholder reward/stake (r/s) ratio
5 (very high)	ICRISAT is not self-sustainable.	≈ 20%	> 50%	zero for ≥ 10 years	highest r/s ≈ lowest r/s
4 (high)		In purely humanitarian terms, ICRISAT shows	ICRISAT's ratio of equity to fixed asset is very high	No breaches against the law have been	Again, in humanitarian terms, ICRISAT shows
3 (moderate)		good returns on its research projects. Fiscally, very low.	due to its donation-based nature.	recorded, locally or internationally.	good returns on its research projects. Fiscally, none.
2 (low)					
1 (very low)	1 (very low)	≤ 4% or ≥ 36 %			highest r/s > 4 x lowest r/s

Table 4. ICRISAT, Holistic responsibility.

Level of holistic responsibility	Fair Trade (supplier side)	Fair Production (employee side)	Fair Sales (BOP) (customer side)
5 (very high)	5 (very high)	5 (very high)	
4 (high)	ICRISAT strives	There is no question	4 (high)
3 (moderate)	to function locally, buying seeds and fertilizers at a local	that ICRISAT aims to produce sustainably, and even go beyond	ICRISAT does what it promises, if yet with somewhat suspicious
2 (low)	level.	that	methods.
1 (very low)			

Performance Indicators for NGOs

As we could see in the previous section, most of the performance indicators in the original model could only be applied to ICRISAT by creative interpretation. And interestingly enough, there is hardly any indicator where ICRISAT's potential GMO hazard would really come into play. And financially, a donation funded NGO is hard

pressed to compete with an industrial company on sustainability; only in the social sector can the two be compared with any kind of accuracy. However, if we break down the issue to the individual indicators, there are some that are more suitable, and others that are not. Still others would only need to be reset to the level of an NGO to be relevant.

In the environmental analysis, the “Energy used” indicator is partially usable as is. Even though the energy usage of a NGO is hardly in the same class as that of an industry, the effort is sound. Similarly, the “Recycling” indicator could just be replaced by something more suitable for “intangible” NGO. For instance, a measure of the organisation’s “carbon footprint” – that is the amount of carbon dioxide released in the course of their activities – could be well motivated. The choice of materials and type of energy source used would have an effect on this number. And also in this case, the NGO’s scale from good to bad would need to be benchmarked against other NGO:s, not against industrial firms.

On “Emissions” however, the NGO indicator should be closer linked to the impact of their activities. This is of course a hard thing to achieve, since such impacts are inherently qualitative and almost impossible to review objectively. As such, the only really good way forward would probably involve benchmarking the NGO against similar organisations. An “Environmental impact” stat based on a peer review could produce good results. The only problem with this line of reasoning is that performance indicators are at their best when they do not depend on subjective assessment, but on objective, numerical data. But some sort of combination indicator would anyway seem necessary, to fully capture the repercussions of the organisation’s actions.

Finally, “Environmental incidents” and “Investments in biodiversity” could remain as they are, since both are viable even in the case of NGO activity. However, the “Investments in biodiversity” stages could be modified to reflect the different situation, focusing on percentage of available funds instead of percentage of net sales, or even on a ratio of invested funds to the NGO’s administrative costs. And certainly, the range could be raised somewhat, so that the fifth level would be higher than 3%, to more accurately reflect the NGO:s’ humanitarian and environmental aims.

In the social aspect, there is less that needs to be modified – really only the category “Product incidents” would need serious modification. Changing it to “Formal complaints against NGO activities over the last ten years” would already be a good step forward – more militant NGO’s would certainly rack up a few such. In addition, the limits for “Donations for socio-cultural purposes” and “Education” could be raised by a few percent, again to be tallied as a portion of available funds, or similar.

Finally, the economic aspects of sustainability, which are definitely where the NGO’s differ the most from their industrial counterparts. An NGO is, for instance (mostly) prohibited by law from making profit, and can as such not produce any stakeholder rewards. The projects they implement often have no - or at least difficult to estimate – financial value and abysmal ROI figures. Finally, other financial terms such as liquidity, equity-to-assets ratio, budget variance, turnover, etc, have little or no relevance to the successfulness of an NGO. Only the “Breaches against the law, fines” stat has direct usefulness in such an evaluation.

Because of this, any financial sustainability estimate of an NGO should be tailor-made for that particular sector. For instance, to get a sense of the stability of their funds, “Annual donation variance” and “Annual donation growth”; to get a sense of the efficiency with which the funds are being spent, an “Administrative costs to Project costs ratio” would make sense; and “ratio of NGO’s funding from the private sector” would already say something about where the NGO’s interests lie. Also, some sort of satisfaction index on behalf of the donors, would say something about whether or not funds are being spent in a satisfactory manner. However, this can of course also be estimated from other, indirect numbers – such as “Donor fidelity” or the number of years in a row a donor chooses to support an NGO. The customer votes with their purchases, in a sense. These are only a few examples; there are ample opportunities to find new indicators in this field. And the process of building a “new” set of performance gauges for the Non- Government Organisation sector will undoubtedly uncover even more potential candidates. The effort is sound.

Conclusion

So, as we have seen, there are many additional issues that need to be considered when assessing the sustainability of an NGO as compared to that of an industrial company. In ICRISAT’s case, their environmental and social sustainability stats are high on the “classical” scale, and only in the financial side do they show weakness against a hypothetical industrial producer. In fact, with their humanitarian aims and mission, they would naturally seem to be at the very top of the sustainability index.

And this is true in many ways. They do devote their hearts and minds to helping the poverty- and famine-stricken areas of the world, and do accomplish much to further the lots of farmers and agriculture in these regions. The only question mark is their methods in doing so. By focusing more and more on GMO research and development, they are choosing a method with potentially high gains, but also with relatively higher risks. And the fact that the same sort of experimentation is frowned upon in many of the industrialized countries, makes its practise in the Semi-arid Tropics dubious. The conclusion to be drawn from this case organisation is that new sustainability indicators should be developed more specifically for the NGO:s, to better reflect such possible concerns.

An “Environmental Impact” indicator reflecting more subtle issues than the classical “Emission”, for instance, and an almost completely refurbished set of economic stats, specific for the NGO’s fiscal situation. If this idea is realized, it is clear that the image of ICRISAT – together with many other similar organisations – would become more well-balanced, lowering its status in some areas and raising it in others.

Hopefully, its strength in humanitarian aid and strong financial backing would become more obvious (and deservedly so), while at the same time, its environmental sustainability rating would be negatively affected by its strong focus on GMO.

References

CGIAR (2008). The Origins of the CGIAR. [online]. [cited 9 Feb. 2009]. Available from Internet: <URL:<http://www.cgiar.org/who/history/origins.html>>.

CheckBioTech.org (2007). ICRISAT focuses on improving agriculture to trump climate change. [online]. [cited 9 Feb. 2009]. Available from Internet: <URL:http://greenbio.checkbiotech.org/news/icrisat_focuses_improving_agriculture_trump_climate_change>.

Grain NGO (2004). ICRISAT leads the charge to the private sector. [online]. [cited 9 Feb. 2009]. Available from Internet: <URL:http://www.grain.org/seedling_files/seed-04-07-06.pdf>.

ICRISAT (2008). Annual report - 2007. [online]. [cited 9 Feb. 2009]. Available from Internet:<URL:<http://www.icrisat.org/Publications/EBooksOnlinePublications/AnnualReport-2007.pdf>>.

ICRISAT (2007a). Sweet Sorghum flyer. [online]. [cited 9 Feb. 2009]. Available fromInternet:<URL:<http://www.icrisat.org/Biopower/BVSReddySweetSorghumFlyerJan207pdf>>.

ICRISAT (2007b). What ICRISAT Thinks... - Biofuels. [online]. [cited 9 Feb. 2009]. Available from Internet:<URL:http://www.icrisat.org/Biopower/WinslowWIT_BiofuelSept2006.pdf>.

ICRISAT (2004a). Annual report - 2003. [online]. [cited 9 Feb. 2009]. Available fromInternet:<URL:<http://www.icrisat.org/Publications/EBooksOnlinePublications/AnnualReport-2004.pdf>>.

ICRISAT (2004b). ICRISAT - a glimpse. [online]. [cited 9 Feb. 2009]. Available fromInternet: <URL:http://www.icrisat.org/aboutus/ICRISAT_a_glimpse.pdf>.

ICRISAT (2002). Annual report - 2001. [online]. [cited 9 Feb. 2009]. Available from Internet:<URL:<http://www.icrisat.org/Publications/EBooksOnlinePublications/Annual%20Report%202001.pdf>>.

Ketola T (2009). Five Leaps to Corporate Sustainability through a Corporate Responsibility Portfolio Matrix. *International Journal of Innovation and Sustainable Development*, Special Issue: Corporate Social Responsibility: Management and Methods, forthcoming. ISSN 1740-8830, ISSN 1740-8822

The Hindu Business Line (2005). Icrisat biopesticide project gets World Bank award. [online]. [cited 9 Feb. 2009]. Available from Internet:<URL:<http://www.thehindubusinessline.com/2005/05/28/stories/2005052800611000.htm>>.

A NEW SUSTAINABILITY MANAGEMENT SYSTEM MODEL FOR GLOBAL BUSINESS ORGANISATIONS

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Abstract

Our recent work on the sustainability management requirements of global business organizations (GBOs), and on the limitations of existing management system models has identified the need for a new model. As a result, this paper presents a new sustainability management system (SMS) for implementation in GBOs. The SMS is based on plan-do-check-act (PDCA) principles, and incorporates best practice that has been identified in a number of established public domain SMSs. In addition, the model includes features that facilitate engagement of stakeholders and processes throughout the entire business value chain. Furthermore, the scope of the SMS is expanded from the established 'triple-bottom-line' to a broader set of six aspects. Although the SMS is intended for application in GBOs its use is not necessarily limited to these organizations, and the paper discusses the potential for alternative implementation. This paper presents the model, including a detailed and integrated benchmarking and maturity-testing tool.

Keywords: Sustainability Management System, Global Businesses

Introduction

The process of globalization in the 20th century saw the emergence of what are variously termed trans-national corporations (TNCs), multinational corporations (MNCs), or global business organizations (GBOs). Bishop (2008) foresees the emergence of '*a new breed of global companies, rooted in neither rich nor developed countries but aiding wealth creation by making the most of opportunities the world over*' (Bishop, p6, 2008). In order to more clearly assess the need for a new management system that is specific to GBOs, we first propose a new definition of a GBO that embraces a broad range of financial and non-financial organizational attributes. This definition is then used to briefly analyze the requirements for a sustainability management system in a GBO. The new management system draws on much existing practice (Deming Plan-Do-Check-Act, etc.) but also introduces features that are intended to address the specific needs of a GBO. We further recognize that a management system model is, on its own not a practical tool as it describes (or proposes) a set of processes but does not in itself provide guidance on implementation in an organization. Therefore we have also developed a detailed benchmarking and maturity testing matrix to assist with the implementation of the system.

What is a Global Business Organization (GBO)?

A trans-national corporation (TNC) or multi-national corporation (MNC) is not necessarily a GBO. UNCTAD has published annual World Investment Reports since 1991, many of which review TNC activities and impacts (UNCTAD 1992, 1993, 1994, 1995, 1997, 2002, 2005, 2007, 2008). UNCTAD's TNC data is frequently referenced in the literature, notably the SCOPE program (van Tulder et al, 2001). UNCTAD uses three indicators of internationalization: foreign sales as a percentage of total sales; foreign assets as a percentage of total assets; and foreign employment as a percentage of total employment. Each of these ratios requires that a TNC has a "home" or "domestic" market. However a GBO has no such "home" or domicile: rather its operations are spread globally.

Experience in a domestic marketplace is significant for a TNC or MNC, as they can use the business practices, standards, ethics and policies of their "home" country as benchmarks or reference points as it expands into new countries or regions. However in a GBO that is created through (a series of) mergers or acquisitions may find that the "home" country experiences of its predecessor companies are inappropriate or inadequate and need to be replaced by a global program: examples of this include ArcelorMittal which was created from two distinctly different MNCs (with two different "home" cultures) in the steel industry (ArcelorMittal, 2007) or the contemporary BP (BP, 2009) which was created through the acquisition of three US oil & gas companies by a British oil & gas company. Similarly, an organization that starts its life as a global (rather than domestic) business also needs a global approach to sustainability management and cannot use any home, or regionally specific standards or behaviours as reference points. An example of this is Schlumberger (Schlumberger, 2009) the oilfield services company that merged a number of family-owned activities, located in different countries into a single holding company registered in the Netherland Antilles' in 1956 and established (and still maintains) headquarters in both Houston and Paris.

There are a small number of existing GBO definitions in the literature. Redding (2006) uses a definition based on distribution of revenue. This GBO definition is reasonably precise: accounting standards for calculation and reporting of revenue are well established, and data is normally audited. However revenue is not the only indicator of globalized activity or organizational culture. For example, de la Torre et. al. (2001) take a very different approach: GBOs are defined as those that treat the world as a single market. This definition suggests that a GBO has a global business chain although de la Torre (2001) limits this to the customer portion of the chain, which is an important feature. However it is important to note that GBOs are not necessarily large, as size may be correlated with, but is not equal to a global presence. But de la Torre (2001) offers no quantitative criteria that can provide a test of globalization, and the definition is not therefore adequate for empirical research or comparative work. The MIT Sloan School of Management (2005) defines a GBO as an organization with international sales (i.e. business), but which does not necessarily coordinate work globally: it is small but offers its products or services worldwide. This implies that the GBO is less 'global' than a multinational corporation (MNC), and contradicts other available definitions.

Doz et al (2001) try to extend the concept of a GBO further. They use the term 'metanational' to describe organizations that derive competitive practice from all over the world, rather than a single (home) country. But this is a behaviour that should be exhibited by all truly global businesses, and the sub-set suggested by Doz is not useful in a research context. The Thunderbird Business School (undated) uses a definition that embraces behaviours and business objectives in addition to revenue distribution. In this model, the GBO has global aspirations; a global and multicultural workforce, a global supply chain; (aspirations for) a global market with over 50% of its business outside the US (which is assumed to be its home market); and non-employee business partners. This multi-dimensional definition is the broadest, and most useful of the ones reviewed here, although it does not offer the precision in revenue distribution used by Redding (and takes a US-centric view of the world). This discussion shows the complexities of defining GBOs, as well as the growing research interest in this field. To contribute, we propose a new definition for a GBO that draws on the literature referenced above and which uses seven criteria, as follows:

1. Geographical distribution of revenue, as in indicator of distribution of business activity (after Redding, 2006, and UNCTAD, 1992)
2. Geographical distribution of employees. This is used as an indicator of organizational culture: the more geographically diverse the employee population, the more likely that the culture will be global rather than regional or national (after Thunderbird Business School, undated, and UNCTAD, 1992)
3. Geographical distribution of R&D centres. To benefit from the global diversity of academic & research cultures, a global distribution of R&D sites is required
4. Geographical distribution of manufacturing facilities, if applicable (i.e. if the organization undertakes any manufacturing). To facilitate global wealth creation and to derive business benefits from a global supply chain, global distribution of manufacturing sites is required (developed from UNCTAD, 1992)
5. Management diversity, where data is available, and considering either executive or senior management (as defined by the company itself). This is also used as an indicator of organizational culture however the indicator looks at the origin, not the assigned location, of the senior or executive management
6. Location, & number of headquarters sites, as defined by the company, and where a true GBO would have no single, fixed HQ
7. Consistent and continual (public) statements of global aspiration and, or a global culture, with qualitative evidence (after Thunderbird Business School, undated)

The majority of the above seven criteria are geographical, reflecting the spatial nature of a GBO, and the geographical test in each case is that no more than 50% of the relevant indicator occurs in any one geographical region, and at least 20% occurs in each of three regions (developed from Redding, 2006). All geographically-based assessments are made using the following five areas: North America; Latin (South & Central) America; Europe, including the former Soviet Union countries; Africa; Middle East & Asia or separately as Middle East and Asia (developed from Redding, 2006). However, revenue (or net income) disclosures by publically traded (listed) companies are not always made in line with these groupings (and privately held companies typically provide even less data), so assumptions and interpolations may be required. These six indicators are deliberately quantitative, but their use can be limited by the degree of disclosure of information by businesses under review.

We have identified approximately forty organizations that meet several of the requirements in the GBO definition proposed above, and 15% of these meet the majority of the requirements (see Table 1, below). These are all publicly traded companies that disclose financial data in accordance with the requirements of the stock exchanges on which they are listed. It is probable that there are more organizations that meet the requirements, particularly privately-owned, or unlisted businesses that are not required to provide detailed annual business reports.

Requirements for Sustainability Management in a GBO

The concept of a sustainable business is not new (and it can be argued that every business must, from this initial perspective, at least be financially sustainable as the alternative is bankruptcy). There is no a priori contradiction or conflict between the concepts of economic success and sustainability nor are the concepts of social and environmental responsibilities of business organizations new. There were socially active businesses in Britain before the industrial revolution, a period that also saw the emergence of occupational health and safety regulation of business.

But GBOs have a number of specific exposures, or requirements that must be addressed by a sustainability management system (SMS):

Table 1: Detailed Analyses of Organizations against GBO Criteria, with Criteria-Based Scoring

Company	Revenue Distribution	Employee Distribution	R&D	Manufacturing & Supply Chain	Management Diversity	HQ Distribution	Global Aspirations & Culture	Globalization Score
ABB	48 / 25 / 18 / 11	53 / 23 / 17 / 7	No data	66/18/12/4 SC\$	Indicates EUR	EUR	Limited Statement	2
Accenture	49 / 46 / 7 **	150 countries	NA	NA	52% NAM 48 % EUR	NAM + EUR	Limited Statement	3
Air France Group	35/20/18/15/12	Incomplete date	NA	No Data	100% EUR	EUR	No statement	1
BAE Systems	Revenue split NA	6 'home' countries	No data	No Data	NAM + EUR	EUR	Limited Statement	2
Bayer	44 / 26 / 16 / 14	53 / 18 / 16 / 13	71 / 23 / 5 / 1	37/20/20/15/8 sites	EUR	EUR	Limited Statement	4
BHP Billiton	48 / 25 / 23 / 4 **	37 / 26 / 22 / 15	No Data	45/21/14/11/9 Op\$	No Data	ASA / EUR	Limited Statement	6
BP	50 / 27 / 23 ** & ***	38 / 34 / 28 **	No Data	No Data	46%US+UK / 54%ROW	EUR	No Statement	3
Canon	33 / 30 / 21 / 16	42 / 40 / 9 / 9 **	67/17/8/8 sites	90 / 7 / 3 sites	ASA	ASA	No Statement	3
Cemex	40 / 23 / 19 / 18 **	30/26/25/19 **	No Data	43/20/20/12/3 sites	LAM	LAM	Limited statement	6

Chevron	70(ROW)/30 ** & ***	48/26/14/8/4	No Data	No Data	No Data	75 NAM / 25 EUR	NAM	Limited statement	3
Citigroup	43 / 23 / 17 / 17	No Data	NA	NA	No Data	No Data	NAM	Limited statement	2
Coca Cola	27/25/25/16/7 ***	27/20/15/15/13/1 0	No Data	No Data	~ rev' distribution	No Data	NAM	Global Mission	8
Colgate	25/25/20/17/1 3	No Data	No Data	No Data	No Data	Incomplete data	NAM	Global Mission	4
DIAGEO	38 / 28 / 22 / 11 **	46 / 23 / 17 / 14	No Data	No Data	Incomplete Data	Indicates UK	EUR	Global Mission	4
EADS – Airbus	45 / 23 / 20 / 6 / 6	95 / 3 / 2	EUR	EUR	76 / 22 / 2	95 EUR / 5 NAM	EUR	Limited Statement	3
Ernst & Young	45 / 43 / 12 **	46/30/14/5/5	NA	NA	NA	Incomplete Data	NAM + EUR	Global Mission	5
ExxonMobil	(Implied) ***	41/23/17/9/6/4	No Data	No Data	No Data	No Data	NAM	Limited Statement	3
HP	41 / 33 / 17 / 9 **	~ 33 / 33 / 33	42 / 42 / 16	75 / 20 / 5	No Data	No Data	NAM	Limited Statement	5
Holcim	37/23/19/14/7	42/26/15/12/5	No Data	No Data	52/20/16/10/2	39/20/20/15/ 6	EUR	Limited Statement	5
IBM	43 / 36 / 21 **	No Data	37 / 37 / 26	43 / 27 / 26 / 4	No Data	No Data	NAM	Global Mission	7
IHG	49 / 27 / 14 / 10 **	52 / 18 / 16 / 14	NA	NA	NA	No Data	EUR	Limited Statement	2

Johnson Electric	43 / 33 / 24	No Data	No Data	No Data	No Data	No Data	No Data	ASA	No Statement	2
Johnson Matthey	41 / 31 / 19 / 9	50 / 30 / 10 / 10	No Data	No Data	No Data	No Data	No Data	EUR	No Statement	4
Lenovo	50 / 28 / 22 **	No Data	80 / 20	65 / 17.5 / 17.5	ASA + NAM	ASA / NAM / EUR	Limited Statement	6		
LVHM	37 / 30 / 25 / 8	49 / 25 / 23 / 3	No Data	No Data	No Data	EUR	No Statement	4		
Nestle	38/30/15/13/3	38 / 35 / 27 **	Incomplete data	38/21/20/16/ 5	No Data	EUR	Global Mission	7		
Nike	49 / 37 / 14 **	50/25/13/12 **	No Data	70 / 18 / 12 **	No Data	NAM	No Statement	2		
Novartis	36 / 36 / 19 / 9	50 / 21 / 19 / 10	No Data	49/28/23(assets)* *	60 / 40	EUR	No Statement	3		
Phillips	37/26/17/13/7 *	50 / 20 / 20 / 10	No Data	43/36/15/5/1	No Data	EUR	Limited Statement	5		
Rolls Royce	35 / 35 / 26 / 5	59% UK / 41% ROW	68% UK / 32% ROW	84 / 13 / 3 assets	EUR (?)	EUR	Limited Statement	3		
Samsung	47 / 20 / 19 / 15	No Data	57 / 23 / 20	78 / 11 / 11	ASA	ASA	No Statement	1		
Schlumberger****	28/ 23 / 21 / 14 / 13	Approx' = Revenue	60 / 20 / 20 sites	35/32/27/6 sites	34 / 24 / 24 / 18	NAM + EUR	Global Mission	11		
Shell	42 / 25 / 25 / 8	34/32/23/11 **	No Data	No Data	No Data	EUR	No	3		

											Statement	
Sony	27 / 26 / 25 / 23 **	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	NAM + ASA	Limited Statement	4
Transocean	47 / 20 / 13 / 11 / 9	No Data	No Data	No Data	32/29/20/12/7 rigs	No Data	No Data	No Data	No Data	NAM	No Statement	3
Unilever	38 / 33 / 39 **	50 / 25 / 25 **	50 / 33 / 17	36 / 33 / 31 SCS **	21 nat' in top 113	No Data	No Data	No Data	No Data	EUR	Global Mission	7
U. Technologies	38 / 25 / 23 / 14 **	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	NAM	Limited Statement	3

Data source is applicable company web site.

Revenue distributions: marked * have been reported in mixed format by continent and by market type; marked ** have been reported by grouping or merging areas (e.g. NAM + LAM = Americas); marked *** have been assumed on the basis on net income, or unit sales, or unit production data. Company data marked **** Includes some data not externally published.

Globalization Scoring is as follows: organization shows no evidence of progress towards individual requirement = 0 points; is near to meeting requirement = 1 point; meets requirement = 2 points; exceeds criteria = 3 points. Final globalization score is sum of scores of seven individual requirements. Score of 0 – 6 = path to globalization; 7 – 14 = global organization; 14 – 21 = very mature global organization.

1. *Stakeholder Relations*: GBOs have stakeholder and societal relationships which can vary substantially by region and there must be a fit between the stakeholder environment and the business (Brammer & Parelin, 2006). The degree of scrutiny to which GBOs are subjected, by global and by regional or local NGOs, as well as by media and regulatory organizations varies substantially but is often large and, in recent years, increasing.
2. *Brand Management*: This includes protection and development of their corporate (and where applicable consumer) brand(s) in numerous, and diverse markets. GBOs need to respond to this by developing and implementing global strategies that take account of the trans-cultural footprint they have, and that can protect their brand in a wide variety of circumstances (Gadiesh, 2004). (EMS's were directed at improving the quality of the physical environment: in a GBO, an SMS must manage the value and perception of the organization's brand: management of environmental impacts is simply, or merely a subsidiary activity for the SMS.)
3. *Integrated Business Systems*: An SMS must be an integral part of the organization's management process, perhaps even the primary management system in the organization. In the interests of efficiency, the SMS will often share management tools, business processes, and corporate policies with other components of the business management system.
4. *The Business Process Chain*: The scope and length of supply and customer chains can be very large and complex in GBOs, making management of sustainability exposures extremely challenging. Indeed the concepts of supply chain and customer chain may need to be replaced by the concept of a 'cylinder of influence' (Sealy et. al, 2008) which recognizes the chain of value creation, with the organization placed in between the customer(s), and the supplier(s) of raw material or underlying services.
5. *Internal Stakeholders*: GBOs almost invariably have a very diverse employee population which needs to accept the value of, and become engaged in, the sustainability management process. The SMS therefore should be flexible enough to incorporate and conform to local (national, regional or cultural)

requirements, but at the same time be robust enough to provide global consistency in the implementation and the delivery of performance.

6. *Compliance Management*: GBOs are exposed to multiple legal and regulatory compliance regimes. A compliance program built on the expectations and practices of a single (home) country will therefore be inadequate. Furthermore, using regulatory (non) compliance as an indicator or, or proxy for environmental performance has little value to the GBO.
7. *Ethics Management*: An ethical approach to business implies that the GBO must first determine what ethical (or behavioural) standards (or principles) it deems appropriate and applicable (and may need to do so in the absence of a “home” country reference points). In an increasing number of business operating environments, enforcement is provided not by governments, but by NGOs. GBOs cannot successfully manage their external compliance obligations and exposures if they are responding to initiatives and agendas promulgated by NGOs, to media demands, or to a multitude of government regulations: rather, they must lead, or influence the debate (Kolk & Van Tulder, 2001).
8. *Disclosure*: The sustainability impacts, and associated disclosure requirements, of a GBO that are locally or regionally significant may not be globally significant. The SMS must therefore be able to effectively identify, assess, rank, mitigate, and manage aspects and impacts in a variety of operating environments.

Most of the above requirements are specific to GBOs because they typically have either no “home” country culture to refer to, or because they have discovered that the “home” country precedent has little (or no) relevance to their contemporary requirements. Whichever is the case, these eight exposures combine to create a business environment for a GBO that is very significantly different from the one experienced by a TNC or MNC: a GBO therefore requires an SMS that can effectively address these requirements.

An Opportunity for a New SMS Model

Abrahams (2004) and Leipziger (2003) have both identified and reviewed a range of public domain codes, standards & regulations relating to sustainability (& corporate responsibility) behaviours of corporations. Many of these had either a very narrow scope (they are industry-specific or region specific), or address only one functional aspect of a business (e.g. environment, health & safety, or industrial relations). Of the one hundred publications reviewed, only six standards - BS8900 (2006), Equator Principles (2003, 2006), GRI-G3 (2006), ICC Business Charter (1991), OECD Guidelines for MNCs (2000), SIGMA Project (2003) - attempt to address a broad sustainable development management scope. Perhaps in response to the practical limitations of these public domain management system tools, a small number of proprietary SMS tools exist (but as they are proprietary, it is very difficult to identify them all). Mead (2006) describes a commercial and proprietary tool with six major

elements but no economic component (the elements are governance, workplace, environment, supply-chain, products & services, & community) and sixty minor elements.

Four standards: EMAS (1995), ISO14001 (2004), which is in widespread use (Peglau, 2006); OHSAS18001 (2007) and SA8000 (2001, 2008) offer users the opportunity for certification, verification, or accreditation. So why then do these standards not provide a basis for a SMS? Most importantly, each of these four standards is limited in scope, either to environmental management (ISO14001, EMAS), occupational health & safety management (OHSAS18001) or industrial relations (SA8000). Any attempt to develop a SMS from these four standards would require integration of their respective requirements, and those of other standards, which may be a disincentive to users and which suggests the need for an integrated standard (Oktem et al, 2004, Jørgensen et al, 2006). Furthermore there are also conceptual difficulties with the process of transferring the requirements of an environmental standard to social or economic requirements.

The forthcoming ISO26000 standard (in its 2008 Committee Draft form: ISO, 2008) on social responsibility is intended to provide guidance on (ISO's) seven core subjects: human rights; labour practices; environment; fair operating practices, consumer issues; and community involvement & development. It also has seven principles of social responsibility, namely accountability; transparency; ethical behavior; respect for stakeholder interests; respect for the rule of law; respect for international norms of behavior and respect for human rights. However, the intent of this standard is to provide guidance on these aspects of an organization's behavior, and on the integration of best practice in into the organizations existing (management) systems: it does not provide a management system model and is not intended to be a certification standard.

As noted above, the ISO 14001 standard is the most widely used EMS model. The limitations of the ISO14001 standard have been extensively researched and include: evidence of extra-organizational structural barriers to its acceptance (Welch et al, 2003); large variations in the standard of performance required, or selected to achieve certification (Gallagher et al, 2004; Petra & Taylor, 2006); limited ability to deliver improvements in the environmental impacts of an organization (Utting, 2005); and the fact that certification only tests the adoption of the requirements of the standard (Moxen & Strachan, 2000) and not the success or effectiveness of the implementation. Others have questioned the additional value that derives from an ISO14001 certification (Jiang & Bansal, 2003), beyond that of external credibility (which may in certain circumstances be sufficient justification).

The relative benefits of EMAS and ISO14001 have also been extensively researched, however Friedmann et al (2002) found that there was no significant difference between the outcomes of the two approaches. It should also be noted that the management system planning section of ISO14001, which is used to define the scope of the EMS via the identification and assessment of aspects and impacts (ISO14001:2006 sections 4.3.1, 4.3.2) is specifically directed at environmental impacts. These limitations should not be taken as evidence that an EMS, ISO14001-based or otherwise, has no relevance to the development of a SMS. (And it is important to distinguish between an EMS and an ISO14001 certified EMS.) The

transition from EMS to SMS can be achieved (Wehrmeyer, 2004) and the prior use of an EMS, or other management systems, can help in the development of expanded and integrated management systems (Oktem et al, 2004; Sarkis & Srafe, 2004). But there is today no single SMS standard or model (Oktem et al, 2004) and nothing that appears to be developing any widespread credibility or acceptance.

System Model: Description & Benchmarking

The proposed management system comprises seven components (described pictorially in Figure 1, and as a detailed benchmarking process in Table 2, below) as follows:

1. Identification and (risk) assessment of the aspects and impacts of the organizations activities, including stakeholder communities and a full range of sustainability aspects (governance, environment, reputation, communications, health & safety, customer quality, and fiscal. This provides a much broader assessment of the (GBO's) sustainability impacts than the ISO14001 aspects assessment (ISO14001 part 4.3.1.a/b) and is used as one of the foundations of the SMS.
2. Selection of both external and internal best practices, and incorporation into the organization's processes. This module provides a formal process for the review, assessment, and selection (or rejection) of both internal and external best practices, together with benchmarking of these practices: there is no equivalent process in the ISO14001 model.
3. Sustainability policy & plan: having performed a sustainability assessment, and identified best practices that are appropriate to the GBO, a sustainability policy and implementation plan can be established. This is equivalent to ISO14001 parts 4.2 and 4.3.3, but uses a broader sustainability (rather than environment) scope.
4. The fourth component in the system establishes a process to clearly identify the scope of the SMS and define its relationship with other (management) systems in the organization. Use of this module will depend on the existence and maturity (or otherwise) of other business management systems in the GBO: there will be substantial differences between organizations that have well established business systems in place, and those that do not.
5. The management practices and standards component can be thought of as an expanded version of ISO14001 4.4, Implementation & Operation, covering all of the sustainability (rather than environmental) aspects of the GBO. It also includes self-checking feedback loop to ensure organizational standards are modified in accordance with the organization's changing requirements.
6. Incorporation of the entire business process (value) chain into the sustainability management process via a cylinder of influence model (Sealy et.al.) it a key feature of this SMS. This component establishes links between

the GBOs sustainability practices and programs, and the (entire) business chain, including suppliers, internal activities, and customers. There is no equivalent component in ISO14001.

7. A continuous improvement feedback loop based on Deming's PDCA principle, with performance measurement and assurance processes, is provided by module seven. This provides a sustainability (rather than environmental) system functionality similar to ISO14001 part 4.5 and 4.6.

These seven components are further divided into seventy-three attributes (Table 1). To provide a tool for maturity testing (assessing the degree of implementation of the system in an organization), three levels of maturity have been assigned to each of these 73 attributes, and a scoring system has been applied to these maturity tests (with a maximum score of 219 points).

We recognize that there are a number of important limitations with this type of scoring system:

- All seventy-three attributes have been assigned the same value, although they may not have equal importance in the sustainability management process. In fact importance may vary across business sectors or geographically
- The more (of the 73) attributes a system component has, the more value is assigned to it in the overall scoring
- Improvement (growth) in achievement is scored in a disproportionate manner, as Level 2 is 200% of Level 1, but Level 3 is (only) 150% of Level 2
- The use of three levels of maturity is, to some extent, arbitrary and systems with five, or more levels are used

These limitations are symptomatic of all maturity and benchmarking systems, and at present we have chosen not to introduce any weighting or normalizing features. In fact these are problems with any such system, not only with this one. Our system reflects established practices, is useful for tracking progress with time, and is simple to use.

Conclusions

Having reviewed the definitions of a GBO and then discussed the sustainability management requirements that are specific to GBOs, we have presented a new management system that has been developed to address these requirements. We argue that this system is much more suited to application in GBOs than existing environmental management systems.

In particular, we believe this system is more suitable for implementation in GBOs than ISO14011, which was designed to be applicable in all organizations, but is not

adequate as an SMS in a GBO. Furthermore, we note that the forthcoming ISO 26000 standard is a guidance document for social responsibility, and its scope explicitly states that it is not a management system standard (ISO, 2009). Our system integrates, and has been designed to embrace a broader and more appropriate range of sustainability aspects, that go beyond the established triple-bottom-line approach. This may allow simplification of the sustainability management process in organizations that implement the system, and should provide for more effective integration with existing business management systems in these organizations.

The maturity testing system and its associated scoring has limitations that we recognize, but that are nonetheless valuable for practical implementation of the management system. They apply both in organizations with existing systems and in organizations that need to build an SMS from first principles. Given the difficulties associated with management system implementation in large organizations (e.g. GBOs) we believe this is an important aspect of our system. Although our work is intended for application in GBOs, there may well be applications in TNCs and MNCs. The relevance of our system would be a function of the relative importance of the 'home' country business, culture, and precedents to the TNC or MNC.

Figure 1: A Sustainability Management System for Application in Global Business Organizations

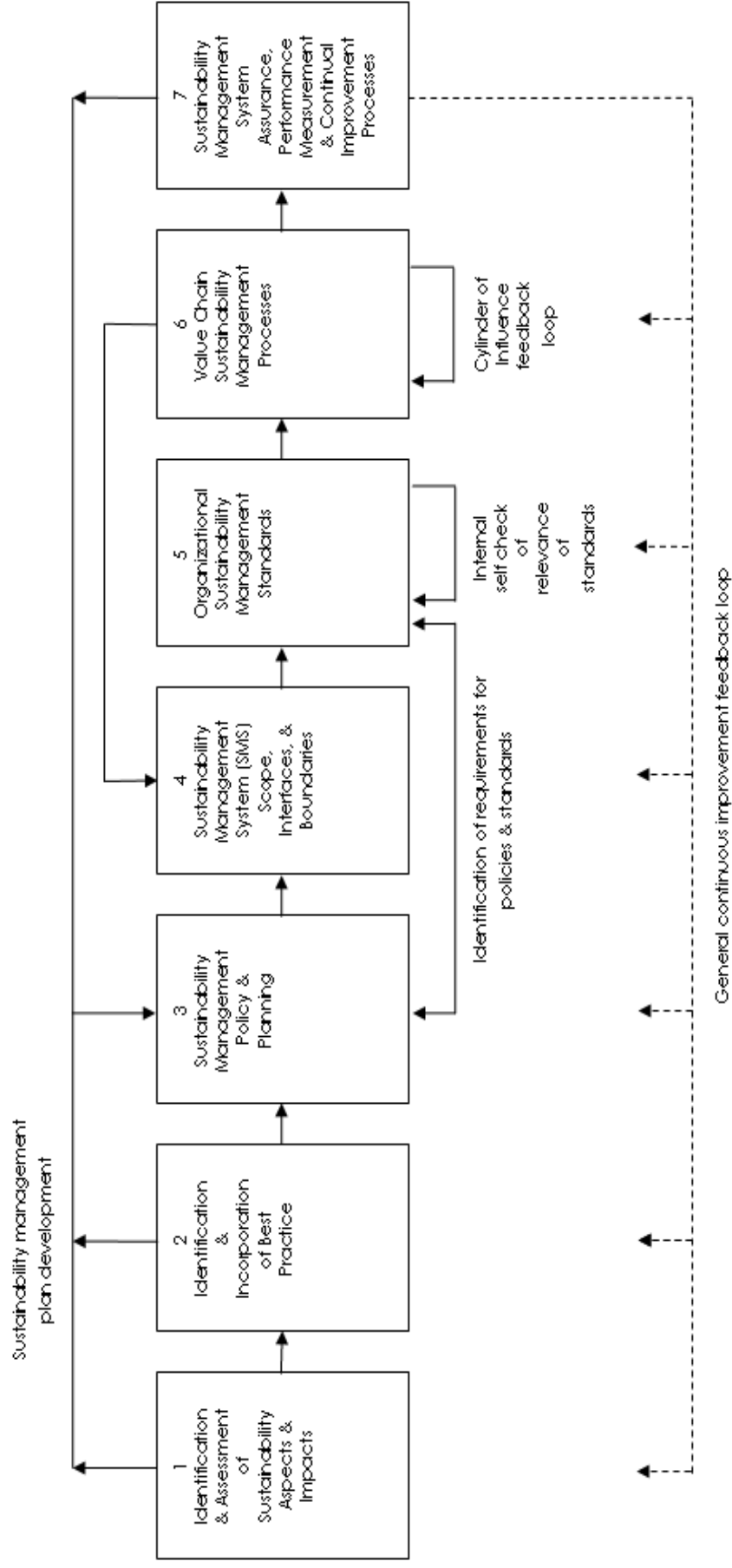


Table 2: Detailed Description of System Components and Associated Maturity Tests

System Component 1 - Identification & Assessment of Sustainability Aspects & Impacts (Maximum Score = 36)		Maturity Level 1 (Score 1)	Maturity Level 2 (Score 2)	Maturity Level 3 (Score 3)
	System Attribute	Notes		
1a	Identification & Assessment of stakeholder communities			
1a1	Formal process for identification of stakeholder communities		Formal processes exist, but have incomplete implementation OR there is a well implemented but informal process	Process is well implemented, & documented, ranking process is credible, & results are reviewed & communicated
1a2	Risk assessment & significance ranking of stakeholder communities		No formal process in place, or implemented No formal process in place, or implemented	
1b	Formal, quantified identification & assessment of sustainability aspects & impacts in the following:			
1b1	Governance & organizational ethics & values	1	No formal identification or assessment of this aspect & its associated impacts	Process is well implemented, is documented, includes a credible assessment of aspects and impacts, & results are reviewed, integrated into system, & communicated
1b2	Environment & ecology		Formal processes exist, but there is incomplete implementation OR there is a well implemented but informal process	
1b3	Organizational reputation & sustainability achievement			
1b4	Stakeholder communications			
1b5	Occupational health & safety			
1b6	Community health & safety			
1b7	Customer service quality, & customer satisfaction			
1b8	Product quality & safety, & customer satisfaction			

1b9	Indirect economic impacts on communities & the organization's business chain			
1b10	Direct economic returns to shareholders & other stakeholders (employees, government, etc.)	2		

System Component 2 - Identification & Incorporation of Best Practice (Maximum Score = 21)					
	System Attribute	Notes	Maturity Level 1 (Score 1)	Maturity Level 2 (Score 2)	Maturity Level 3 (Score 3)
2a	Identification & Communication of Internal Best Practices	3			
2a1	Process to identify, review, communicate & implement local/regional best practices		Process exists but inconsistently or incompletely applied, or communication is ineffective	Incomplete implementation OR a well implemented but informal process	Process is well implemented, documented, and credible. Results reviewed & communicated
2b	Identification & Assessment of External (NGO, Government, industry) System Models & Processes				
2b1	Review of external models & processes & selection of applicable & relevant models		Review, selection, & implementation are performed, but process is informal, or inconsistent	As Above	As Above
2b2	Detailed assessment of relevant external models & processes				
2b3	Implementation program for models & processes selected				
2c	Innovation & Substitution				
2c1	Innovation management & substitution opportunity processes implemented		Value of management process for innovation &	As Above	As Above

			substitution is recognized, but limited process		
2d	Peer Identification & Assessment				
2d1	Systematic identification & assessment of peer-organization is performed		Limited, infrequent, or intermittent peer assessment is performed	As Above	As Above
2e	Benchmarking				
2e1	Systematic benchmarking against peer & best-practice organizations is performed		Limited or no benchmarking performed	As Above	As Above

System Component 3 - Sustainability Management Policy & Planning (Maximum Score =36)					
	System Attribute	Notes	Maturity Level 1 (Score 1)	Maturity Level 2 (Score 2)	Maturity Level 3 (Score 3)
3a	Establish organizations sustainability policy via:				
3a1	Identification & assessment of applicable external codes & standards		Limited identification or assessment process for codes & standards	Some assessment of external codes performed, but not thoroughly integrated into policy development process	Detailed, formal identification & assessment process, used as foundation for policy development process

3a2	Selection of external codes & standards for endorsement or adherence (if any)		Limited process for endorsement or adoption of codes & standards	Evidence of endorsement process, but not clearly or completely aligned with sustainability system and strategy	Fully implemented selection process with clearly established criteria for endorsement, or otherwise, of codes
3a3	Development, review, & management approval of sustainability business case		Informal development of sustainability business case	Formal development of sustainability business case	Formal development of sustainability business case & complete integration into overall organization business strategy
3a4	Development, review, approval & communication of sustainability policy		Limited process for development & approval of sustainability policy in place	Policy exists, but is not formally approved or endorsed, or is not linked to business case	Rigorous process for development & implementation of policy, clearly linked to business case & external codes
3b	Sustainability Policy	4			
3b1	Sustainability policy statement		No formal policy statement	Statement exists but does not address all (relevant) aspects or is obsolete	Comprehensive, regularly reviewed statement
3b2	Ethical & compliance policy statement & associated implementation standard		As Above	As Above	As Above
3b3	Additional policies as required by 3a		Requirement not assessed	Requirement assessed but not	Requirement assessed & acted upon

				acted on	
3c	Improvement Process Using Data from System Components 1, 2, 5 & 7				
3c1	Identification & ranking of significant sustainability requirements	Requirements are inadequately identified and ranked	Ranking process in place but lacks time frame, or is otherwise inadequate	Comprehensive, time bound identification & ranking process is implemented	
3c2	Development of (time-bound) sustainability management plan	No formal, documented plan exists	Plan exists but is inadequate, incomplete, or not implemented	Plan is comprehensive, time bound, and implemented	
3c3	Review of plan with (relevant) internal & external stakeholders	Limited or no external review, or incomplete engagement of stakeholders	Review is performed but is informal, infrequent, or otherwise inadequate	Formal & thorough review with executive management involvement	
3c4	Establish short / medium term objectives to facilitate implementation of plan	No formal objectives are established	Objectives exist but are incomplete, inadequate, not measurable or not specific	Comprehensive objectives established & endorsed by executive management	
3c5	Internal & (where applicable) external communication of plan & objectives	Limited, or no communication of plan & objectives	Informal communication process	Formal & thorough communication process with executive management involvement	

System Component 4 - Sustainability Management System (SMS) Scope, Interfaces, & Boundaries (Maximum Score = 42)						
	System Attribute	Notes	Maturity Level 1 (Score 1)	Maturity Level 2 (Score 2)	Maturity Level 3 (Score 3)	
4a	Define scope of sustainability management system (SMS) in the following aspects					
4a1	Ethics: governance, regulatory compliance, & organizational values					
4a2	Ecology: environmental & ecological risks & impacts					
4a3	Perspective: organizational reputation, achievement & sustainability					
4a4	Societal: community impacts, occupational health & safety					
4a5	Quality: customer, product and, or service quality & satisfaction					
4a6	Economic: business impact & shareholder value					
4b	Boundaries & interfaces between SMS and other organizational systems					
4b1	Boundary & interface between SMS and supply chain system		SMS scope incompletely or inadequately defined for this system aspect	SMS scope has been defined for this aspect, but SMS implementation is not sufficiently aligned with definition	SMS is aligned to an effective & appropriate definition of scope for this aspect, with periodic review	
4b2	Boundary & interface between SMS and product / service R&D system					
4b3	Boundary & interface between SMS and personnel management system					
4b4	Boundary & interface between SMS and financial system					
4b5	Boundary & interface between SMS and marketing & external relations system					
			SMS boundary, and interface to corresponding system incompletely or inadequately defined	SMS boundary, and interface are defined, but implementation of interface is limited	Detailed & effective definition of SMS boundary & system interface, with well implemented interface process	

4b6	Boundary & interface between SMS and legal & regulatory compliance system				
4b7	Boundary & interface between SMS and risk management system				
4c	Management of change				
4c1	Process to identify & manage requirements for change in system scope		Process to identify & assess requirements for, & to develop & implement changes to SMS scope or functionality is limited	Change process exists, but implementation is incomplete or ineffective	Change process exists & is fully & effectively implemented

System Component #5 – Organizational Sustainability Management Standards (Maximum Score = 33)					
	System Attribute	Notes	Maturity Level 1 (Score 1)	Maturity Level 2 (Score 2)	Maturity Level 3 (Score 3)
5a	Identification of Requirements for Standards (Using input from Module 2)				
5a1	Process to determine, from outputs of Section 2, requirements for organizational standards		Process missing, informal, incomplete or otherwise inadequate	Process exists but is not embedded in management process	Process is a routine, integral part of management process with well implemented actions
5b	Specific Minimum Requirements for Organizational Standards				
5b1	Process(es) to identify, assess, risk rank & mitigate all categories of sustainability impact	5	Process, aspect or requirements is not	Process, aspect or requirements is	Process, aspect or requirement is

5b2	Business continuity & emergency preparedness & response standard		addressed or is inadequate or incomplete	addressed but is not thoroughly embedded in management process	thoroughly addressed in an organization standard and is an integral part of organizational activities
5b3	Risk monitoring & risk management standard				
5b4	A set of minimum performance standards for each significant aspect of the SMS	6			
5b5	Asset maintenance & management	7			
5b6	Management of local regulatory compliance & interface to organization's compliance system	8			
5b7	Sustainability incident & non-conformance reporting, investigation, analysis, & review				
5b8	Sustainability of products & services				
5b9	Intellectual property protection & management				
5c	Review to Check for Relevance				
5c1	Process to review standards for relevance, & feedback to 5a1		Process missing, informal, incomplete or otherwise inadequate	Process exists but is not embedded in management process	Process is a routine, integral part of management process with well implemented actions

System Component #6 – Value Chain Sustainability Management Processes (Maximum Score = 18)					
	System Attribute	Notes	Maturity Level 1 (Score 1)	Maturity Level 2 (Score 2)	Maturity Level 3 (Score 3)
6a	Supplier Chain				
6a1	Strategic sustainability priorities for supplier chain identified, with appropriate actions		Process missing, informal, incomplete or otherwise inadequate	Process exists but is not embedded in management process	Process is a routine, integral part of management process with well implemented actions
6a2	Cultural differences between GBO & suppliers are identified & managed		As Above	As Above	As Above
6b	Internal Business Process				
6b1	Strategic sustainability priorities for internal business process chain are identified & managed		As Above	As Above	As Above
6c	Customer Chain				
6c1	Strategic sustainability priorities for customer chain are identified & managed		As Above	As Above	As Above
6c2	Cultural differences between GBO & customers are identified & managed		As Above	As Above	As Above
6d	Management of Cylinder of Influence				
6d1	Review of stakeholder influences, assess significant requirements, feedback to 6a,b,c		As Above	As Above	As Above

System Component #7 – Sustainability Management System Assurance, Performance Measurement & Continual Improvement Processes (Maximum Score = 33)					
	System Attribute	Notes	Maturity Level 1 (Score 1)	Maturity Level 2 (Score 2)	Maturity Level 3 (Score 3)
7a	Internal audit, assessment & assurance process				
7a1	Process for internal audit, assessment & assurance		Process is missing, informal, incomplete or otherwise inadequate	Process exists, but implementation is incomplete or ineffective	Process exists & is fully & effectively implemented
7b	External (i.e. regulatory) audit, assessment & assurance process				
7b1	Process for external audit, assessment & assurance		As Above	As Above	As Above
7c	Process to identify, capture & implement lessons learned				
7c1	Process for identification & implementation of lessons learned		As Above	As Above	As Above
7d	Performance Measurement				
7d1	Identification of sustainability performance indicators		Use of indicators missing, informal, incomplete or otherwise inadequate	Indicators are used but not embedded in management process	Use of indicators is a routine, integral part of management process with well implemented actions
7d2	Implementation of performance measurement & management system				
7d3	Systematic review of results versus performance objectives				
7e	Management Review				
7e1	Management review of sustainability strategy		Review missing, informal, incomplete or otherwise inadequate	Review performed but not embedded in management process	Review is a routine, integral part of management process with well
7e2	Management review of sustainability aspects of operational processes				
7e3	Management review of stakeholder interests &				

	requirements			implemented actions
7f	Systematic Maturity Testing of SMS			
7f1	Process for maturity testing of SMS	Process is missing, informal, incomplete or otherwise inadequate	Process exists, but implementation is incomplete or ineffective	Process exists & is fully & effectively implemented
7g	Business Review of SMS			
7g1	Process for business review of SMS	As Above	As Above	As Above

References

- Abrahams, D. (2004). *Regulating Corporations, A Resource Guide* [Online]. [Referred to 1.7.2009]. Available: www.unrisd.org .
- ArcelorMittal (2007). *History*_[Online]. [Referred to 1.7.2009]. Available: www.arcelormittal.com.
- Bishop, M. (2008). A Bigger World, A Special Report on Globalisation. *The Economist*, September 20th 2008, 3 – 6.
- BP (2009). *History of BP* [Online]. [Referred to 1.7.2009]. Available: www.bp.com.
- Brammer, S.J., Parelin, S. (2006). Corporate Reputation & Social Performance: The Importance of Fit. *Journal of Management Studies* 43-3, 435-455
- BSI (2006). *British Standard on Sustainability Management BS8900:2006* [Online]. [Referred to 1.7.2009]. Available: www.bsi-global.com
- BSI (1999). *Occupational Health & Safety Management Standard OHSAS 18001:1999* [Online]. [Referred to 1.7.2009]. Available: www.bsi-emea.com.
- BSI (2003). *BSI Publically Available Specification (PAS) 55, Asset Management* [Online]. [Referred to 1.7.2009]. Available: www.bsi-global.com.
- De la Torre, J. et. al. (2001). *Managing the Global Corporation: Case Studies in Strategy & Management, Second International Edition*. Irwin McGraw-Hill, Singapore.
- Doz, Y. , Santos, J. , Williamson, P. (2001), From Global to Metanational: How Companies Win in the Knowledge Economy, *Harvard Business School Press*.
- Equator Principles (2003). *The Equator Principles* [Online]. [Referred to 1.7.2009]. Available: www.equator-principles.com.
- European Union (1995). *Eco-Management & Audit Scheme (EMAS)* [Online]. [Referred to 1.7.2009]. Available: www.ec.europa.eu/environment.
- Friedmann, U., Walther, M., (2002). *The Impacts of Corporate Environmental Management Systems – A Comparison Between EMAS & ISO14001, EASY-ECO Conference 2002 Vienna* [Online]. [Referred to 1.7.2009]. Available: www.sustainability.at
- Gadiesh, O. (2004). *Risk Proof Your Brand* [Online]. [Referred to 1.7.2009]. Available: www.bainlab.com.
- Gallagher, D.R., et. al. (2004). Environmental Management Systems in the US & Thailand, *Greener Management International* 46, 41-56.

Global Reporting Initiative (2006). *G3 Reporting Guidelines* [Online]. [Referred to 1.7.2009]. Available: www.globalreporting.org.

International Chamber of Commerce (2007). *The Business Charter for Sustainable Development* [Online]. [Referred to 1.7.2009]. Available: www.iccwbo.org.

International Organization for Standardization (2004). *International Standard ISO14001:2004* [Online]. [Referred to 1.7.2009]. Available: www.iso.org.

International Organization for Standardization (2008). *ISO26000 Committee Draft 2008* [Online]. [Referred to 1.7.2009]. Available: www.iso.org.

Jiang, R.R., Bansal, P. (2003). Seeing the Need for ISO14001. *Journal of Management Studies* 40-4, 1047-1067.

Jørgensen, T H., et. al (2006). Integrated Management Systems – Three Different Levels of Integration. *Journal of Cleaner Production* 14, 713-733.

Kolk, A., Van Tulder, R. (2001). Multinationality and Corporate Ethics: Codes of Conduct in the Sporting Goods Industry. *Journal of International Business Studies*. 32-2, 267-284.

Leipziger, D. (2003). *The Corporate Responsibility Code Book*. Greenleaf, UK.

Mead, C. (2006). *Beyond Reporting – Systematic Approaches to Sustained Corporate Responsibility* [Online]. [Referred to 1.7.2009]. Available: www.bsi-global.org.

MIT Sloan School of Management (1997). *Keywords and Definitions for Interesting Organizations* [Online]. [Referred to 1.7.2009]. Available: ccs.mit.edu.

Moxen, J., Strachan, P.A. (2000). ISO14001: A Case of Cultural Myopia. *Eco-Management & Auditing* 7, 82-90.

Oktem, U., et. al. (2004). EMS & Sustainable development, A Model & Comparative Studies Of Integration. *Greener Management International* 46, 11-28.

Organization for Economic Cooperation & Development (2000). *Guidelines for Multinational Enterprises* [Online]. [Referred to 1.7.2009]. Available: www.oecd.org.

Peglau, R (2009). *The Corporate Risk Management Company / ISO World* [Online]. [Referred to 1.7.2009]. Available: www.ecology.or.jp/isoworld/.

Petra, C., Taylor G (2006). Firm Self-Regulation through International Certifiable Standards: Determinants Of Symbolic Versus Substantive Implementation, *Journal of International Business Studies*, 37- 6, 863-878.

Redding, G. (2006). The Myth of the Global Company. *World Business* 1, 1.

Social Accountability International (2001). *SA8000:2001 Standard* [Online]. [Referred to 1.7.2009]. Available: www.sa-intl.org.

Sarkis, J., Srafe, R. (2004). Strategic Sustainability: The State of The Art in Corporate Environmental Management Systems. *Greener Management International* 46, 5-9.

Schlumberger (2009). *Corporate History* [Online]. [Referred to 1.7.2009]. Available: www.slb.com.

Sealy, I., Wehrmeyer, W., France, C., Leach, M. (2008), *Sustainable Development Management Systems in Global Business Organizations*, [Online]. [Referred to 1.7.2009]. Available: www.crrconference.org/previousconferences/crrc2008/

SIGMA Project (2003). *The SIGMA Project* [Online]. [Referred to 1.7.2009]. Available: www.projectsigma.co.uk.

Thunderbird Business School (undated). *Global Mindset* [Online]. [Referred to 1.7.2009]. Available: <http://www.thunderbird.edu>.

UNCTAD (1992). World Investment Report 1992 [Online]. [Referred to 1.7.2009]. Available: www.unctad.org.

UNCTAD (1993). World Investment Report 1993 [Online]. [Referred to 1.7.2009]. Available: www.unctad.org.

UNCTAD (1994). World Investment Report 1994 [Online]. [Referred to 1.7.2009]. Available: www.unctad.org.

UNCTAD (1995). World Investment Report 1995 [Online]. [Referred to 1.7.2009]. Available: www.unctad.org.

UNCTAD (1997). World Investment Report 1997 [Online]. [Referred to 1.7.2009]. Available: www.unctad.org.

UNCTAD (2002). World Investment Report 2002 [Online]. [Referred to 1.7.2009]. Available: www.unctad.org.

UNCTAD (2005). World Investment Report 2005 [Online]. [Referred to 1.7.2009]. Available: www.unctad.org.

UNCTAD (2007). World Investment Report 2007 [Online]. [Referred to 1.7.2009]. Available: www.unctad.org.

UNCTAD (2008) World Investment Report 2008 [Online]. [Referred to 1.7.2009]. Available: www.unctad.org.

Utting, P. (2005). Rethinking Business Regulation. From Self-Regulation to Social Control, *UNRISD Technology, Business & Society Program* Paper 15.

van Tulder, R., van den Berghe, D., Muller, A. (2001). *Erasmus Scoreboard of Core Companies: The World's Largest Firms & Internationalization*. Erasmus University of Rotterdam ISBN 90-9014707-1.

Wehrmeyer, W. (2004). Editorial. *Greener Management International* 46, 2-4

Welch, E.W. et. al. (2003). The Promises & Pitfalls of ISO 14001 for Competitiveness and Sustainability: A Comparison of Japan and the United States. *Greener Management International* 44, 59-73

RESPONSIBLE MANAGEMENT – OPPORTUNITY FOR SUSTAINABLE GROWTH IN SLOVENIAN BUSINESS PRACTICE

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Abstract

Businesses today are experiencing profound pressures to reform and improve stakeholder-related practices and their impacts on stakeholders and the natural environment. This paper researches the relationship and potential synergies between the quality management and corporate social responsibility (CSR) where emerging systems from the total quality management systems (TQM) to the total responsibility management (TRM) have been compared. The evolution of TRM in companies includes three main components – approaches – inspiration (vision), integration and improvement/innovation. TRM indicators focus on stakeholders together with triple bottom lines of economic, social and environmental issues. Gorenje Group represents a successful case of implementation of TRM, especially of environmental management, into corporate values, culture, strategies and measurement of sustainable indicators to employees, responsibility to closer and wider social environment, effects of CSR on consumer behaviour, responsibility to the product users and services, responsibility to the natural environment, environmental and occupational health and safety policy. CSR offers the connection between sustainability and long-term competitiveness.

Keywords: total responsibility management, total quality management, corporate social responsibility, sustainable development, sustainable indicators, environmental management, Gorenje Group.

Introduction

The European Union (EU) acknowledged the potential role that corporate responsibility might play in realising EU's goal of becoming the most competitive knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion. Businesses can compete effectively across the responsibility spectrum, spanning from investment in environment-friendly technology and raising productivity by improving their employees' work-life balance, all way to cutting corners on environment and labour standards and engaging in corrupt relationships with governments decline. (Zadek, 2004)

Quality management is given in modern companies – a competitive imperative. Why and how should responsibility be managed? What is responsibility management? Contemporary literature (Waddock & Bodwell, 2007) answers these questions and at the same time provides a systemic framework for managing the company's

responsibilities to stakeholders and the natural environment that can be applied in a wide range of contexts. Moreover, the company's management of its responsibilities to other constituencies affects its relationships with those other stakeholders and its natural environment. It is important to make explicit the process of managing responsibilities to and relationships with the stakeholders and nature.

Corporate social responsibility (CSR) is continual company's commitment to ethical behavior, economic development, improvement of the life quality of employees, their families, the local community and society in general. However, researches suggest that CSR under certain conditions can stimulate innovation, investment or trade and consequently also competitiveness. As Porter & Kramer (2006) state "corporations are neither responsible for the world's problem, nor do they have the resources to solve them all. Each company can identify the particular set of societal problems that it is best equipped to help resolve and form, which it can gain the greatest competitive benefit from." During the last decade growing numbers of companies worldwide acknowledged the importance of CSR in doing business (Cramer, 2003). Today CSR is one of the most important items on the corporate boardroom agenda for significant number of companies worldwide (Grayson & Hodger, 2004). The increased attention to CSR from all the stakeholders is becoming stronger and is making pressure on the companies to transform their business practices and relationships in order to create additional (sustainable) values other than the stakeholder's value. These challenges of sustainability are now being expanded in the increasing CSR-related expectations and changing consumer's behaviour as well as accountability and being more active and involved in the civil society.

This paper researches the relationship and potential synergies between the quality management and CSR as emerging systems from the total quality management systems to the total responsibility management (including ecological management) and sustainable indicators and their implementation – in Gorenje Group. The theory total responsibility management (including environmental management), indicators and measurement of corporate sustainability, sustainable consumption, management practices in Gorenje Group are investigated.

What are Corporate Social Responsibility and Responsibility Management?

The research on CSR carried out over the last 30 years has mainly been related to the analysis of value creation (Clarkson, 1995; Harrison & Feeman, 1999; Waddock & Graves, 1997). The neo-institutional theory suggests that organizations and their strategies are strongly influenced by the institutional characteristics in which they operate and by the legacy reflected by the culture, history and policy of a specific country or region (Doh & Guay, 2006). Furthermore, Welford (2005) states that in general CSR is more active in Europe than in the United States or Canada, mainly in the North European Countries. Their research results show that there are significant differences in the social behaviour between highly reputed European and North American companies. These differences tackle the level and components of the social behaviour as well as the factors, which motivate such behaviour. The difference is more significant concerning responsibilities toward employees and

customers of the company than toward community or natural environment. From this perspective, managing responsibility means building trusting relationships with key stakeholders, such as employees, customers, suppliers and communities, and ensuring that despite the power differences that may exist the company's impacts are rather positive than negative (Waddock & Bodwell, 2007).

Briefly about Total Responsibility Management

Briefly, TRM starts with inspiration. It means that the company has articulated a values-driven vision to which top management is committed. Built on generally agreed foundational standards that provide a floor of expectations about company practices and performance while incorporating the company's own explicitly stated values, the vision guides strategy development and implementation, processes, procedures and relationships. The next major component of TRM is integration. TRM integrates the company's inspirational vision into its strategies, its employee relationships and practices, and the numerous management systems that support company strategies. TRM, using continual improvement tools creates feedback loops that foster innovation and improvement in management systems. Key performance indicators, or a measurement system that assesses how well the company is performing along at least the triple bottom line of economic, social and environment (Elkington 1998) is an important element of the TRM framework; so are transparency and accountability for results. TRM in brief means (Waddock & Bodwell, 2007): 1) inspiration: vision setting and leadership systems (responsibility vision, values and leadership systems, stakeholder engagement processes); 2) integration: strategy, employee and operating practices (strategy, human resource responsibility, responsibility integration management systems); 3) innovation: improvement and learning systems (improvement: remediation, innovation and learning) and 4) plus indicators to feed back into the improvement and innovation system (responsibility measurement system; results: responsible economic performance, stakeholder/societal and ecological outcomes; transparency and accountability for results and impacts).

In analogy with quality management TRM follows the traditional process sequence embedded in quality systems in their implementation – plan, do check, act – a process that is embedded in the corporate accountability management system called SA8000 (Social Accountability 8000) which primarily focuses on implementation of labor standards, but can be extended to TRM. The plan-do-check-act sequence provides a process for continual improvement which is needed to ensure not only that responsibility management is in place but also that the company is on a path of continual improvement. TRM is very similar to TQM, where top-management and leadership commitment to customers is a fundamental first step. The specific attribute of TRM is that other stakeholders' interests are also need to be taken into consideration. Responsibility management, as with quality management, is not necessarily about perfection, but rather about a process of continual improvement and innovation. As with quality management, improving the company's responsibility management means involving and engaging with key stakeholders, particularly with employees. By engaging with them interactively, companies can

develop improvement and learning systems that help them generate better returns and greater competitive advantage.

Putting responsibility management into practice - Employees in quality-oriented culture instinctively act as a team. Organizations where focuses on customers, continuous improvement, and teamwork are taken for granted have a good chance of attaining the total quality. The criteria are built upon a set of “core values and concepts” (Evans, 2007): visionary leadership, customer-driven excellence, organizational and personal learning, valuing employees and partners, agility, focus on the future, managing for innovation, management by facts, social responsibility, focus on results and creating value and systems perspective. Some initiatives that benefit ecology have been introduced at relatively low cost. The comparison of core values and concepts in TQM/Baldrige Award and TRM are presented in Table 1.

Table 1 Comparison of core values and concepts in TQM/Baldrige Award and TRM

Baldrige award core values / concepts	TRM core values / concepts
Visionary leadership	Visionary and committed leadership
Customer-driven excellence	Stakeholder-driven excellence and responsible practices
Organisational and personal learning	Organisational and personal learning through dialogue and mutual engagement with relevant stakeholders
Valuing employees and partners	Valuing employees, partners, other stakeholders
Agility	Agility and responsiveness
Focus on the future (short and long term)	Focus on the future (short and long term)
Managing for innovation	Managing for responsibility and improvement
Management by fact	Management by fact, transparency, accountability
Public responsibility and citizenship	Public responsibility and citizenship
Focus on results and creating value	Focus on positive results, impacts and value-added for stakeholders with responsible ecological practices

Source: Waddock and Bodwell (2007, 57-59)

At the company’s level, sustainable development strategy should be “fostered by a strong sense of social environmental purpose”; it implies a commitment to a triple bottom line that includes profitability, environmental and social goals (Fowler and Hope, 2007). Vision can be a positive guide for action and decision-making, it helps to determine what should be and should not be done, it inspires people to do their best work, provides a meaningful framework for company’s stakeholders, creates a sense of ‘we’ that inspires new ideas and contributions, and provides a long-term sense of direction and purpose (Waddock & Bodwell, 2007). The important work of Collins & Porras (1997) highlights how a well-articulated vision can contribute to company’s long-term success. In their book *Built to Last* they found that the visionary companies, that did so well, had future-oriented, inspirational visions,

supported by widely recognised core values along with supporting strategies that enabled the company to achieve its vision in the long term. It is to those values, both core to the company, and foundational to basic human dignity, that we now will turn. Vision setting and leadership systems create the organizational context for managing responsibility. A necessary condition is having a clear vision about CSR from the top management and well-articulated guiding core values that support the vision. Articulating these values is an important element in developing a coherent and meaningful vision and strategy. For example Ketola's (2007) corporate responsibility model anthropocentrism illustrates preference for social responsibility, biocentrism, preference for ecological responsibility and techno centrist the view that economic and ecological responsibilities can be simultaneously achieved through technological solutions.

Leadership commitment - Leaders and managers in company play a crucial role in developing vision and values. Adopting a TRM approach means systematically changing the entire company, ensuring that vision and values are integrated into all company's strategies and operating practices; it also requires the top management involvement. Leaders, wherever they are in the organization, but particularly in the top management, need to take a long-term perspective, make a public commitment, communicate the commitment, be a role model for the company's values, to integrate vision and values into strategies and practices, and support change (Waddock & Bodwell, 2007).

Leading companies are finding that new strategic and organisational skills are required to integrate stakeholder considerations into the value delivery capability of their organisations. The competencies to manage stakeholder value in a way that integrates environmental and social issues into core business decisions remain in familiar territory in all but a handful of companies. The eight disciplines that form the core competencies required to create sustainable value are: 1) understand current value position, 2) anticipate future expectations, 3) set sustainable value goals, 4) design value creation initiatives, 5) develop the business case, 6) capture the value, 7) validate results and capture learning, 8) build sustainable value organizational capacity. All eight are essential to achieving the goal and must be considered as parts of a whole process. The eight disciplines of sustainable value are integrated into a management process that executives can use in their organisations to discover and create sustainable value in a step-by-step approach (Laszlo, 2008):

Stakeholder engagement - The proactive stance is the best in this attempt to anticipate and hence respond to problems before they arise. Many companies find that two-way communication or what is called stakeholder engagement can help to provide better information about possible problems and better prepare the company for issues. The next important task is to identify the relevant stakeholders. Most companies would acknowledge the importance of a certain set of stakeholders, called primary and secondary stakeholders (see e.g. Clarkson 1995; Waddock 2006).

Integrating responsibility management - What is clear is that responsibility management approaches must be both systemic and requisitely holistic, if they are to be effective. A key step in developing innovation and improvement systems is to provide guidance and structures that encourage responsible practices. Improvement and innovation means taking processes or systems that may or may not be working

reasonably well now and making them better. Employees are the most critical resource that a company has for improving its TRM systems because they do the work of the organization day to day.

Indicators – to measure responsibility, new indicators need to be added to financial and quality management systems, in what we call ‘plus indicators’. Indicators for TRM focus on stakeholders and on the triple bottom lines of economic, societal and environment issues. Measures of business success and dimensions of corporate sustainable-development performance focuses specifically on the key areas of (van Heel et al. 2001): governance (ethics, values and principles); general business (triple-bottom-line commitment); environment (environment process focus and environment product focus); socioeconomic (socioeconomic development, human rights, workplace conditions); and stakeholder engagement (engaging business partners, engaging non-business partners).

Environmental management systems and standards

Current political trends and scholarly research increasingly promote collaborative and participatory governance in multi-level systems as a way to more sustainable and effective environmental policy. Participatory and multi-level, scale-adapted governance are current responses to lacking effectiveness of environmental policy in Europe and other modern democracies.

Environmental policy in Europe and elsewhere has been suffering from a lack of effectiveness (Jordan, 2002; Knill & Liefferink, 2007). As a response, two key strategies have been proposed and partly pursued: (1) to adapt the level and spatial scale of governance to that of the environmental problems; (2) to enhance participation of non-state actors in environmental decision-making. In order to effectively respond to environmental problems, it has repeatedly been proposed to adapt the scale of governance institutions to that of the environmental issue (Young, 2002). Increasingly, functionally specific governance institutions on natural spatial scales are being marshalled (Hooghe & Marks, 2003). For instance, the EU Water Framework Directive (2000/60/EC) mandates river basins as the relevant unit for planning, management and protection of inland waters. To date, a high number of vertical, horizontal and, across these, task-specific levels of governance exist in Europe. Thus, environmental governance has become a highly complex system of decision points (Meadowcroft, 2002). An important aspect of governance – as opposed to government, and of multi-level governance in particular, is the participation of non-state actors in decision processes on the different levels of governance (Bache and Flinders, 2005; Papadopoulos, 2007).

In this context, a stronger decentralization in policy implementation is advocated (Jordan, 2002). Prominently, the European Commission’s White Paper on Governance (2001) and the report by the Mandelkern Group on Better Regulation (Mandelkern Group, 2001) represents stimulating impulses for the architecture of European governance. In the light of increasing policy implementation gaps (Jordan, 2002), these documents develop criteria for ‘good European governance’ and marshal novel procedures for ‘better regulation’, including extended stakeholder

consultations. In the field of environmental policy, in particular the inclusion of non-stake actors in policy-making achieved prominence thanks to four EU directives pushing forward more collaborative forms of governance: for example, the Water Framework Directive (2000/60/EC) and the Public Participation Directive (2003/35/EC). Drawing on the academic literature (Steele, 2001; Pellizzoni, 2003), participatory governance is expected to contribute to improving the 'quality' of decisions by incorporating locally held knowledge and by opening up the political arena for environmental interests. Further, it is argued that the inclusion of stakeholders increases the acceptance of decisions and thus improves compliance and implementation on the ground (Schenk *et al.*, 2007). Based on these prerequisites, participatory and collaborative forms of governance are expected to lead to more effective improvements in environmental quality (Newig, 2007; Dietz & Stern, 2008). This is typically expected with environmental problems characterized by increasingly complex spatial interrelations of societal and ecological processes (Meadowcroft, 2002; Young *et al.*, 2006). Of particular interest is the hitherto most comprehensive case survey by Beierle & Cayford (2002), who analyse 239 cases, albeit with considerable methodological shortcomings. We need to know which types of decision-making processes – multisectoral collaboration, hierarchical planning, command and control regulation, or market-based mechanisms – perform best in terms of environmental outcomes' (Koontz & Thomas, 2006 and Rauschmayer *et al.*, 2009).

A particular challenge for research (and practice) arises from the fact that the question of (civic) participation is invariably connected to the issue of governance level, because participation is always carried out on a particular – typically local or regional – level. For instance, the perceptions and preferences of citizens and interest groups are presumably not neutral regarding the spatial distance to environmental resources or problems, neither is the engagement of actors neutral regarding the level of governance (Koontz, 1999). Although it is plausible to assume that there is unexpected potential and fundamental contradictions embedded in the relationship between participation and multi-level governance, this has not yet been the subject of scholarly attention (except by Warleigh, 2006).

Environmental management systems (EMS) were developed as a response to pressure to show the environmental performance. The EMS emerged as a mean to ensure compliance with regulations and to respond to societal concerns related to environmental incidents. EMS is that part of the overall management system, which includes the organizational structure, responsibilities, practices, procedures processes and resources for determinateing and implementing the firm's overall aims and principles of action with respect to the environment. Environmental management bears many resemblances and is often harmonised with the quality management. Environmental policy should be planned, implemented, checked and corrected if necessary and finally reviewed. In this way firms aim at continual improvement of the system in order to ameliorate environmental performance (Kolk, 2000). An EMS consists of different elements, according to the cycle of plan, do, check and act, which, if followed constantly, leads to continuous improvement. As the design in implementation of an EMS requires considerable time and effort, the process will only start if management is committed. Managers should communicate their support to the whole organization and emphasise that they aim to improve environmental performance.

Responsible competitiveness

The question is whether corporate responsible practices can play a significant role in driving 'responsible competitiveness', characterised by a positive relationship between national and regional competitiveness and a nation's sustainable development performance. The relationship between international competitiveness and CSR is not a simple one. However, CSR can under certain conditions stimulate innovation, investment or trade, and hence competitiveness. The potential for 'CSR clusters' has been identified as creating competitive advantage within several sectors arising through interactions between the business community, labour organisations and wider civil society, and the public sector focused on the enhancement of CSR. Furthermore, while Porter was originally thinking of clustering focused on the role of geographic proximity in stimulating innovation, learning and productivity, research (Zadek, 2004) raises the possibility of geographically dispersed clustering, for example along value chains. Public policies to amplify CSR practices need to be, and indeed are being, formulated in the context of this complexity at an international level and also at regional, national and even community levels: redefining our understanding of 'responsible competitiveness'; national, regional and sector analysis; standards, tools and competitiveness; responsible competitiveness, winners and losers; redefining competitiveness measures.

Social responsibility (of enterprises as human tools for a part of economic benefits) can be a superficial charity, some saving of energy and nature, some fair treatment of co-workers and other business partners and broader society, etc., which is fine, but social responsibility can be much more: upgrading of methods of so far for social advancement and sustainable future, such as total quality management, business excellence, innovative business, business reengineering etc., consideration of the law of requisite holism in the daily practice, or even a new way out the current blind alley of affluent and complacent society, or even a new way to the world peace. Cost/benefit alternatives in business are presented by Knez-Riedl & Mulej (2008). Creativity matters do not tackle only the innovation of products, services, and work processes, but also include a sense-making content of working and leisure time of people as creative creatures. The fact that the creative class is increasing its share of society (Florida, 2005); with social responsibility of creative people and their co-workers and stakeholders as the most influential groups; then we might be able to find a way from abusing the liberal economics to sustainable future. Tolerance for diversity brings talents and makes investment in technology worth while, the 3T model says (Florida, 2005); this makes the difference between the most successful and other regions.

Effects of Corporate Social Responsibility on Consumer Behaviour

In a business world characterized by an increasing competition and in which corporate actions are being employed to complement marketing activities in order to gain a sustainable competitive advantage, the present research contributes to our understanding of the effects of CSR on consumer behaviour. It especially (Marin et al., 2009) shows that CSR initiatives have influence on the consumer behaviour

through multiple paths, including the traditional path through company evaluation as well as the recently proposed path through consumer-company identification. CSR activities have a significant influence on several consumer related outcomes such as consumer product responses (Pirsch et al., 2007) and attitudes (Berens et al., 2005) as well as consumer-company identification (Sen and Bhattacharya, 2001). The topic has been intensely researched in recent years, but the results seem to be inconclusive. The stock performance of “good” companies does not excel that of their “inferior” competitors (Mc Williams & Siegel, 2000; Margolis & Walsh, 2003; Orlitzky et al., 2003; Rubbens & Wessels, 2004). Page & Fearn (2005) found that, in the area of corporate reputation, perceptions of fairness toward consumers or attributions of success and leadership to a company have the greatest impact on consumer attitudes.

Studies of the effect of a company’s social reputation on consumer purchasing preferences... have been inconclusive at best (Porter & Kramer, 2006). Fair Trade is now part of a wider and complex ethical consumer movement that demands socially and environmentally sustainable production processes (Low & Davenport, 2006). Fair trade is considered one of the best examples of how the economy can be based upon solidarity and sustainability.

Successful implementation of TRM (environmental management) - Gorenje Group

Problem definition

Problem - The main researches on Corporate Social Responsibility have not included synergies between Total Responsibility Management (including environmental management) and Total Quality Management into corporate strategies. CSR and sustainable development have to be measured.

Hypothesis: Total Responsibility Management (including environmental management and its implementation in corporate strategies) are elements of CSR and sustainable development which lead to sustainable development and long-term competitive advantages. Gorenje Group can serve as a successful case in Slovenia.

Methodology – Gorenje Group (the second biggest export company in Slovenia) - Head of the department of environment and health and safety at work, has been interviewed. Furthermore, the Gorenje Group internal data have been included.

Research questions

The questions are following this aim: Is TRM/CSR included in your corporate culture, values and strategies? How does your company put TRM/CSR, especially ecological management, into practice and explain the leadership commitment? What is the context and why is special attention paid to environmental management? Which environmental-management encompassing dimensions have already been included in your strategies? Which TRM/CSR, especially environmental-management indicators, are introduced in your company and how it is measured –

examples? What are the main commitments and goals of Gorenje Group regarding TRM/CSR – environmental management and environment protection? Why are EMAS and good working conditions so important for your company? What are your expectations, successful outcomes and will TRM/CSR lead your company to responsible competitiveness? What discourages Slovenian companies from more sustainable behaviour and people from consuming more sustainably? What actions can responsible and sustainable business take to deliver goods and services that encourage people to consume more sustainably? What does Gorenje Group do to encourage sustainable behaviour of the consumers? What can government and communities do to encourage and enable more successful environmental/sustainable management, sustainable production and consumption?

Research findings in general

Gorenje Group wider values, leadership principles and policies are supplemented by the Gorenje Sustainable Development Policy, which lays down their sustainability strategy. The Gorenje Group has undertaken to pursue a sustainable and value-oriented business policy, in part through their commitment to the Global Responsible Care Initiative. The Gorenje Group is aware of its responsibility for its activities, which have an impact on people as well as on closer and wider surroundings, including the natural environment; therefore its approach to the CSR is a planned and responsible one.

Group-wide control of this task is handled by the Gorenje Corporate Sustainability Board, the most important committee for sustainability management at the Group level. The Gorenje Corporate Sustainability Board consists of the members of the management boards of the subgroups responsible for ecology and technology and the heads of the Corporate Center departments for Corporate Human Resources & Organization, Communications and Environment & Sustainability. Chaired by the Group Management Board member responsible for Innovation, Technology and Environment, this body meets regularly to jointly establish the sustainability strategy and objectives, to adopt Group sustainability-related directives and to decide on key initiatives. A corner stone in the implementation of these decisions is the Environment & Sustainability Department. The subgroups and service companies have established effective management systems for health, safety, environmental protection and quality (HSEQ). Rules governing health protection and workplace safety are particularly important and have thus been adapted. The Gorenje Group is aware of the responsibility for its activities with impact on people as well as on closer and wider surroundings, including the natural environment, therefore its approach to the social responsibility is a planned and responsible one.

CSR in Gorenje Group incorporates: 1) responsibility to employees; 2) responsibility to users of products and services; 3) responsibility to close and wide social environment and 4) responsibility to the natural environment. Some key activities and expected benefits are presented below.

Responsibility to employees (including health protection)

There are several issues to be covered.

Concern for education and training of employees - The dilemma to invest only in material assets or also in knowledge is actually the dilemma between to »have« and to »be«. Knowledge and skills acquired in the process of education, training and living in an organized society enables facing of new challenges. Simultaneously, this is the motive for further development. For years Gorenje has introduced and accepted the concept of a learning company. In 2008 the parent company trained a total of 4,541 staff, which represents a share of 86.5 percent of all employees. More than 85.0 percent of all training and education programs were organized outside working time.

Concern for young and promising staff - Granting scholarships is an important source of acquiring human resources. The share of students of technical studies reached 83.6 %. Through the education centre Gorenje is involved in various state education projects and presentations.

Development of human resources - The mission of the HR development is detection of individual's advantages, wishes and ambitions and their development in accordance with his/her objectives and the objectives of Gorenje. Measuring of organizational climate and employees' satisfaction is used for the detection of satisfaction of employees with their working conditions and relations at work.

Healthcare for employees - The fact that only a healthy and satisfied employee can be successful at work is the basic guidance of all persons involved in the project "Health care for employees and management of sick-absenteeism". Simultaneously, it is checked how employees follow the instructions for treatment and behavior at the time of absence from work. Special attention is paid to employees with reduced working capacity. In compliance with the legislation the mentioned employees are placed to suitable easier jobs.

Assurance of suitable employment to disabled persons - the Employment Rehabilitation and Employment of Disabled Persons Act introduce a system of employment quotas for the disabled in Slovenia Gorenje Group operates in accordance with the requirements of occupational health and safety contained in standard OHSAS 18001 (Occupation health and safety management systems).

Communications with employees - The most important target public of the Gorenje Group are its employees. They are the first voices advertising the trade mark and the first ones representing the culture and values of the Group to the external world. Gorenje has ensured the level of information also by the weekly 'Black on white', and the sporadic journal 'Point on G'. Gorenje Group has done a great deal of organization and management on employee's welfare.

Responsibility to users of products and services

This part of CSR is also manifold.

Assurance of product safety - When developing products Gorenje's most relevant guidance is assurance of product safety which is checked by Slovene and esteemed foreign institutions.

Assurance of environmentally friendly products – is based on European Committee of Domestic Equipment Manufactures (CECED). Gorenje Group typically makes an effort to provide products that guarantee the satisfaction of customers and meets their expectations. The responsibility to customers ensures that the product is of high quality, accessible, safe and environmental-friendly, and has less social and environmental impacts. More long-term attention should be paid to education of sustainable consumers and all stakeholders (values) in welfare society.

Responsibility to close and wide social environment

Gorenje Group has built up its reputation also by contributions to various activities. Company's own activity plays an important role in social activities in the area of culture, health care and humanitarian activities, sports sponsorship and recreational activities for a wide society, stimulate employees and their families to pay more attention to healthy way of life and useful spending of free time. Employees are also encouraged to become members of the Recreational Society Gorenje that receives some funds. Gorenje Group has also supported the activities of the Pensioners' Club of Gorenje and thus showed its concern for the third life period of the company's former employees - for example to establish senior home for former employees in cooperation with local community.

In the recent past the rise and increased attention to CSR in Slovenia has put Gorenje Group in the spotlight and created significant interests and/or reactions among different stakeholders in Slovenian welfare state. There is a wide array of community activities in which Gorenje Group is involved (corporate citizenship – especially very good cooperation with communities where their companies are and where their employees live).

Responsibility to the natural environment

In Gorenje Group, protection of the environment is at the heart of short-term and long-term policies and goals and it is also an important part of the corporate culture. Hence, Gorenje was awarded the ISO 14001 standard for environment protection as early as ten years ago. Furthermore, company operations were adjusted to meet the requirements of the EMAS regulation in 2003. Today, Gorenje Group sees environment protection not only as an obligation, commitment and self-evident responsibility, but also as a source of numerous new business opportunities.

Gorenje invests between EUR 40 and 50 million annually into updating its technology and developing new products. In all segments of its operations and investments related to environment protection, the investments are deliberately planned to exceed the legal requirements. In addition to design and functionality, one crucial aspect of developing new products is in compliance with the requirements of ecological design which takes into account the entire life cycle of a product, from development, manufacturing, operation, to disposal. Furthermore, energy efficiency is one of the key strategic goals when developing new technical solutions, both for products and manufacturing processes. All new products are developed in a way that makes them environment-friendly, as they are made using environment-friendly technological procedures and materials, and as they consume less power, water, and detergent. These appliances rank among the most cost-efficient household appliances in the market. They reach and exceed the highest energy classes required by European standards. The noise that they emit during operation is minimal.

The parent company Gorenje continued its activities of environmental management by performing its activities planned for the achievement of objectives of environmental protection. Besides striving for the achievement of measurable objectives (waste management, energy products – all objectives were achieved) special attention was paid to the introduction and meeting of requirements of the RoHS Directive (Restriction on the use of certain hazardous substances in electrical and electronic equipment). Since the parent company is subject to the requirements of the new IPPC legislation (Integrated Pollution Prevention and Control) it filed an application for obtaining the comprehensive environmental license with the Ministry of Environment and Spatial Planning.

Statement of the credibility of environmental data – ECO-Management and Audit Scheme(EMAS) is a directive by the European Parliament and the Council of Europe, elaborated as a tool for systematic treatment of environment. Gorenje decided to voluntarily enter the EMAS Scheme even before the Slovenian entrance in EU. Therefore it had adequately upgraded its existing system of environmental treatment by the ISO 14001 standard. In the period of aggressive investment into the modernization of technological procedures it had created circumstances for compliance with the legal requirements and rules regarding all environmental aspects. The environmental report published in Gorenje, has already included the certified environmental statement. Gorenje has also fulfilled the requirements regarding communication and engagement of employees in the environmental treatment system. Corporate environmentalism has been proliferating in Gorenje Group and has become a de facto culture of company. Eco-efficiency, environmental management systems (EMS), environmental accounting, auditing and reporting, etc. have provided an array of frameworks for Gorenje Group in responding to environmental issues and the concept of “greening” has become an established corporate motto. Many indicators are used and new indicators are permanently introduced and presented in Gorenje Group environmental report each year.

In the field of environment protection, Gorenje is in the apex of European industry, both with regard to appliance development and management of technological procedures. One proof there of is the Advance Project survey conducted by a group

of independent research institutes from several European countries, which ranks Gorenje as third in Europe by efficient environment protection management.

Advantages of contemporary technological solutions for an environmentally conscious user

Contemporary consumers are increasingly aware that price and appearance can no longer be the sole criteria for decisions regarding the purchase of a household appliance; product's impact on the environment should also be considered as a major aspect. Every household consumes a lot of power to provide a good and comfortable life. Gorenje is a company ranked among the best manufacturers of modern appliance for the home. The awards contributed to the competitiveness of the Gorenje Group. At the same time we have to mention the institute of ecological research ERICo (has been a part of the Gorenje Group), which is among the winners of the European Regional Champions Award 2008.

In 2007, the German Institute of Applied Ecology Öko-Institut E.V. from Freiburg, ranked Gorenje's refrigerator RB 4139W on the first place on its scale of ten best appliances according to the Eco Top Ten initiative. The EcoTopTen list only features appliances that meet the criteria of A++ energy efficiency class, which means up to 45 percent of savings in power consumption. With this recommendation, Gorenje met the most stringent criteria of the EcoTopTen initiative in the field of household appliances for the third time. Upon this foundation – clear vision of environment management and the most cost-efficient refrigerator in Europe in its category – Gorenje was nominated for the award of Ecology-Oriented Company 2007.

Eco Family initiative - To commemorate the Earth day Gorenje presented for the first time the Eco Family initiative to the public. The aim of the initiative is to motivate individuals to change their wasteful habits, to introduce energy-efficient technology in their homes and to seek alternative options. By establishing the Eco Family initiative, Gorenje is extending the framework of thinking about the agents of efforts for a cleaner environment; in addition to asking what I can do as an individual or employee, it seeks to answer how we as society can contribute. Two books entitled Ecofamily – Environmentally Friendly Operation in Order to Preserve the Planet and Ecofamily – Help the Planet with the Informed Behaviours, have been published within the initiative of the Eco Family.

Environmental and occupational health and safety policy

Environmental protection and providing for safe working conditions belong to basic rights, obligations and responsibilities of all employees and are treated as a constituent part of company's management. Gorenje Group is committed to: 1) include ecology and occupational health and safety in their development strategy, in annual and operative plans with anticipated measures, bearers, performers and timeframes in order to offer employees a safe and healthy fulfillment of their job assignments along with permanent reduction of injury risks or medical harm while constantly reducing any negative environmental impacts; 2) monitor and measure indicators of conditions in the activity fields and environmental aspect, and in case of deviations, act accordingly; 3) continually improve workplace conditions and

ecological situation while fulfilling current applicable requirements; 4) plan and introduce new technologies and products according to principles of environmental protection and introduce adequate, faultless and ergonomic working appliances while permanently seeking possibilities for improving working conditions; 5) use such materials and components, which will meet the most demanding local and international environmental standards; 6) plan new products in compliance with eco-design requirements comprising the complete life cycle of the product: development, production, use and disposal; 7) provide for quantity reduction of produced waste and take every measure for streamlined consumption of energy resources; 8) implement requirements regarding the exposure of workers to the risks caused by noise at the workplace; 9) train and qualify coworkers in order to rise their awareness of assuming responsibility towards their working conditions and environment; 10) co-operate with employees and interested parties, thus contributing to the success of joint efforts in environmental protection and occupational health and safety; 11) inform interested parties about their achievements in environmental protection and occupational health and safety.

Goals regarding environment protection until 2010 are: 1) introduction of requirements related to the contents of hazardous substances in household appliances, 2) decomposition of waste electrical and electronic devices, 3) reduction in quantity of produced waste, 4) reduction in the produced industrial waste packaging, and 5) rational consumption of energy sources.

Conclusions concerning environmental management

The basic principles for implementing CSR (concerning environmental management) are a fair and equal consideration of employees, ethical and fair business operations, observance of the basic human rights, a positive attitude to closer and wider community and responsible environmental management, serve as the basis for defining key social responsibility areas of the Gorenje Group, which are reflected on the Gorenje Group's vision, mission and values.

ADVANCE assesses the environmental performance of 65 European companies from the manufacturing sector with the Sustainable Value approach. By using the environmental data that is available in the market today, ADVANCE provides a transparent and meaningful assessment of the environmental performance of 65 European companies in monetary terms. At the same time the experiences of the ADVANCE project show that there is an urgent need to improve the quality of corporate environmental reporting considerably and on a large scale. More standardised and higher quality environmental data and reports are an important prerequisite for applying the Sustainable Value approach to a larger number of companies.

Future research

Of particular concern to companies, as they focus more on doing good, is the persistent lack of a clear sense of the positive returns to their CSR actions. This underscores the need for better measurement models (indicators) of CSR, sustainable

development that capture and estimate clearly the effects of a company's actions on its stakeholders (direct and indirect), including its consumers. The synergies between TRM and responsible consumption also lead CSR-enterprises to long-term competitive advantages by contributing to requisitely holistic management of innovative companies.

The result of this study presents a positive contribution to the progress and development of CSR in Gorenje Group, to discussion and debates on CSR, and conformation furtherance of theories important in studying CSR, TRM and sustainable development and its measurement.

Theories and discussions on CSR (with accent at environmental management) and sustainability are still evolving. As shown in this study, the responses in the case company (Gorenje Group) are positive and substantiated by its programs directly addressing how to develop and improve CSR by implementation of TRM and environmental management into strategies, which includes the permanent measurement (sustainable indicators) to the stakeholders.

Moreover, Gorenje Group, as a good corporate citizenship is involved in a wide array of community activities. Gorenje Group presents a successful case of CSR and sustainable development in Slovenia and even in the EU. The aim – to highlight the characteristic features of Slovenian CSR, especially environmental management, and compare them to other researches (theoretical and empirical) with available empirical published studies – is achieved. Finally, this case adds to the mounting evidence that CSR (including environmental management) and sustainability, in general, has created a new dimension in managing sustainability at the corporate level. This study provided some compelling empirical observations and evidence as well as direct quotations that explain nebulous CSR concepts. There is an immense opportunity to utilize this information to learn and gain new useful insights, approaches and concepts understanding and managing CSR and sustainable development.

References

- Bache I, Flinders M. (2005). Multi-level governance: conclusion and implications. In *Multi-level Governance*, Bache I, Flinders M (eds). New York: Oxford University Press.
- Beierle T.C. and Cayford J. (2002). *Democracy in Practice. Public Participation in Environmental Decisions*. Resources for the Future: Washington, DC.
- Berens, G., C. B. M. Riel, & Bruggen, G. H. (2005). Corporate Associations and Consumer Product Responses: The Moderating Role of Corporate. *Journal of Marketing*, 69: July, 35-48.
- Clarkson, M. B. E. (1995). A stakeholder Framework for Analyzing and Evaluating Corporate Social Performance. *Academy of Management Review*, 20:1, 92-117.
- Collins, J. C., & Porras, J. I. (1997). *Built to Last: Successful Habits of Visionary Companies*. New York: Harper Business.
- Crammer, J. (2003), *Learning about corporate social responsibility: The Dutch experience*, national Initiative for Sustainable Development (NIDO). IOS Press, The Netherlands.
- Dietz T, Stern PC (eds).(2008). *Public Participation in Environmental Assessment and Decision-Making*. Panel on Public Participation in Environmental Assessment and Decision Making, National Research Council: Washington, DC.
- Doh, J. P. & Guay T. R. (2006). Corporate Social Responsibility, Public Policy, and NGO Activism in Europe and the United States: An Institutional Stakeholder Perspective. *Journal of Management Studies*, 43:1, 47-73.
- Elkington, J. (1998). *Cannibals with Forks: The Triple Bottom Line of Sustainability*. Gabriola Island, Canada: New Society Publishers.
- Evans, J. R. (2007). *Total quality Management, Organization, and Strategy*. 4th Edition. Ohio: Thomson Corporation.
- Florida, R. (2005). *Vzpon ustvarjalnega razreda*. Velenje: IPAK.
- Fowler, S. J., & Hope, C. (2007). Incorporating Sustainable Business Practice into Company Strategy. *Business Strategy and the Environment*, 16, 26-38.
- Grayson, D. & Hodges, A. (2004). *Corporate social Opportunity*. London:Greenleaf Publishing.
- Harrison, J. S., & Freeman R. E. (1999) Stakeholders, Social Responsibility, and Performance: Empirical Evidence and Theoretical Perspectives. *Academy of Management Journal*, 42:5, 479-485.

Hooghe L, Marks G. (2003). Unraveling the central state, but how? Types of multi-level governance. *American Political Science Review* 97:2, 233–243.

Jordan A. (2002). The implementation of EU environmental policy: a policy problem without a political solution? In *Environmental Policy in the European Union: Actors, Institutions and Processes*, Jordan A (ed.). London; 301–328.

Ketola, T. (2008). A Holistic Corporate Responsibility Model: Integrating Values, Discourses and Actions. *Journal of Business Ethics*, 80, 419-435.

Knez-Riedl, J. & Mulej, M. (2008). Social responsibility and Adam Smith's economic theory. In: Božičnik, S., Ećimović, T., Mulej, M: Sustainable Future, Requisite holism, and social responsibility. Penang: Ansted University, in cooperation with SEM Institute for climate change and IRDO.

Knill C, Liefferink D. (2007). *Environmental Politics in the European Union: Policy-Making, Implementation and Patterns of Multi-Level Governance*. Manchester University Press: Manchester.

Kolk, A. (2000). *Economics of Environmental management*. Essex: Pearson Education Limited.

Koontz TM, Thomas CW. 2006. What do we know and need to know about the environmental outcomes of collaborative management? *Public Administration Review* 66, 111–121.

Laszlo, C. (2008). *Sustainable value – How the World's Leading Companies Are Doing Well by Doing Good*. Sheffield: Greenleaf Publishing Limited.

Low, W. & Davenport, E. (2006) Mainstreaming Fair Trade: Adoption, Assimilation, Appropriation, *Journal of Strategic Marketing* . 14: December, 315-327.

Mandelkern Group. (2001). *Report on Better Regulation*, final report.

Margolis, J.D. and Walsh, J.P. (2003). Misery Loves Companies: Rethinking Social Initiatives by Business, *Administrative Science Quarterly*, 48:2, 268-305.

Marin, L. et. al. (2009). The Role of Identity Saliency in the Effects of Corporate Social Responsibility on Consumer Behavior. *Journal of Business Ethics*, 84, 65-78.

Mc Williams, A. and Siegel, D. (2000). Corporate Social Responsibility and Financial Performance: Correlation or Misspecification? *Strategic Management Journal*, 21:5, 603-609.

Meadowcroft J. (2002). Politics and scale: some implications for environmental governance. *Landscape and Urban Planning* 61, 169–179.

Newig J. (2007). Does public participation in environmental decisions lead to improved environmental quality? Towards an analytical framework. *Communication*,

Cooperation, Participation. International Journal of Sustainability Communication 1:1, 51–71.

Orlitzky, M., Schmidt, F. L. and Rynes, S. L. (2003). Corporate Social and Financial Performance: A Meta-Analysis, *Organization. Studies*, 24:3, 403-441.

Page, G. & Fearn, H. (2005). Corporate Reputation: What do Consumers Really Care About? *Journal of Advertising Research*, 45:3, 305-313.

Papadopoulos Y. (2007). Problems of democratic accountability in network and multilevel governance. *European Law Journal* 13:4, 469–486.

Pellizzoni L. (2003). Uncertainty and participatory democracy. *Environmental Values* 12:2, 195–224.

Pirsch, J., Gupta S. & Grau, S. L. (2007). A Framework for Understanding Corporate Social Responsibility Programs as a Continuum: An Exploratory St'. *Journal of Business Ethics*, 70:2, 125-151.

Porter, M. E & Kramer, M. R. (2006). Strategy & Society: The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review*, 84:12, 78-92.

Rauschmayer F, Berghöfer A, Omann I, Zikos D. (2009). Examining processes or/and outcomes? – evaluation concepts in European governance of natural resources. *Environmental Policy and Governance* this issue.

Rubbens, C. and Wessels, C. (2004). *The Business Case for CSR: In What Way does CSR Contribute to Competitiveness?* E-discussion, The World Bank, Washington, DC.

Schenk A, Hunziker M, Kienast F. (2007). Factors influencing the acceptance of nature conservation measures – a qualitative study in Switzerland. *Journal of Environmental Management* 83: 66–79.

Sen, S. & Bhattacharya C. B. (2001). Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility. *Journal of Marketing Research*, 38:2, 225-243.

Steele J. (2001). Participation and deliberation in environmental law: exploring a problem-solving approach. *Oxford Journal of Legal Studies* 21:3, 415–442.

Van Heel, O. D., Elkington, J., Fennell, S. & van Dijk, F. (2001). *Buried Treasure: Uncovering the Business Case for Corporate Sustainability*. London: SustainAbility.

Waddock, S. (2006). *Leading Corporate Citizens: Vision, Values, Value Added*. New York: McGraw-Hill, 2nd edn.

Waddock, S. A. & Graves, S. B. (1997). The Corporate Social Performance-Financial Performance Link. *Strategic Management Journal*, 18:4, 303-319.

Waddock, S. and Bodwell C. (2007). *Total Responsibility Management*. Sheffield: Greenleaf Publishing

Warleigh A. 2006. Conceptual combinations: multilevel governance and policy networks. In *Advances in European Union Studies*, Cini M, Bourne AK (eds). Palgrave Macmillan: Basingstoke.

Welford, R. (2005). Corporate Social Responsibility in Europe, North America and Asia: 2004 Survey Results. *Journal of Corporate Citizenship*, 17, 33-52.

Young OR, Berkhout F, Gallopín GC, Janssen MA, Ostrom E, van der Leeuw S. 2006. The globalization of socio-ecological systems: an agenda for scientific research. *Global Environmental Change* 16: 304–316.

Young OR. 2002. *The Institutional Dimensions of Environmental Change: Fit, Interplay, and Scale*, *Global Environmental Accord*. MIT Press: Cambridge, MA.

Zadek, S. (2004). *Tomorrow's history*. Sheffield: Greenleaf Publishing Limited.

**PART TWO: CORPORATE RESPONSIBILITY AND
STRATEGY**

THE INTEGRATION OF CSR INTO BUSINESS STRATEGY: AN EMPIRICAL ANALYSIS OF LARGE ITALIAN FIRMS

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Abstract

Many recent studies about Corporate Social Responsibility are focusing on the integration of CSR into the companies' business strategy and on some managerial tools and organizational aspects than can be implemented by firms to formalize and systematize their approach to CSR. The purpose of this research is therefore to analyze the two aspects separately, finding a set of variables that can be used to measure both the degree of formalization of the CSR management process and the strategic relevance attributed by firms to CSR. Building a matrix whose dimensions corresponds to the two analyzed aspects three main approaches to CSR have been identified, depending on which of the two aspects is prevailing: formal, social values-driven and strategic CSR. Ten case studies of Italian large firms have been analyzed with respect to these two dimensions and have been used to exemplify and explain the different approaches of companies toward CSR.

Key words: Business strategy, Corporate social responsibility, companies' approach to CSR, formalized management systems, Italian large firms

Introduction

A review of the most recent literature on CSR reveals a trend for studying the strategic implications of Corporate Social Responsibility and analyzing the competitive advantages that can arise from a strategic approach to CSR by a profit-oriented firm. Companies that recognize the strategic value of social responsibility undertake initiatives related to their business, which give them an opportunity to utilize and develop their core competencies. Such business-relevant initiatives allow firms to effectively contribute to improving the environment and society, while at the same time enabling them to gain competitive advantage, differentiate themselves from competitors, improve their competitive environment, and strengthen relations with key stakeholders.

Alongside the literature on the strategic value of CSR, there is a second line of research that concerns itself with analyzing the CSR management process, the tools companies can use to communicate their efforts in the CSR arena, and the organizational roles and departments which can be instituted to support the systematization and formalization of CSR activities. In this connection, a number of standard management systems have been developed by national and international bodies and organizations, relating to different aspects of CSR (e.g. environmental and quality standards from ISO) or to the process for auditing and reporting CSR data (e.g. AA1000).

In the literature, the integration of CSR into business strategy and the adoption of formal tools for its management are often explored as two facets of implementing CSR within a firm, on the assumption that they must of necessity progress in parallel. In practice, though, companies can attribute strong strategic import to CSR without formalizing its managerial process or, conversely, they can adopt formal systems of management and reporting without fully exploiting the strategic advantages afforded by CSR. This may depend on a number of variables, such as the industry in which a firm operates, its critical success factors, its corporate culture, etc. The goal of the present work is therefore to first examine the strategic relevance and formalization aspects separately, and then put them in relation with each other to identify the different approaches that companies can take to implementing CSR. More specifically, the detailed objectives of the study, each corresponding to a section of this paper, are as follows:

- To analyze the concept of strategic CSR (as defined in the literature), and to identify a set of variables that can be used to measure the level of integration of CSR into business strategy, hereafter also called the strategic relevance of CSR
- To analyze the literature contributions dealing with the managerial processes and the formal and operational tools which companies can adopt to tackle the structured aspects of CSR, and to identify a set of variables that can be used to measure the degree of formalization of the CSR management process.
- To put the strategic relevance and formalization aspects in relation with each other, constructing a two-dimensional matrix, and to describe the different approaches which companies can take to CSR, depending on which of the two aspects prevails.
- To provide some examples of these different approaches, drawn from the analysis of empirical case studies, and suggest some characteristics of firms which may influence their choice of approach.

Theoretical Background

Strategic CSR

The debate on Corporate Social Responsibility has in recent times adopted a novel perspective: instead of focusing on the apparent conflict between business objectives (profitability, shareholder value) and attentiveness to social issues, several authors have begun to explore the possibility of creating shared value for both the business and society. Viewed in this light, CSR becomes a strategic tool, able to bring benefits to society and the environment while at the same time improving the company's competitive position. Burke and Logsdon (1996) assert that CSR is strategic when it yields substantial business-related benefits to the firm, in particular by supporting core business activities and thereby enhancing the company's effectiveness in accomplishing its mission. Baron (2001) uses the term *strategic CSR* to denote a profit-maximization strategy that some may view as socially responsible, but whose main motivation is to maximize the company's profit. In the definition given by Lantos (2001), strategic CSR or strategic philanthropy are good deeds that are believed to be beneficial for business as well as for society. According to Porter and Kramer (2002), strategic CSR can be defined as the implementation of a small number of initiatives which are able to create social value and place the company in a unique position relative to its competitors. Husted and Allen (2001) introduce the term *social strategy*, defined as a 'firm's plan for allocating scarce resources with the aim of attaining long-term social objectives and securing a competitive advantage'. In particular, CSR can be viewed as part of a company's differentiation strategy (Siegel and Vitalino, 2006). The differentiation arises when customers attribute added value to certain "social" attributes of the products, for which they are therefore willing to pay a premium (McWilliams and Siegels, 2000). Firms can accordingly conduct a cost/benefit analysis, comparing the demand for social attributes with the cost of supplying them, to determine the optimal level of resources that should be allocated to CSR programs for maximizing profits. From this perspective, CSR can be treated as a form of strategic investment (McWilliams et al., 2006).

Within the wider debate on strategic corporate social responsibility, several authors have focused on identifying the conditions under which a firm can generate value for both its business and society. Burke and Logsdon (1996) answer this research question by defining five attributes of CSR policies which favor creation of shared value for the business and society. Out of these, they emphasize the importance of centrality, a measure of the closeness of fit between a CSR policy and the company's mission and objectives. Porter and Kramer (2002) argue that, the more closely a social improvement is related to a company's business activities, the more likely it is to entrain economic benefits for the company (e.g. improving the educational level in the area where the firm operates will enable it to draw from a better trained workforce). Conversely, a social issue that is closely related to a company's business will command stronger commitment from the company, and provide more scope for utilizing its resources and expertise in a manner that benefits society (Porter and Kramer, 2007). The concept of strategic CSR, and the opportunity of reaping business advantages from commitment to CSR, are closely bound up with the stakeholder theory of the firm (Freeman, 1984). Post et al (2002) argue that the ability of a firm to generate sustainable value over time is determined by its

relationships with critical stakeholders. To improve these relationships, a company must proactively engage in dialogue with its internal and external stakeholders, and integrate the outcomes of these discussions into its decision making (Smith, 2003; Galbreath, 2006). Dialogue with stakeholders is the first step for identifying the key sustainability issues that the company needs to address; for each identified issue, the company must then define a set of indicators and concrete targets to be attained (Terry Porter, 2008).

Measurable and achievable goals should be set for each CSR activity, also specifying the expected benefits for both stakeholders and the firm (Lantos, 2001). To ensure that CSR objectives are given equal weight to the company's other strategic objectives, they must be included in the system of manager rewards and incentives (Werther and Chandler, 2006)—for example in the *Management by Objectives* process.

Sometimes, a company may not possess all the competencies needed to address the different concerns of its key stakeholders, and will therefore have to enter into strategic alliances to bring complementary skills to its CSR initiatives (O'Brien, 2001). For this reason, companies often implement their CSR programs through partnerships and long-term collaborations with nonprofit organizations (Seitanidi and Crane, 2008) or specific community groups (Galbreath, 2006).

Formalized Management Systems and Organizational Tools for CSR

A part of the recent literature on CSR focuses on the different tools and standards for CSR management and reporting which companies can implement to support the handling of CSR issues. These tools are intended to improve the integration of CSR within the organization and ensure CSR is managed in a systematic rather than sporadic manner. One of the main causes of misalignment between business operations and CSR is the fact that most large corporations implement their social projects through a contributions office or a corporate foundation, which tend to be isolated from line management and business decisions (O'Brien, 2001). To overcome this, companies should create an organizational structure dedicated to CSR, and positioned at a high hierarchical level to ensure strong commitment from management (Werther and Chandler, 2006; Leigh and Waddock, 2006).

The CSR management process is no different from the other strategic management processes customarily implemented within firms. Waddock and Bodwell (2007) point out that responsibility management, though complex, is very similar in its general framework to other systems with which managers are already familiar, such as quality and environmental management. The authors describe a Total Responsibility Management system, drawing a parallel with the Total Quality Management system, which follows the traditional Deming cycle: plan - do - check - act. McAdam and Leonard (2003) investigate how quality management can serve as a foundation for developing Corporate Social Responsibility.

The work of Castka et al (2004) provides a comprehensive overview of the numerous standards dealing with different aspects of the CSR agenda, and offering certification

against specific requirements. The most commonly used are the following: ISO 9001 (international standard for quality management, published in its first edition in 1987 by the International Organization for Standardization); EMAS (Eco-Management and Audit System promoted by the European Commission in 1993); ISO 14001 (international environmental management system published in 1996 by the International Organization for Standardization); SA8000 (international standard listing the requirements for ethical conduct of companies with respect to working conditions across the supply chain, developed in 1997 by the American institute Social Accountability International); OHSAS 18001 (international Occupational Health and Safety management system specification published in 1999 by the British Standards Institution); AA1000 (developed by the Institute of Social and Ethical Accountability in 1999 with the aim of promoting quality in the accounting, auditing, and ethical and social reporting processes). ISO is currently working on developing an International Standard for social responsibility that will be published in 2010 as ISO 26000.

A fundamental step in implementing a CSR management system, which triggers a process of learning and continuous improvement, is to define a set of Key Performance Indicators and a performance measurement system for assessing how the company is doing along the triple bottom line of economic, social and environmental performance (O'Brien, 2001; Waddock and Bodwell, 2007). The Global Reporting Initiative (GRI) has developed a shared framework for voluntary reporting of economic, social and environmental performance (the *Sustainability Reporting Guidelines*, whose latest edition, G3, was released in 2006), which is currently the world's most widely used sustainability reporting framework.

Data from the responsibility measurement system should be disclosed in sustainability reports, to guarantee transparency and accountability on the part of the firm (Waddock and Bodwell, 2007). These reports should be audited by professional, independent auditors, to ensure fairness (Dunfee, 2003; Lantos, 2001). The AA1000 standard mentioned previously is designed to improve the quality of the accounting, auditing and ethical and social reporting process, and requires the information in the sustainability report to be certified by an external entity. This is a necessary condition for inclusion in ethical indexes, such as the Dow Jones Sustainability Index, or the Footsie4Good Index.

Empirical Analysis

Evaluation Variables

Starting from a review of the existing literature, some relevant variables that can be used to measure how well CSR is integrated into a company's strategy, and whether the CSR management process is formalized through use of standard systems and tools, have been identified. These variables constitute the main areas investigated by the research, and explored more in depth through the case studies. For evaluating the integration of CSR into a company's strategy, five main variables were identified which should be considered to characterize the company's approach: vision/mission, objectives, centrality with respect to the core business, stakeholder involvement, and strategic partnerships.

The first variable concerns the inclusion of social responsibility elements in the company's *vision or mission* statement, as an indicator of commitment to CSR issues, and of the relevance given to CSR in the running of the business. Analysis of *CSR objectives* is aimed at evaluating whether a company sets quantitative targets relating to CSR, and whether these are treated as equally important to strategic objectives by being included in the management reward system. *Centrality* with respect to the core business measures to what extent CSR initiatives are linked to the business, utilize the company's competencies and skills, and are useful for product or process innovation. *Stakeholder involvement* regards the firm's ability to identify its priority stakeholders, engage them in dialogue, and involve them in the decisional process. *Strategic partnerships* in the sphere of CSR are long term relationships that the company maintains with other social actors such as NGOs, governments or institutions, to collaboratively implement projects that can benefit both the business and society. For evaluating the adoption of standard systems and tools, four main variables were identified, that reflect to what extent a company has implemented formalized management systems and organizational tools dedicated to CSR: organizational department, management systems, performance measurement system, and documents. A company can have an *organizational department* devoted to CSR, or it can appoint a CSR manager, or create other formalized roles at different hierarchical levels in charge of handling CSR; it can implement standard *management systems* relating to different areas of the CSR agenda, or it can develop its own customized management system for CSR; it can select Key performance indicators for its *CSR performance measurement system* drawn from international standards such as GRI, or develop its own indicators; finally, it can produce formal *documents* for CSR, such as ethical codes, value statements or sustainability reports, which can be certified by an independent auditor. All of the evaluation variables were scored on three levels (high, medium, or low), according to the evaluation grid shown in Appendix A."

Sample Selection

The sample of companies for the study was selected starting from a previous survey on CSR management, conducted in 2006 on a group of 150 large companies, banks and insurance firms included in the Mediobanca listing of "*The Principal Italian Companies*" (Mediobanca, 2006). Research focused on big companies because they are more likely to have sufficient commitment to CSR to be worth investigating, especially with respect to the implementation of CSR management, performance measurement and reporting systems. First, out of the 150 companies of the starting sample, only those that had their headquarters in Italy were selected. This because CSR is always managed fairly centrally, and it would have been misleading to interview the CSR managers of non-Italian firms whose CSR policies and initiatives are planned and controlled by the headquarters in the company's home country. According to the findings of a previous study, a company's approach to CSR is influenced by the industry in which it operates, and by whether or not it has a global presence, particularly in developing countries. Although it was not the aim of this research to validate the results of this preceding work, the sample was constructed in varied way with respect to these parameters. Accordingly, the final sample of 10 firms included both domestic and multinational companies belonging to different

industries (energy, utilities, oil & gas, food, telecommunication, banking, manufacturing), with not all of the multinationals operating in developing countries

The main characteristics of the companies in the final sample are summarized in **Table 1** (in the interests of confidentiality, the firms are referred to using letters rather than by name).

Company	Sector	Revenues (mln€)	Geographical Market
A	Food and catering	5,794	Multinational
B	Oil&Gas	108,148	Multinational
C	Utilities	61,184	Multinational
D	Energy	11,563	Multinational
E	Food	0,993	Mainly domestic
F	Utilities	3,716	Domestic
G	Bank	11,630*	Multinational
H	Manufacturing	4,660	Multinational
I	Telecommunication	30,158	Multinational
L	Bank	18,373*	Multinational

* Net interests

Table 1. The interviewed companies

Methodology

The methodology chosen was the business case study, because it offers the scope for analyzing in depth some qualitative aspects of companies' approaches to CSR which would have been difficult to summarize using closed-question surveys. The empirical research was conducted in two stages:

- An initial analysis of the companies' websites and of their Sustainability Reports for the previous two years (2007-2008), aimed at gaining a basic understanding of each firm's approach to CSR, and in particular of the managerial tools and documents dedicated to CSR. These formal and structural aspects were found to be always well described in the companies' sustainability reports.
- An ensuing series of face-to-face interviews with the companies' CSR managers, or other professional roles assigned to handle CSR. The interviews were preceded by email contacts to explain the aim of the research and to provide the interviewees with a draft of the main questions.

The interviews took an average of about one and half hours each, and were first recorded and then listened to again. At the time of reviewing the case studies, if any information was found to be missing or unclear, the respondents were contacted again by phone or by e-mail.

Evaluation of the Companies

Using the set of variables described previously, the interviewed companies were evaluated along two dimensions: degree of integration of CSR into business strategy, and level of formalization of the CSR management process. Each company was assessed and given a score (low, medium, high) for each of the variables considered; an overall score for each dimension was then computed as the average of the results for all the variables relevant to that dimension (see Tables 2 and 3).

Company	Vision/ Mission	Objectives	Stakeholder involvement	Centrality	Partnerships	Final score
A	Low	Medium	Medium	Medium	Medium	Medium
B	Medium	High	High	Medium	High	High
C	Medium	High	High	Medium	High	High
D	Low	Medium	High	Medium	Medium	Medium
E	High	High	High	High	High	High
F	High	High	High	Medium	High	High
G	Low	Low	Medium	Medium	Medium	Medium
H	Low	High	Low	Medium	Medium	Medium
I	Medium	High	High	Medium	High	High
L	Low	Medium	Low	Medium	Medium	Medium

Table 2. Level of integration of CSR into business strategy

Company	Organizational department	Management systems	Performance measurement system	Documentation	Final score
A	Medium	Medium	Medium	High	Medium
B	High	High	High	High	High
C	High	High	High	High	High
D	High	High	High	Medium	High
E	Low	Medium	Low	Low	Low
F	High	High	High	High	High
G	High	High	High	High	High
H	High	High	High	High	High
I	High	High	High	High	High
L	Medium	Low	Medium	High	Medium

Table 3. Level of formalization of the CSR management process

Different Approaches to CSR

The two dimensions of analysis, strategic relevance and formalization, can form the axes of a matrix (Figure 1) in which the studied companies are positioned according to the overall scores awarded to them for each dimension.

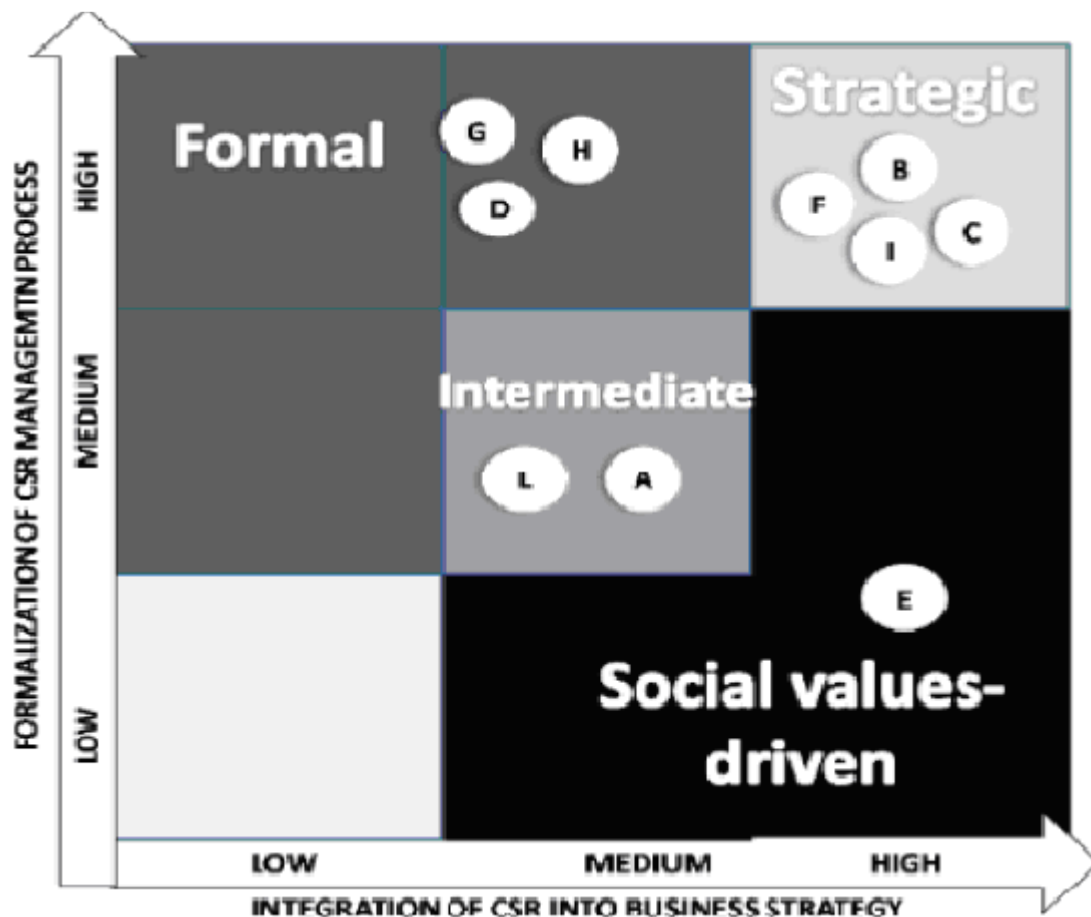


Figure 1. Different approaches to CSR

The top right hand corner of the matrix, labelled *strategic CSR*, corresponds to the highest degree of formalization of the CSR management process and of integration of CSR into business strategy. In order to be positioned in this quadrant, companies must have obtained a “high” overall score for both dimensions.

The companies that fall into the *formal* quadrant are those in which the formal aspects of CSR management prevail over the strategic relevance attributed to CSR. The quadrant of *social values-driven CSR* instead represents the approach of companies in which the CSR agenda is deeply integrated into business strategy, but where this dimension prevails over the implementation formal tools for managing and organizing CSR.

The central area of the matrix contains companies that have somewhat integrated CSR into their strategy and partially implemented managerial tools for CSR, thereby earning an “*intermediate*” final score for both analysis dimensions. Their approach is

evenly balanced between the two dimensions, but cannot be termed strategic according to our definition.

The bottom left quadrant corresponds to those companies that have neither integrated CSR into their business strategy (limiting it to philanthropy or social initiatives not linked to their core business), nor implemented management systems or organizational tools to formalize and systematize CSR management. Because of the criteria by which the sample has been selected, none of the companies falls into this quadrant. Since the research goal was to evaluate which are the main factors that contribute to defining a company's approach to CSR as strategic, this lack will not affect the results of the study.

The following section now further clarifies the positioning of the companies in the matrix, providing some real-world examples of the different approaches. In particular the focus will be on *strategic CSR*, *formalized CSR* and *social values-driven CSR*. As noted previously, companies in the top right-hand corner have both integrated CSR into their business strategy and implemented a formal CSR management process: for these reasons, their approach to CSR can be termed strategic.

The following example better clarifies what is meant by strategic CSR.

Company I: Strategic CSR

Company I was motivated primarily by the desire to obtain a listing in an ethical index, which was considered crucial for accessing sources of funding, and by the desire to match and surpass its major competitors. To this end, it set up a structured system of social responsibility management that allows it to identify strategic opportunities within CSR related issues. More specifically, the planning system comprises the following steps:

- 1. Identifying areas of improvement for sustainability performance*
- 2. Comparing the identified improvement areas against the investment projects that the company is intending to implement for business purposes.*
- 3. Planning interventions within those improvement areas for which there are no investments already planned, or for which the planned investments do not have sufficient positive impact in terms of sustainability.*
- 4. Monitoring the areas in which the company wants to maintain the level of performance already achieved.*

Through the structured process described above, the company identified a set of priority areas, to which it decided to devote a large proportion of its investments:

- *Digital Inclusion*
- *Impact of TLC services*
- *Sustainable Mobility*
- *Product Liability*
- *E-security and privacy*
- *Guardianship of minors*
- *Climate change*

- *Electromagnetism and impact on local communities*

These areas guided the process of research and development, and helped the company to develop new products and innovative solutions that form an integral part of its business portfolio.

On the lower right-hand corner of the matrix are located companies whose approach to CSR has been termed **social values-driven**. For the companies in this quadrant, CSR has strategic relevance (according to the previous measurement scale) but is not supported by a formal management process devoted to it. This kind of situation generally arises when CSR is deeply embedded in the company's values and culture, and there is a strong commitment on the part of the CEO and senior management.

One example of such an approach is the case of company E, described in the box below.

Company E: Social Values-Driven CSR

Company E's vision and mission are centred on CSR values. The vision of the company asserts that it seeks to "be the first in quality, freshness and goodness for people's pleasure and well-being". Its mission statement is: "To create value for stakeholders in the process chain and work to develop the following objectives [for each stakeholder, the company describes the main goals it has set for satisfying the needs of that stakeholder]; to express, through a strong corporate culture and concrete actions, a commitment to protecting and safeguarding the environment and to behaving ethically in economic and social relationships". In addition, company E has developed a quantitative approach to measuring the impact of CSR commitment on some critical success factors.

Although the above elements indicate that CSR has strategic relevance and plays a central role in its business, company E does not have an independent BU devoted to these issues, but only a CSR manager. In the past two years it has produced neither a social report nor any other formal document, and the CSR management process is not structured (aside from the stakeholder dialogue phase). Company E seems to have no need for a structured CSR management process because its values and principles have been truly embedded in its business model from the outset, or at least since the company's restructuring in the 1990s. The corporate website states: "In the 1990s this was a company on the brink of collapse. The new management reformulated the business model according to principles "instinctively" inspired by sustainability: the focus on high quality (essential for revitalizing the fresh milk market with a product that delivers value, to both the domestic livestock agro-industry in terms of profits, and to consumers in terms of nutrition), internal involvement (no crisis situation such as that experienced by the company could have been solved simply through a "command and control" management system, but instead required emphasis on engagement through participatory models, and finally economic-financial disclosure (i.e. an open and transparent approach to banks, which were at that time the true principal shareholders, given the high level of debt)."

The approach to CSR of companies in the top left-hand corner of the matrix is described as **formal** because, though such firms have developed standard systems and formal documentation for managing CSR, this aspect tends to prevail over the integration of CSR issues into their business strategy. Company H provides a good example of what is meant by a formal approach to CSR.

Company H: Formal CSR

Company H has formalized its management of CSR issues in a different way. In 1998 it implemented an environmental management system conforming to ISO 14001, and in 2007 all the operational manufacturing sites had a certified environmental management system. It began reporting on environmental issues in 2000 with its first Environmental Report; in the same year it implemented the OHSAS 18001 standard. The Values and Ethical Code was approved in 2003 and translated into the languages of all the countries in which the company operates. In 2004 it adopted a new Policy for Health, Safety, Environmental and Social Responsibility, and implemented the SA8000 standard. In the same year, a Steering Committee for Social Responsibility was created. In 2006 it published its first Sustainability Report, which was certified by an external auditor, and it defined a CSR Operating Procedure providing for the creation of the formal roles of Group CSR Manager, Sector CSR Managers and Company CSR Managers. The role of CSR management is regulated by the Operating Norms on Corporate Social Responsibility (issued in 2006) which describe, govern and discipline the internal management of activities relating to Corporate Social Responsibility, with particular emphasis on the roles and responsibilities of the functions involved, the operational process for planning and control, the process of producing the Sustainability Report, and the management of external reporting of CSR.

This formal management process of CSR appears to prevail over the strategic relevance that the company attributes to CSR. The company's mission makes mention of CSR through formulaic expressions such as 'social and environmental sustainability' and 'meeting the needs of all stakeholder'. Stakeholders are involved only by means of standard tools such as e-mail, toll-free numbers or questionnaires. The projects in which the firm participates, though unquestionably important for society, are often not related to its core business (e.g. interventions during natural disasters or emergencies, donations to hospitals, cultural initiatives). That said, the company has recently started to enter new business areas related to green products and environmental strategies. However these are as yet only niche markets, with little significant impact on total profits.

Conclusions

In the first stage of this research, starting from a literature review, some variables were identified for evaluating both the strategic relevance attributed by companies to CSR, and the extent to which the CSR management process is formalised. The variables selected as indicators of strategic relevance were: integration of social aspects into the company's vision and mission; definition of specific, quantitative objectives for CSR that are incorporated into management reward systems; centrality of CSR initiatives with respect to the core business; level of stakeholder involvement; and establishment of strategic partnerships with NGOs or other social actors for the collaborative implementation of CSR programs. The variables chosen as indicators of the degree of formalisation of CSR were: existence of a CSR department or of a formal role dedicated to CSR management; implementation of standard management systems for different areas of the CSR agenda, or the formalisation of a customised managerial process; adoption of a CSR performance measurement system; and the production of formal documents for CSR reporting.

By evaluating the above-described variables for the companies in our sample, we were able to identify different approaches to CSR depending on whether the strategic value of CSR or the more formal aspects of its managerial process tended to prevail. In particular, three approaches were found that merit special attention:

- **Formal CSR:** in these companies, the prevailing aspect is the implementation of a formal management process devoted to CSR.
- **Social values-driven CSR:** in this case, the strategic relevance of CSR prevails over the implementation of a formal management process.
- **Strategic CSR:** these companies have implemented a formal management process for CSR, supported by a dedicated department, but also integrated CSR into its strategy, treating it as a source of value creation for both the business and its stakeholders.

The empirical case studies were used to provide examples of the three types of approaches

described above. Given the small number of interviewed companies, the present work was not intended to provide generalisable results; nevertheless, there are some considerations which can be drawn. First, the case-study analysis reveals that the environmental impact of a company's process/ product, and therefore of its industry, plays a very significant role. The interest elicited in public opinion, and the many environmental regulations, have prompted companies operating in sectors such as energy or utilities to implement environmental management and performance measurement systems. Moreover, in these industries, environmental strategies and green product development are becoming an increasingly important way for companies to differentiate themselves and acquire customers sensitive to these issues and attentive to conservation (Runhaar et al, 2008; Albino et al, 2009).

Another interesting observation is the growing importance attributed by companies to inclusion in ethical ratings, which are believed to influence investor decisions. This often prompts firms to implement formalised management systems and organisational tools for CSR. The financial analysts who evaluate companies for admission into ethical ratings ask for formal tools and documents, because these indicate a systematic and enduring commitment to CSR issues, as well as being more easily measured in an objective way.

A final consideration can be made regarding a number of “soft” factors that certainly influence CSR, and which have not been measured in this study (due to the difficulty of evaluating them objectively). In company E, which was classified as social values-driven, the approach to CSR reflects strong commitment on the part of management, and a corporate culture that has historically always been oriented toward fair and reciprocal dealings with its supply chain and the community in which it operates. As Perrini and Minoja (2008) suggest, the belief and value systems of entrepreneurs and managers appear to play a fundamental role in shaping responsible corporate strategy, so that the conditions leading to competitive advantage tend to coincide with those enhancing the company's social responsiveness.

Without a doubt, the main shortcoming of the present research is the small number of interviewed firms. Repeating the study with a statistically significant number of companies might be useful for better distinguishing the different approaches to CSR and more reliably identifying which characteristics of firms affect their approach to CSR. Moreover, the proposed matrix could lend itself to a longitudinal analysis, investigating the evolution of companies' approaches to CSR over time. It would be interesting to determine the direction in which companies are moving, as well as their reasons for doing so, and the tools used to accomplish such changes.

Appendix A

Level of integration of CSR into business strategy

Variable	Level	Description
<i>Vision/mission</i>	Low	CSR is not explicitly included in the firm's mission or vision, or is mentioned only through standard expressions (for example, "in respect of all stakeholders", or "in full respect of people", (etc.)
	Medium	CSR is included in the firm's mission, with an explicit mention of the different stakeholder categories and the company's goals with respect to them.
	High	CSR is the central element of the firm's mission/vision.
	Low	Very broad and generic, qualitative CSR targets(i.e.to improve stakeholder engagement, <i>Objectives</i> to improve the satisfaction of our employees...)
	Medium	Specific objectives related to the different areas of CSR (not only environmental), defined in a strategic agenda, and supported by quantitative targets where possible
	High	Objectives relating to CSR incorporated into variable pay (for example by including them in MBO systems).
	Low	Sporadic initiatives unrelated to the core business; marketing campaigns that link the company's brand <i>Centrality</i> with social initiatives (e.g. <i>cause related marketing</i>).
	Medium	Improvement of the company's processes to reduce the negative impact of its activities on both the environment and society; new products/ services/business areas with social/environmental features.
	High	CSR is a central aspect of the business model and value proposition, and the

		company is able to identify the competitive advantages accruing from its involvement in CSR.
<i>Stakeholder Involvement</i>	Low	Involvement only of shareholders; the company's aims with respect to other stakeholders are primarily communicative
	Medium	Dialogue with several stakeholder categories through traditional instruments, such as e-mail, websites, newsletters, toll free numbers, on-line questionnaires.
	High	stakeholder mapping and dialogue with the most relevant stakeholder categories through advanced instruments (ad hoc departments, formal roles, ...) to involve them in the decisional process.
	Low	Short or long term relationships with NGOs or with <i>Strategic</i> other charities to which the company makes donations <i>partnership</i>
	Medium	Partnerships with NGOs or public institutions for long term projects not linked to the company's core business, but in which the company is involved at an operational level
	High	Strategic partnerships with NGOs or other philanthropic organizations or public institutions, in areas related to the company's business and competencies, which help drive the company's innovation, leading it to enter new business areas or to create new profitable products/services.

Level of formalization of the CSR management process

Variable	Level	Description
<i>Organizational Department</i>	Low	No formal role or department devoted to CSR.
	Medium	Formal CSR manager role in charge of CSR, but belonging to another business division (devoted part time to CSR).

	High	Independent BU/Committee devoted to CSR with formal responsibilities relative to other BUs and at different hierarchical levels.
	Low	The company does not implement any management process relating to CSR.
	Medium	Implementation of standard management systems such as EMAS, ISO 14001, 18001, SA8000.
<i>OHSAS Management systems</i>	High	Formalization of a management system for CSR issues.
	Low	Socio-environmental performance is not evaluated, except for the measurement of some environmental indicators required by law.
<i>Performance measurement system</i>	Medium	KPIs defined on the basis of national/international standards (e.g. GRI).
	High	Integration of standard KPIs along with additional indicators defined by the company for its specific requirements.
	Low	Ethical code or/and values statement
<i>Documents</i>	Medium	Sustainability report.
	High	Sustainability report certified by an external auditor.

References

- AA1000 (1999). *AA 1000 Standard, Accountability – Institute of Social and Ethical Accountability* [online]. [referred to at 5.5.2009]. Available: www.accountability21.net.
- Albino, V., Balice, A. & Dangelico, R.M. (2009). Environmental Strategies and Green Product Development: an Overview on Sustainability-Driven Companies *Business Strategy and the environment* 18, 83-96.
- Baron, D (2001). Private politics, corporate social responsibility and integrated strategy: *Journal of Economics and Management Strategy* 10:1, 7-45.
- Barnett, M. L. L. (2005) Stakeholder Influence Capacity and the Variability of Financial Returns to Corporate Social Responsibility *Academy of Management Review* 32:4, 794-816.
- Burke, L. & Logsdon, J. (1996). How corporate social responsibility pays off *Long Range Planning* 29:4, 495-502.
- Castka, P., Bamber, C. J., Bamber, D. J. & Sharp, J. M. (2004). Integrating corporate social responsibility (CSR) into ISO management systems – in search of a feasible CSR management system framework *The TQM Journal* 16:3, 216-224
- Dunfee, T.W. (2003) Social Investing: Mainstream or backwater? *Journal of Business Ethics* 43, 247-252.
- Freeman, E.R.(1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman.
- GRI (2002). *Sustainability Reporting Guidelines, Global Reporting Initiative* [online]. [Referred to 8.5.2009]. Available at: www.globalreporting.org.
- Galbreath, J. (2006). Corporate Social Responsibility Strategy: strategic options, global considerations *Corporate Governance* 6:2, 175-187.
- Katsoulakos, T. & Katsoulakos, Y. (2007). Strategic management, corporate responsibility and stakeholder management. Integrating corporate responsibility principles and stakeholder approaches into mainstream strategy: a stakeholder-oriented and integrative strategic management framework *Corporate Governance* 7:4, 355-369.
- Lantos, G.P. (2001). The Boundaries of Strategic Corporate Social Responsibility *Journal of Consumer Marketing* 18:7, 595-630.
- Leigh, J., & Waddock, S. (2006). The emergence of total responsibility management systems: J. Sainsbury's (plc) voluntary responsibility management systems for global food retail supply chains *Business and Society Review* 111:4, 409-26.

- McAdam, R. & Leonard, D. (2003). Corporate Social Responsibility in a Total Quality Management Context: Opportunities for Sustainable Growth *Corporate Governance* 3:4, 36-45.
- McWilliams, A. & Siegel, D. (2000). Corporate Social Responsibility and Financial Performances: Correlation or Misspecification? *Strategic Management Journal* 21, 603-609.
- McWilliams, A., Siegel, D. & Wright, P. (2006). Corporate Social Responsibility: Strategic Implications *Journal of Management Studies* 43:1, 1-18.
- MsAdam, R. & Leonard, D. (2003). Corporate Social Responsibility in a Total Quality Management Context: Opportunities for Sustainable Growth *Corporate Governance* 3:4, 36-45.
- Molteni, M. (2004). *Responsabilità sociale e performance d'impresa : per una sintesi sociocompetitiva*.
- Milano: Vita e Pensiero. Molteni, M., Bertolini, S. & Pedrini, M. (2007). *Il mestiere di CSR manager. Politiche di responsabilità sociale nelle imprese italiane*. Milano: Il Sole24ore.
- Perrini, F. & Minoja, M. (2008). Strategizing Corporate Social responsibility: evidence from an Italian medium-sized, family-owned company *Business Ethics: A European Review* 17:1, 47-63.
- Porter, M.E. & Kramer, M.R. (2002). The Competitive Advantage of Corporate Philanthropy *Harvard Business Review*.
- Porter, M.E. & Kramer, M.R. (2006) Strategy and Society: The Link Between competitive Advantage and Corporate Social Responsibility *Harvard Business Review* 84:12, 78-92.
- Porter, T.B. (2008). Managerial Applications of Corporate Social Responsibility and Systems Thinking for Achieving Sustainability Outcomes *Systems Research and Behavioral Science* 25, 397-411.
- Post, J. E., Lee, E.P. & Sachs, S. (2002). Managing the Extended Enterprise: the New Stakeholder View *California Management Review*, 45:1, 6-28.
- Runhaar, H., Tigchelaar, C. & Vermeulen, W. J. V. (2008). Environmental Leaders: Making a Difference. A Typology of Environmental Leaders and Recommendations for a Differentiated Policy Approach *Business Strategy and the Environment* 17,160-178.
- SA8000 (2001). *Social Accountability, Social Accountability International (SAI)* [online]. [referred to 15.4.2009]. Available at: www.sa-intl.org

Seitanidi, M.M. and A. Crane: 2009, 'Implementing CSR Through Partnerships: Understanding the Selection, Design and Institutionalisation of Nonprofit-Business

Partnerships', *Journal of Business Ethics*, **85**, 413–429. Siegel, S.S., & Vitalino, D.F. (2007) An Empirical Analysis of the Strategic Use of Corporate Social Responsibility *Journal of Economics & Management Strategy* 16:3, 773–792.

Waddock S. A. & Bodwell, C. (2007). *Total Responsibility Management: The Manual*. UK: Greenleaf Publishing.

William W. B. Jr. & Chandler, D. (2006). *Strategic Corporate Social Responsibility*. USA: Sage Publication.

ECONOMIC DOWNTURN AND THE LANGUAGE AND ACTION OF CORPORATE SOCIAL RESPONSIBILITY

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Abstract

In UK policy-making, sustainable development is discussed in a corporate-centric manner, with CSR seen as an extension of, indeed as interchangeable with, sustainable development. The agendas of CSR and sustainable development have, to some extent, been confined to ones which are 'safe' in the current economic system. Given the significance of the role of corporate actors in this context, this paper examines whether the way corporations 'talk about' CSR has changed since the onset of the recession.

Using document analysis of popular business media and interviews of key informants, this paper contributes to the debate around whether change in language subsequently leads to change in action and whether this will affect the direction of agenda setting and policy making relating to CSR. This paper contributes to the debate linking CSR and corporate activity and it begins to investigate how robust CSR activity is when economic prosperity is threatened.

Keywords: CSR, Sustainability, Recession, Economic Downturn, Language.

Introduction

In the UK policy-making context, sustainable development is discussed in a corporate-centric manner with CSR often being seen as an extension of, indeed as interchangeable with, sustainable development. To some extent, the agendas of CSR and sustainable development have been confined to ones which are 'safe' for the main economic players and corporate actors. Within this context this paper examines whether the language used when corporations 'talk about' CSR has changed since the onset of the economic downturn. We discuss whether this subsequently leads to a change in action and whether this will affect the direction and agenda of policy-making. In examining CSR in this context, this paper extends the debate about the link between CSR and corporate lobbying activity. It also begins to investigate how robust CSR activity is when economic prosperity declines. In doing so, it illustrates how important it is to consider the discourse of CSR and its interrelatedness with corporate activity.

The recession is having an impact on society, markets and business throughout the globe. In times of such economic difficulty, it is necessary to question whether corporate responsibility is seen as a desirable optional extra which can be culled in favour of profit maximisation, or economic survival. Or, conversely, CSR is considered a proactive business tool, which will aid the survival of companies during times of recession? These are questions which are being asked by business executives, the popular media and academics alike. There has been a proliferation of ‘noise’ both in the media (traditional and web-based), discussing the state of CSR in economies in recession and much debate predicting ‘what will happen next’. This paper begins to unpack this discourse and address the questions highlighted above.

To examine these questions and to investigate how CSR will be affected at a more substantive level, this paper focuses on the impact of the recession on both the action and language of CSR. Language is deemed as being significant in this instance as it is a mechanism by which the agenda for both short and long term action is set. This agenda will impact within the boundary of the market in relation to business activity, but will also have a wider impact, namely in the media and in policy-making environments. The paper begins by discussing, in more detail, why it is important to investigate language as well as actions, we are taking it as a given that it is important to look at the actions of CSR.

Context: So why is it Important that we Discuss Language?

The importance of the way issues are ‘talked about’ has been debated widely; it is important to extend the focus of CSR research from that of definition and operation, to identify and include the broader impact of the language of CSR beyond the bonds of corporations to wider society, specifically highlighting the impact the language of CSR may have on the policy-making.

The link between language and power has been demonstrated elsewhere. As a key tenet of the work of Foucault, power is viewed as being embedded in and effectuated through a crucial combination of knowledge and language, or what he calls discourse.

Discourse is a:

“complex mixture of ideas and expression through which individuals both perceive and in turn try to explain social reality” and therefore “defines the parameters and criteria people use to ascertain and calculate their potential course and action and choose particular courses of actions in certain circumstances”

(Goverde et al 2000: p14)

Following this line of argument, discourse is primarily a means of both understanding and action, operating in a circular fashion. In terms of approach, discourse is “a window or filter through which a whole range of other concepts and understanding must be mediated in human action.” (emphasis as in original) (ibid. 2000: p14).

Additionally, for Foucault, and important for this paper, as a key aspect of the link between knowledge and power and discourse, is the process of exclusion. By this, reference is being made to the exclusion of certain knowledge and language which leads to certain discourses rather than others. In his work *Power/Knowledge* (1980), “Foucault explores the way that, in order for something to be established as a fact or as a truth, other equally valid statements have to be discredited and denied.” (Mills 2003: p67)

Discourse is also the cornerstone of the Habermasian concept of communicative rationality. Within this concept the different actions involved in decision-making, become aware of problems of current approaches and are able to develop, and agree upon alternative actions through communication and collective reasoning (Gouldson and Beddington 2007, Habermas 1984). Discourse plays a vital role within this concept as it is through discourse that agreement is reached and action taken, rather than as a result of the power of different actors. Habermas argues that interactions between the different actors are driven by communication rationalities rather than by institutional concerns, suggesting as Gouldson and Beddington outline, that “the power of a good argument can transcend the power of the different actors, actors who can engage in discursive struggles can still be influential even if in political economy terms they might be seen to be marginal” (ibid: p10). This statement highlights the optimistic nature of Habermas’s communicative rationality, which lies in contrast to the work of Foucault and underlines the main criticism of Habermas’s work in this area. This paper holds with such concerns, following the stance that changes in governance structures have, to some degree, allowed for a more open debate, prevailing powerful actors and institutions still lead and shape the debate and decide who takes part (see Rydin 2003). In this instance, as business actors are the dominant force within CSR, with a reach both internally and externally to their own organisations, discourse will be a vital role in how they shape, act and influence CSR agendas and policy making.

The Language of the Environment, Sustainability and CSR

The analysis of discourse within the realm of the environment and sustainable development has been applied in a number of studies (see Dryzek 1997, Jamison 2001 and Hajer 1995). Dryzek’s work is based on the presumption that language has a key role to play in understanding decision-making surrounding the environment, he argues that “...the way we construct, interpret, discuss, and analyse environmental problems has all kinds of consequences” (ibid: p9).

The debate surrounding language and CSR has, up until recent years, tended to focus on the question of definition. Like sustainable development, CSR is a contested concept, with questions and concerns perpetually being raised about the lack of a unifying definition, and the subsequent difficulty in making the concept operational. This lack of a universal definitions creates an environment that is conducive for extended debate, but more importantly in the context of this paper, flexibility in the use and abuse of terms with changing emphasis of both the concept and the action of business.

The ‘flexibility’ in the language of CSR allows for easy movement by organisations in challenging times, such as a recession, leading to what Cheney refers to as a “strategic sensitivity to the language chosen” (Cheney et al 2007: p9). This strategic sensitivity allows for a cause-effect relationship between the language of sustainability/CSR and practice (ibid 2007). As Cheney describes:

“Definitions and terms are not static, despite our desire to fix labels and identities in an elusive yet compelling search to say “what something really is”

(Cheney et al 2007: p8).

This flexibility and fluidity in the definitions and terms used in CSR, allows CSR actors (policy makers, practitioners, corporate actors, business media), to use terms interchangeably, as deemed appropriate to satisfy other strategic or operational goals.

In the wider context, businesses have a sphere of influence wider than their own practices and operations and business leaders are influenced by factors other than market mechanisms.

UK Policy Context

Language is relevant in this setting due to its importance in relation to agenda-setting in the wider context. In addition to affecting the way corporations approach CSR, language is also important in a wider policy context, hence, it is important that research does not merely focus on the operationalisation of CSR but also looks at the discursive construction of the topic. Previous research has shown that within UK policy decision-making, the language of CSR has played a pivotal role in shaping sustainable development policy (Ellis, 2008).

The emphasis placed on CSR demonstrated the use of corporate-centric language and adoption within the policy process. This research finds that throughout, CSR (and CR) has begun to be used interchangeably with sustainable development, by a wide range of policy actors. Moon (2007) argues that “Both terms [sustainable development and CSR] are often used vaguely and interchangeably” (ibid: p 297) and also argues that there are “weaknesses, limitations and challenges” relating to CSR as an appropriate mechanism to achieve sustainable development. Following this line of reasoning, the dominance of corporate-centric language, based on the broader CSR agenda in policy-making, raises questions regarding the appropriateness of the policy agenda and subsequent policy recommendations. Where terms are seen as interchangeable by various CSR actors, but in practice are not, is it wise to influence policy without further clarification?

So, taking the stance that the way CSR is discussed is important in a wider policy context, we investigate whether the economic downturn has changed the language of CSR.

Approach

The discussion in this paper is based on findings gathered through a document review (including web blogs) and semi structured interviews of key informants. The approach is designed to give an initial view of the situation and is aimed to develop a platform for extended discussion and further research rather than to provide any definitive ‘answers’. This preliminary stance is largely due to the context within which the research takes place, i.e. the relatively short history of the current recession; therefore it is not possible, or desirable, to collate data from a wider evidence base.

Document Review

Documents have been reviewed from a number of sources including the popular and business press, corporate websites, think tanks and web blogs.

Specific publications from with the popular business press were been selected in this research because, as a body of literature, it provides a good ‘feel’ for the mood of the business sector. With this in mind, a number of opinion pieces and factual articles were seen as valid in this context.

The following publications were consulted, for the period between June 2008 and August 2009.

- Business Week
- The Economist
- Financial Times
- Ethical Corporation
- Accountancy Age

Other publications from the wider media have included:

- Guardian
- The Telegraph

And finally articles, sound bites and web blogs from specific business/CSR organisations have been reviewed;

- Ethical Trading Initiative
- Business and the Community
- CEIS
- Ethical Corporation
- Force for Good

Publications and specific pieces were selected based on searches using the relevant key terms; recession, CSR (and associated terms), sustainability and business.

Web blogs (taken, in this research, to also include webcasts) are an interesting research tool in this type of work as they provide a very immediate window into the views and opinion of a current situation. For more discussion on the benefits of web blogs in research see Woodly (2008) and Messner and Distaso (2008).

Interviews

A combination of research techniques has been employed to collect data from business representatives working within the CSR field. It was essential to use more than one method of data collection in order that the findings could be triangulated, thus increasing the validity of the results.

The semi structured interviews were designed in advance (but based on earlier literature review) of the document review in order to ensure that question design was not unduly influenced by earlier results. Questions and themes were determined by discussion and brain storming activities by the researchers based on the initial findings of the literature review.

Data Handling

The data sets from the various sources outlined above have been analysed by employing the approach of close reading of the different sources, as used in Rydin's (2003) investigation of conflict and consensus in environmental planning, to identify trends and patterns in the data. From this analysis a number of emerging themes, relevant to the research aim have been identified and are discussed later in the paper.

Findings

The findings from this initial data collection are split into two sections; firstly a mapping of the evolution of the debate surrounding CSR and the economic downturn has been completed and secondly the main research themes in addressing the research aim of investigating the impact of the economic climate on the language and action of CSR are outlined.

Mapping the Debate

The evolution of the story of the economic downturn and CSR, as presented in the media, is useful as it frames the more detailed data findings of this research, outlines the wider debate which frames the research as a whole and also provides an overview of the language of CSR outside the immediate boundary of the corporation. Even though the recession is not over, and when this research started, the recession was in its earlier stages, the 'mood' of the media has evidently been through a certain degree of evolution.

At the start of the recession, some quarters of the business press (particularly the conservative right, and neo-liberal press), reported that the recession might pose sufficient challenges as to bring about the end of CSR; businesses would not be able to maintain the 'luxury' of CSR. The Economist, for example, ran stories on the

need for firms to tighten their belts and only spend on core business activities (Economist, 2008).

CSR practitioners, business leaders supporting CSR etc, talked more about the need for CSR to become more integrated into business practices (see for example Tomorrow's Company presentations 2009): CSR itself is not seen as in jeopardy, but CSR activities will only survive the recession where they are recognised as being core to the business. This implies to some degree that the type of CSR might be significant. Corporate philanthropy is discussed as being less significant than fulfilling reporting obligations for example. Compliance CSR will have to remain as a minimum to fulfil legal obligations of course, but market leaders at the start of the recession (and onwards) are witnessed as doing much more than compliance despite common business pressures around the need to tighten belts during recession. .

More recently, there has also been more widespread support amongst the wider business press for the notion that the type of CSR matters. By early 2009, the shift in the language used in the business press was towards referring to CSR as, a mature business practice which benefits businesses in times of recession. The Financial Times for example, heralded corporate responsibility as a survivor (Financial Times 2009).

Figure 1 below summaries the evolution of the media debate surrounding CSR and the recession. It is also evident from an examination of web-blogs, corporate web sites and corporate activity, that the big players in CSR terms support the view that CSR has not disappeared Nike, Cadbury, Wal-mart, Canon all have reiterated their support for CSR, both in activity and in language, during the global recession. This may be seen as contrary to the early predictions of the business press. However, without suggesting any direct causality, it is certainly the case that as the recession rolls on, the popular business press is reporting on CSR in a more positive light.

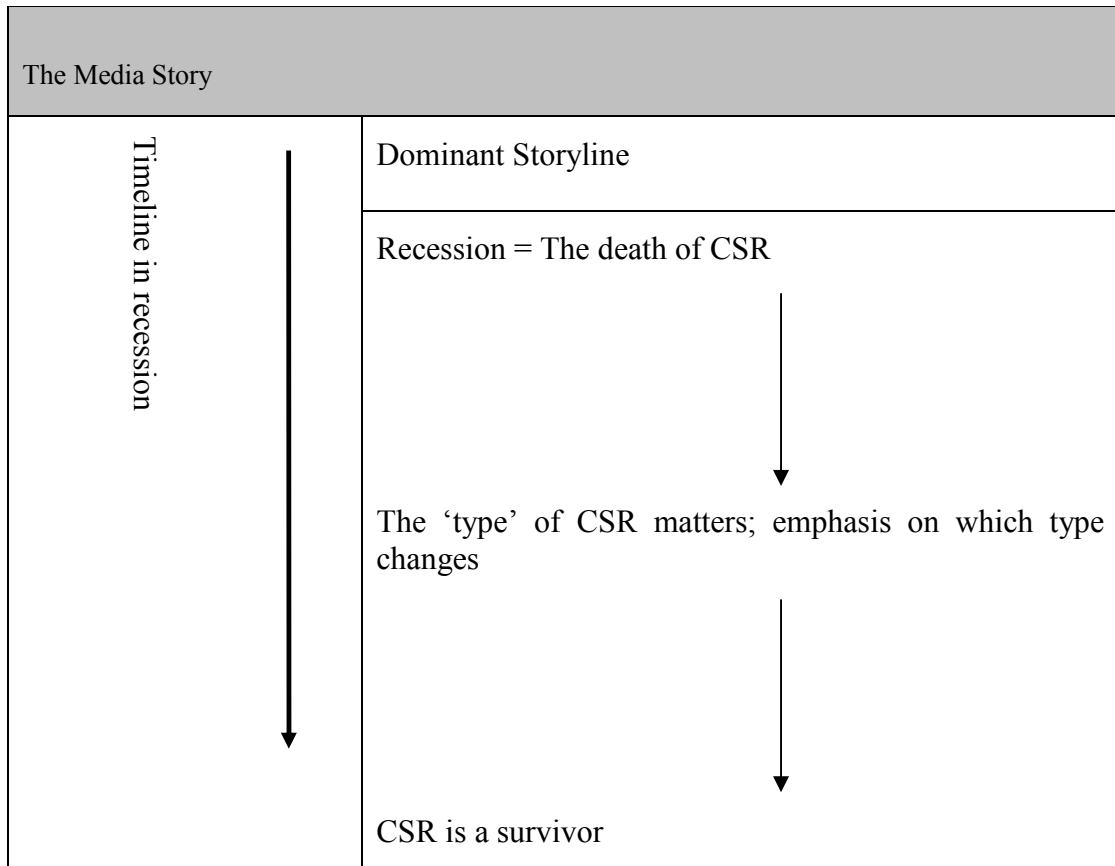


Figure 1: Timeline of Media Opinion

The development of the media storyline has also demonstrated a subtle change in the language used, with more emphasis on terms such as sustainability and sustainable business practices. This interchangeable use of CSR terminology is in line with discussion of the language of CSR earlier in this paper. Perhaps this makes intuitive sense as one would expect businesses to communicate to their stakeholders and shareholders that they will survive the recession as they are more 'sustainable' than their rivals. This subtle change in language, is also reflected in the themes emerging from the interviews.

Themes

A number of themes have emerged from the preliminary data review undertaken in this research. These themes relate to both the language and action of CSR and provide an interesting spring board for further work in this area, as the impacts of the recession become more evident.

One notable impact of the recession, is that some of the main criticisms and challenges which feature in the broader CSR debate are becoming either more evident in an operational sense and/or are re-igniting debates. One such issue relates to the problem of the short-term, market driven view often taken by business as a

result of economic-market system; the need for a business case for CSR is back on the agenda.

The Role of Business in Society

In some areas the recession, and the role of CSR has once again ignited the debate surrounding the true role of business, this is highlighted in the following excerpt:

“Winning companies create jobs, pay taxes, and strengthen the economy. Winning companies, in other words, enable social responsibility, not the other way around. And so, right now—as always—companies should be putting profitability first. It's the necessity that makes every other necessity possible.”

(Welch and Welch, 2009)

‘Types’ of CSR

In line with the fluidity of the definition of CSR, this research has found that the recession has highlighted that as well as different definitions, there are also different ‘types’ of CSR, which focus on selected areas or in the case of more advanced firms levels of integrations of the three pillars of sustainability.

‘CSR is becoming ghettoised in various CSR activities, for example philanthropy.’
(Welch and Welch, 2009)

The same article goes onto suggest that CSR is made up of three elements, which like other data found in this research suggests that one potential outcome of CSR in a time of recession is that the debate, and activity, of CSR moves away from an holistic management issue to three separate pillars; environment, society and economy.

“Here's what we mean. CSR, essentially, comes in three different forms. Companies can contribute to society with cash or products, giving away grants, goods, or their services to schools, homeless shelters, hospitals, and the like. Second, companies can focus their CSR on community involvement, by supporting employees who mentor students or volunteer for a myriad of causes. And third, companies can put CSR into their product and service strategies, focusing on green initiatives, for instance, or factoring environmental concerns into their manufacturing processes.” (ibid: p1)

The response to this piece highlight the discrepancies about what CSR is and as the piece itself highlights that there are different types of CSR and choosing the right one is becoming increasingly important in a time of economic downturn/recession.

Business Case

The need to develop a business case for CSR has long been a key element of the research, discourse and operationalisation of CSR. However, what has become evident in this research is that during times of increased economic pressure the development of a robust business case, which is securely anchored in core business

value and advantage has become increasingly important. The emphasis on the need for such a business case has been evident in all data sources reviewed in this research.

“All areas, including CSR need to be justifiable in business-terms; focus is on core, profit-making activities is viewed as essential.”

(Financial Services Company)

“more talk about business case rather than ethics; using language of business to develop business case and in articulating need for CSR”

(Financial Services Company)

“There will be more discussion around materiality and relevance of CSR in terms of investors needing to be clear of the relevance of CSR, what it is and why it happens”

(Investment Company)

The emphasis on a robust business case which shows real business value was also evident in an Accountancy Age webcast (Accountancy Age 2009), showing an interview with representatives of the business research and accountancy sectors. The interviewees highlighted that although there are still a number of diverse CSR constructs, within all of them, it is value which is key; with particular emphasis placed again on efficiency.

“..... we're not suggesting that companies abandon philanthropy and other charitable initiatives until the sky is blue again. We're only saying that corporate social responsibility—or CSR, as it has come to be known—needs to adapt to the circumstances. It hasn't become a "luxury," to use your word, but leaders today do need to pin down, for themselves and their employees, CSR's place among the company's priorities.”

(Welch and Welch 2009: p 1)

Efficiency

Again, this supports the view that ‘value is the key’, that businesses can, in times of recession legitimately discuss cost cutting activities in a way which had perhaps become unfashionable in policy making environments. Respondents referred to the need to demonstrate that CSR activities must also demonstrate efficiency gains.

‘Areas to be focused on will be those which will lead to cost savings, for example energy use, waste management and business travel.’

(Financial Services Company)

Another theme which arose around efficiency and savings, is that some CSR activities will not be effected by this for a number of key reasons. Firstly, where CSR is focussed on compliance, costs cannot be cut. Secondly, where CSR is not an integral part of the firm, CSR costs will be small and so not a major area for efficiency gains. And thirdly, where CSR is already integrated into a firms activities, it is not likely to be in the interests of the firm to disentangle these activities during the recession, partly because this might be costly in itself and partly because it would send inappropriate messages to stakeholders.

Resource Allocation and the Home of CSR

Respondents were asked to comment on where CSR sits in the organisation and whether this has or is likely to change.

“not sure will make a difference to team size, not that big in the first place and very focused on compliance reporting anyway so not much scope to reduce”
(*Financial Services Company*)

The responses relating to this issue, again supports the view that compliance type CSR is not likely to undergo any significant change as a result of recession, at least in part because there is not much which can be changed without negative consequence.

Short-termism

An interest in short-term planning for short-term gain was highlighted by a number of respondents, as highlighted in the quotes below.

“CSR is even more risk-based and increasing focus on short-term issues/risks”
(*Financial Services Company*)

‘Areas to be focused on will be those which will lead to cost savings, for example energy use, waste management and business travel.’
(*Financial Services Company*)

“[there are] more discussions about short-term rather than long-term”
(*Investment Company*)

The potential contradiction between the timescale of an average business cycle and the long-term nature of sustainable development is often highlighted as one of the main criticisms of CSR. This issue seems to have become more acute during the recent period of recession, with decisions around business success being linked to immediate measurable return.

Secondary Data

Secondary data, in the form of industrial surveys, suggests that the importance of CSR activities has gone down the business agenda. A recent survey of the food and manufacturing sector conducted by CIES has found that CSR has moved down the top 10 priorities list from 1st in January 2008, to 3rd at the same time this year to 5th in June 2009 (CIES 2009). Senior representatives of the global food business network are arguing that CSR has dropped down the priority list as the sector has been dealing with CSR/sustainability effectively for a number of years now and thus it has become integrated into the core business model and therefore is no longer ranked by respondents as a ‘separate’ priority (ibid). However, the true level of

integration is questionable and cannot be addressed within this paper, the survey results still demonstrate a decreased in importance placed on CSR (concurrent with the economic downturn) even if this decreased is purely one which is perceived.

Booz and Co. conducted a survey of 828 senior managers, and found that 40% of the respondents felt green and other CSR initiatives would be halted as a result of the recession. This delay was particularly evident in the energy and transportation sectors (Environmental Leader 2009).

Whilst not wholly in line with all the outcomes of this research, the findings of these surveys to some extent corroborate the notion that for some companies who have failed to fully integrate CSR into their business models, the recession has resulted in a further reduction in their CSR activities. This is reflected in the excerpt below.

“attitudes towards CSR have changed during the economic downturn; the drive will be employee and customer driven not by a wider stakeholder base” -
(*Financial Services Company*)

Discussion

One of the major implications from this research, is that the language employed by the media and other corporate actors when referring to CSR has changed during the recession. The economic downturn has stimulated once more the debate around the appropriateness of CSR as a core business operation. This finding coincides with an implied increase in focus of businesses on the need for all business activities to contribute to economic sustainability of the organisation. The increase in the exposure of the different views for and against CSR, demonstrates that there is still no collective agreement amongst corporate actors or the wider business world, on the role, nature and significance of CSR. As the economic crisis is forcing companies to take a ‘hard look’ at all of their activities through this economic lens, the outcome for CSR has been mixed: In some senses it has exposed the different views on CSR and stimulated debate, and where CSR is seen as an add-on, it has challenged its standing as a core business tool. The role of business is still to make a profit after all, and the recession has re-legitimated this view. Where CSR is already engrained in a company’s operations however, the story is somewhat different, and the view is that a recession is not sufficient to challenge traditional business models, and CSR is part of a set of business models in operation amongst industry leaders.

These converse views bring about two main features of the change of language and action of CSR. Firstly, there is a notable divergence between the language and actions of leaders in CSR and those of the ‘laggers’. Secondly, there is a sense that the three pillars of sustainability have been split, and the focus is again more firmly placed on economic efficiency; CSR is supported more strongly, or spoken of in positive terms, when it is expected to have a notable impact on profit or efficiency. In this sense CSR is not hugely affected by the recession, because for the majority of companies, it is not at the heart of operations.

Such divergent views raise questions around the extent to which the CSR community has made significant progress toward embedding CSR into business practices in the mainstream. The recession is highlighting that CSR has not to any great extent challenged the conventional business model, and it is predominantly when efficiency gains are available, where CSR activities are fully embedded into business practices. Companies are still concerned with the bottom line, not the triple bottom line, and this is especially the case in times of economic downturn.

A further significant finding of this research relates to the language of CSR. Both the document review and interviews suggest that throughout the recession, there has been a shift in the language used, away from terms such as CSR and towards greater use of terms such as sustainability and sustainable business practices. The focus of business during the recession has been towards a need to demonstrate efficiency and focus more markedly on their own durability and profit making ability. Terms such as sustainability, as highlighted earlier, are perhaps appealing as they are generic enough to imply support for a range of business goals and operations. This trend seems likely to continue given a degree of convergence in use for the terms from all quarters: Business press, CSR practitioners and other corporate actors on this matter share some agreement and as a result CSR is perhaps becoming more about operational efficiency, rather than broader CSR definitions and models.

These findings also raise significant questions over the implications for policy making agendas; if the voluntary nature of CSR means that during times of economic crisis, firms focus their activities on the easy CSR gains, such as efficiency gains or reporting activities as these findings imply, what does that mean for policy and agenda setting? The implication is that there is a risk that regulatory frameworks will weaken and that policy making agendas become more corporate-centric. Within a policy-making perspective we could witness decision-making moving back to much more of the ecological modernisation tradition.

Conclusion

The main findings of this paper can be summarised by three points. Firstly the way the media has reported on CSR has changed during the life cycle of the recession; moving away from the death of CSR to CSR being a mechanism by which companies can survive and come out ‘the other side’.

Secondly, to date there has not has been significant change in terms of CSR operations; for the mainstream there has not been a great deal of progress towards truly integrating holistic CSR practice, therefore there is no real need to change operations relating to CSR. Indeed the debate has re-opened around whether CSR is relevant other than to support business as usual or in order to operationalise efficiency gains.

Thirdly, the recession has made an impact on the way corporate actors talk about CSR, with a shift to sustainable business and efficiency being witnessed. In this sense the dominant language is one which still supports traditional business models

even in a time of recession. This change in language could have the impact of weakening policy decision making.

So far, what the recession has really highlighted is that, as a whole, the business sector has made limited progress in truly integrating sustainability/CSR into core business activities, and therefore the recession has, across the board, had little real impact on CSR. Importantly, the economic climate has further exposed the gap between the laggards and leaders in CSR.

This paper provides a marker in the sand for further research on the language and action of CSR. Further research needs to extend data gathering process to include a wider sectoral base, to acknowledge and investigate whether the witnessed change in language and potential lack of progress is being reflected in the wider context of policy-making.

References

- Accountancy Age (2009) CSR and the Recession
<http://www.accountancyage.com/accountancyage/video/2242251/aatv-csr-recession>,
 [3 September 2009]
- Booz and Co. (2008) Recession Response. Why Companies are Making the Wrong Moves
http://www.booz.com/media/uploads/Recession_Response.pdf, [2 September 2009].
- CIES (2009) The Food Business Forum – Top of Mind Survey June 2009
http://www.ciesnet.com/pfiles/press_release/2009-06-08-PR-TOMII.pdf,
 [2September 2009].
- Dryzek, J. S. (1997) *The Politics of the Earth: Environmental Discourses*, Oxford, UK: Oxford University Press
- The Economist (2008). ‘The Year of Unsustainability’. The Economist 19th Nov 2008.
www.economist.com/theworldin/displaystory.cfm?story_id=12494427[2306 09]
- The Economist (2009). ‘A Stress Test for Good Intentions; Corporate Social Responsibility’.
 The Economist Vol. 391(8631); pg. 69, 16 May 2009
- Ellis, L. (2008) *The Role of Multinational Corporations in UK Sustainable Development Policy*. PhD Thesis, University of Leeds.
- Environmental Leader (2009) Survey: Recession Slows Corporate Sustainability Efforts
<http://www.environmentalleader.com/2009/03/04/survey-recession-slows-corporate-green-spending>,
 accessed [2September2009]
- Financial Times (2009). ‘Why Corporate Responsibility is Survivor’, Financial Times, 20 April, 2009.
- Foucault, M (1980) *Power/Knowledge*. In Gordan, C. (ed) (1980) *Michel Foucault: Knowledge/Power: Selected Interviews and Other Writings 1972-1977*. UK: Harvester
- Gouldson, A and Beddington, J. (2007) Corporations and the Governance of Environmental Risk. *Environment and Planning C: Government and Policy*, 25, 4 - 20
- Goverde, H. Lery, P and Letner, H. (2000) *Power in Contemporary Politics: Theories, Practices, Globalisation*. London, UK: Sage
- Habermas, J. (1984) *The Theory of Communicative Action* translated by T. McCarthy, Cambridge, UK: Polity Press
- Hajer, M. A. (1995) *The Politics of Environmental Discourse: Ecological Modernisation and the Policy Process* Oxford, UK: Clarendon Press.

Jamison , A. (2001) *The Making of Green Knowledge: Environmental Politics and Cultural Transformation*, Cambridge, UK: Cambridge, UK: Cambridge University Press.

Mills, S. (2003) *Michel Foucault* London, UK: Routledge

Moon, J. (2007) *The Contribution of Corporate Social Responsibility to Sustainable Development*, *Sustainable Development*, 15, p296 – 306

Rydin, Y. (2003). *Conflict, consensus and Rationality in Environmental Planning: An institutional Discourse Approach*. Oxford University Press, Oxford, UK.

Tomorrow's Company (2009). <http://www.tomorrowcompany.com/> [23 June 2009]

Welch, J. and Welch, S. (2009) *CSR in a Recession; Companies have no choice but to recalibrate their philanthropy*. *Business Week*, June 2009

http://www.businessweek.com/magazine/content/09_22/b4133000801325.htm:
[03/09/2009]

IMAGE DIFFERENTIATION WITH CORPORATE ENVIRONMENTAL RESPONSIBILITY

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Abstract

Purpose – This paper analyzes strategic implications of corporate responsibility (CR) and in particular how a firm can differentiate with an environmentally responsible image.

Design/methodology/approach – A single case study was conducted in the Nordic hospitality industry with semi-structured interviews as the main data collection method.

Findings – By adopting an environmentally responsible identity through shared values with the firm's key stakeholders, the firm can reflect an environmentally responsible image. This image can enhance firm's strategic position through internal and external differentiators from competitors – as the firm becomes a more preferred employer, partner and supplier; results as enhanced employees' motivation, cost savings, better reputation, and greater guest loyalty.

Practical implications – The amount of CR depends on the micro/meso/macro/global-level drivers, and competitive aims of the firm. The emphasis on stakeholder communication becomes greater as the firm increases its CR-aggressiveness.

Keywords: Image differentiation, corporate environmental responsibility, strategic CR, hospitality industry, key stakeholder approach.

Introduction

Corporate responsibility (CR) and environmental marketing/management (EM) are receiving great attention among academic scholars and practitioners. Increasingly each sector (private-public-third-fourth) shows interest in environmental concerns. Firms are eco-labelling and expressing their passion for sustainable growth; governments are enacting laws concerning emissions and waste reductions; Non-governmental organizations (NGOs) are demonstrating; media is spotlighting the issue; and families recycle and have more information about the phenomenon than ever before. It is obvious that this green-trend has changed, and keeps changing the competitive environment creating new opportunities and threats. The firms concerned on their short-term profitability are more likely to resist the upcoming costs of greening and see the proliferated environmentalism rather as a threat to their business (cf. Richter 2001: 186-187). The long-term oriented firms seem to understand the necessity of these investments and the new opportunities they hold within. These “firms that see environmental issues as opportunities rather than

threats are more likely to succeed by establishing a competitive advantage over their competition” (Friedman & Friedman 2009).

The purpose of this research paper is to explore and analyze strategic implications of CR. The study aims at increasing the understanding of the phenomena with a model building approach that is based on the stakeholder theory (cf. Freeman 1984). The main problem is phrased as follows: *how a firm can differentiate with corporate responsibility (CR) and in particular with an environmentally responsible image?*

Because of the non-existence of antecedent models the stress of the study is on theoretical reasoning, however an empirical case study is conducted to support the working propositions and theoretical framework. The selected case is a hotel chain, Scandic, and the dissected context is the Swedish-Finnish hospitality industry.

Theoretical Framework

This chapter presents the concepts, reviews the strategy approach and aims at developing five working propositions.

Corporate Responsibility

The concept of corporate responsibility (CR), a part of the entity of corporate sustainability, consists of economic responsibility, environmental responsibility (Van Marrewijk 2003), and socio-cultural responsibility (Ketola 2008). Corporate responsibility *cannot* and does *not* equal to sustainability, because responsibility is relative and sustainability is absolute (Ketola 2005, 2007). In this study CR is considered as a voluntary task, meaning that companies do more than laws and regulations acquire (cf. Carroll 1979).

CR impacts the organizational culture, which requires the development of new shared values, as well as strategic embedding within organization of the three pillars: people, planet and profit (Cramer 2005).

Strategic CR is one way to execute corporate responsibility. The aim is to create a win-win-win situation, in which the CR ables the people, planet and profit to prosper. Moreover, CR becomes strategic when it yields substantial business-related benefits to the firm, in particular by supporting core business activities and thus contributes to the firm's effectiveness in accomplishing its mission (Burke & Logsdon 1996).

Differentiation Strategy

Each industry has its own characteristics and reacts uniquely to external and internal changes. Also in the case of corporate responsibility (CR), not all industries behave in a similar manner because of non-equal exposure to CR challenges. Peng (2006)

argues that industries with a close contact to environment are more likely to interact with CR issues. However, best practises are from industries such as food, IT, and cosmetics (Kotler & Lee 2005). Nevertheless, it seems that all industries are becoming more vulnerable, and over time no industry will have immunity to CR concerns.

The Configuration school of strategy states that "each school has its own time, in its own place" (Mintzberg, Ahlstrand & Lampel 1998). In positioning school (Porter 1980, 1985, 1996), or porterism (Näsi 1996), according to the capabilities of a firm and conditions of an industry, one of the three or a combination of the three generic strategies is chosen for a competitive strategy that can enhance a strategic position that creates barriers for competition (Porter 1985).

Being aware of the generic strategy trap (Miller 1992) and the pitfall of oversimplifying the analysis (Haberberg & Rieple 2008), the differentiation strategy appears suitable for CR: in differentiation a company seeks for ways to be unique (often beyond the physical product) that lead to a price premium (Porter 1980, 1985), and due to environmental concerns, differentiation opportunities are growing (Winsemius & Guntram 2002).

Reputation, Image and Identity

Corporate reputation is an intangible way to differentiate services and products from competitors. The reputation is built upon ethics and morality; history; efficiency; the product; public *image*; and human resource management (Siltaoja 2006b). Therefore, a favorable image is one of the factors that over time create a favorable *reputation*. However, according to Pruzan (2001) a creation of an outer image alone, may not lead to desired results. In order to have an improved and a more inclusive description of the organization and its performance, the new image should rather be a reflection of an internal *identity* (Pruzan 2001). This leads to the first working proposition that suggests that *[WP1] a reflected image is more likely to lead to desired results than a merely pragmatic image*. Heikkurinen and Ketola (2009) suggest that in order to have a more coherent and stable image and reputation firms should focus on being their identity rather than trying to manage it.

Identity of an organization is formed by cognitions, emotions, and aesthetic appreciations of its members (Hatch & Schultz, 2004: 4), and functions as an umbrella term for corporate identity (Heikkurinen & Ketola 2009). The distinction by Bendixen and Abratt (2007) between corporate identity (i.e. what the firm is) and corporate image (i.e. what the firm is perceived to be) seems to be accepted throughout the business life and academia. Arguably, the internalizing of a CR identity is less complicated and requires less organizational learning if the organization has some experience of responsible behavior. And the more the CR is an integral part of the culture the easier it is to communicate the norms and values underlying the concept (Cramer 2005).

The value theory connects reputation and CR (Siltaoja 2006b). Since reputation is a very context related issue (Siltaoja 2006a) as well as the CR (Halme, Roome &

Dobers 2009) a firm must be sure that the new image corresponds and is parallel with its stakeholders' values and needs in a specific context. But because a firm cannot meet all the expectations of all their stakeholders, it must concentrate on its key stakeholders – the stakeholders that matter the most. Therefore it can be proposed that *[WP2] a key stakeholder oriented firm forms and re-forms its values according to its key stakeholders' values*. In addition, since the amount of appreciation towards environmental responsibility depends greatly on the culture the key stakeholders identify with, it can be proposed that *[WP3] a key stakeholder oriented firm adjusts the amount of its CR activities, according to the context of its key stakeholders at issue*.

A well created (i.e. reflected), positive, image strengthens firms' competitive position (Marconi 1997). In a quantitative study, McWilliams and Siegel (2001) found positive impacts of CR on the corporate reputation, and a lack of CR effectively ruining a corporate image. Even though marketing communications are vital in image building, a corporate image is not created in the marketing department. The whole *value chain* (Porter 1985, Porter & Kramer 2006) needs to be reconfigured in order to meet the desired image. This is because the full dedication of the whole value chain decreases the possibility for unwanted errors, as Ketola (2006a, 2006b) stresses the importance of consistency in values, words, and actions. Hence the next proposition is that *[WP4] a responsible identity is built upon the whole value chain of the firm*.

Drivers For Environmental Marketing

Since only the received and experienced value of the stakeholder matters (Porter 1985: 138-140), marketing plays an important role in strategic CR. In environmental marketing (EM), the environmental expenditures are viewed as investments in the firm's ability to create value for its owners, buyers, and other stakeholders (Miles & Covin 2000).

A multiple case study of 17 Finnish SMEs, show that the personal interest of entrepreneurs and owners was the main motive for environmental responsibility consideration (Mäntylä, Syrjä, Vainio, Vehkala & Wuori 2001: 33-36). According to Mäntylä et al. (2001: 33-36), the other motives were the requirements of external stakeholders (mostly customers), intensions to keep up with competition, and ahead of the legislation. These CR actions are mostly done in the hope of cost savings and image benefits (Mäntylä et al. 2001: 33-36).

Since some of the value to the stakeholders can be created through corporate image, the environmental marketing (EM) tends to enhance differentiation-based competitive advantage, besides conceivable cost savings. The produced competitive advantage through differentiation-based positioning targets the environmentally sensitive stakeholders, and therefore also relates to the focusing strategy. However, the form of advantage may not be receivable if the corporate strategies are contradicting with the environmental strategies. Therefore, Ketola (2007) suggests that the desired results will most likely be achievable if (and when) the environmental strategy is the corporate strategy.

Since not all stakeholders value environmental actions in equal terms, it is important to focus where the demand exists. Arguably, a demand for strategic CR and environmentalism must either exist or is to be created – otherwise, there will be no financial gains in sight. However, often the demand is not seen as something static, rather it is seen as something that can be anticipated and affected. Thus it can be proposed that [WP5] *if a demand for corporate responsibility does not exist, firms can create it by supplying corporate responsibility.*

In Aragón-Correa and Sharma (2003), proactive (refers to anticipated demand) corporate environmental strategies were actually found to be associated with improved financial performance (Judge & Douglas 1998; Klassen & McLaughlin 1996).

In order for ‘environmental image differentiation’ to be successful, stakeholders and potential buyers must be fully aware of environmental actions and values, otherwise they might as well do business with a firm without such attributes (McWilliams & Siegel 2001). Therefore, marketing communication holds an intrinsic part in raising the awareness among stakeholders and companies shall focus on communicating the CR issues with the greatest shared value among key stakeholders. However, the intensity of actions should be more on the primary activities and less on the supportive activities of the value chain (Porter & Kramer 2006).

Research Methodology

Since the research method and data are subordinates to the research problem (Uusitalo 1991: 50), the research problem and questions defined the used qualitative method and data. The case study method was chosen because the phenomenon is researched in its natural environment with different datas, it does not require control over behavioural events, and it allows to cover contextual conditions (Yin 2003: 1-13).

The Selected Case

The selected case is the Nordic region's leading hotel chain, Scandic. The case study was chosen because a gap in research regarding the context and their rather extensive environmental agenda that is critical for the research problem addressed.

Data Reduction

The term data reduction refers to selecting, focusing, simplifying, abstracting, and transforming the collected data, and it starts already before the actual collection of the data (Miles & Huberman 1984: 21-23).

The empirical data was collected from both primary and secondary sources. The *primary data* consisted of unstructured and semi-structured in-depth interviews in the

Nordic hospitality industry. Three key informants from the case company were interviewed: two from Sweden and one from Finland. Characteristic for this data collecting method was its flexibility and capability that allowed new questions to be brought up during the interviews. These theme interviews were conducted on a one-on-one basis and took from 70 up to 140 minutes each. The purpose was also to uncover underlying practices and attitudes behind the case company's CR.

The first key informant was a CEO of Scandic, the second key informant was Scandic's former Vice President in Sustainable Business, and the third key informant was the case company's Sustainability Controller.

The *secondary data* collection consisted of selecting the most essential documents and archival records about the case company and the Nordic hospitality industry. The purpose of the secondary data was to prime and support the collection of the primary data, and prevent the collection of the same primary data twice.

Evaluation of the Study

Since reliability and validity are rooted in positivism they should be redefined to fit qualitative methods (Golafshani 2003). Guba and Lincoln substituted reliability and validity with a similar concept of "trustworthiness," consisting of credibility, transferability, dependability, and confirmability. (Guba & Lincoln 1981; Guba & Lincoln 1982).

Dependability – Since opinions of management, strategies and other codes of conducts change over time – the results are not repeatable. However, the interviewees were rather unanimous. The data triangulation also increases the dependability, as the company documents were compared with the interviews. Critical documents from impartial sources and higher amount of interviewees would have enhanced the dependability of the study.

Transferability – The purpose of the generic theoretical framework was to increase the transferability of the study since the theory was not context-specific. However, the empirical results are transferable only to similar competitive environments.

Creditability/Confirmability – The study was conducted with transparency. The interviews were recorded, listened twice and transcriptions were written. The researcher conducted all of the interviews in person.

A common problem of case studies is the generalization of the results as they only aim to make theoretical or analytical generalizations (Yin 1989: 38-40). However, what is lost in the generalization can be won in the depth and richness of the content (Uusitalo 1991: 39). And the results of the research should be evaluated based on the pragmatic usefulness of the results – hence it becomes a question of the relevance, simplicity, and handiness of the results (Niiniluoto 1980).

Empirical Findings

The first proposition

[P1] A reflected image is more likely to lead to desired results than a merely pragmatic image.

Often the discussions around corporate image/identity take place in the executive management and are facilitated by an external agency. It was found that in the case company the CR image building was led by the identity (what the firm is). The idea for CR came from a manager inside the company, and was thereby internalized into corporate values. These values led to responsible actions that were then communicated (reflected) to all stakeholders. When a responsible identity is built upon the responsible values of the firm, it seems to reflect as a responsible image.

A time delay of approximately three to four years was found between the first CR actions in 1993 and the stakeholder perception and reaction. “It takes time when the image adapts”, a key informant of Scandic states. The person continues that “identity must result as an image. If an image does not correspond with what the firm is, then it is green-wash”. At Scandic, the reflected image is seen as the only proper way to achieve long-term success.

Hence the first working proposition receives strong support from the case company and is supported.

The second proposition

[P2] A key stakeholder oriented firm forms and re-forms its values according to its key stakeholders' values.

The case company built its image through shared values with its the key stakeholders – the team members and the guests of the hotels – which indicates (key) stakeholder orientation. It was found that to some extent the case company re-forms and modifies its values according to its *external* key stakeholders' (guests) values, and to a great extent according to its *internal* key stakeholder's (team members) values. These findings support the latter part of the second working proposition (*re-forms its values*).

At first, the environmentally responsible values rose from the team members, especially from the top management. Therefore, it can be stated that the case company formed its values according to its key stakeholders' values (as the team members are a key stakeholder group and as the top management is part of the team members at Scandic). This reasoning supports the first part of the second working proposition (*forms its values*). However, the case company did not form its values in accordance with the external key stakeholder's values. Therefore, an informative revision is made: the case company as a key stakeholder oriented firm, formed its values according to its internal key stakeholders' values – and re-forms its values according to its internal and external key stakeholders' values.

It can be deduced that *an internal key stakeholder oriented firm forms its values according to its internal key stakeholders' values, whereas an external key stakeholder oriented firm forms its values according to its external key stakeholders' values.*

But even though the case company did not form its values based on both internal and external key stakeholders' values, it did form its values in accordance with its key stakeholder's values. Thus also the unrevised proposition can be verified.

The third proposition

[P3] A key stakeholder oriented firm adjusts the amount of its CR activities according to the context of its key stakeholders.

The values of the key stakeholders vary between different countries that Scandic operates in. It was found that this difference in values (demand) seems to affect the supply for CR. Ideally, the demand should not affect the supply for CR, a key informant from the company states. The interviewee explains that being part of the solution (supplying CR) everywhere is a prerequisite for all businesses. This refers to the **law of nature** that “enacts” that (overtime) all firms must become responsible.

In Finland and Sweden, slight differences were found in the firm's key stakeholders' values. However, if the values are dissected with a relative perspective (all the countries in the world) the differences are minor. With an absolute perspective the differences are more visible, as they affect the demand/supply for CR.

In the comparison of the CR actions (supply) between Sweden and Finland, the case company showed higher CR standards in Sweden than in Finland. In 2007, the CO₂ emissions in Sweden were 1,174 Kg/gn, when in Finland they were as high as 6,375 Kg/gn (Scandic 2009). Both figures are in kilograms per guest night, and therefore comparable. It seems that Scandic has focused to minimize especially the CO₂ emission in Sweden. “The closer you come to the head office, the more company like it becomes”, an interviewee informs. The consumption of water and energy were also clearly lower in Sweden, as well as the amount of unsorted waste. On the other hand, in the areas of water consumption and recycling, Scandic Finland has improved faster than Sweden. This could be due to the fact that auditing for CR actions began five years later in Finland than it did in Sweden (Scandic 2009). In addition, in the beginning of CR supply, the cut down of emissions is easier.

In Finland, the case company supplies less CR than in Sweden because of the 1) lower demand (difference in stakeholder values) and 2) partly due to technical issues (disagreements with real estate owners over changing hotels to be more ‘green’). Since some countries have stricter laws and regulations than other ones, the level of compliance is also diverse. Therefore, the amount of CR – to meet the definition of strategic CR (over compliance) – is consequently diverse. Hence the more developed environmental **laws of society** in Sweden can partly explain the higher CR supply/actions in Sweden.

The right amount of CR is when it becomes profitable today or maybe tomorrow, because “if you focus on the things that will become profitable 2025 you will eventually die because you will not be profitable”, an interviewee mentions. This factor can be referred as the **law of market** – firms must be profitable and competitive.

These findings support the proposition, i.e. that the context of the key stakeholders have an influence on the amount of CR activities, through the key stakeholder values. In addition, three multi-level drivers beside stakeholder demand were detected: the law of nature on global level, the law of society on macro level, and the law of market on the meso level. The key stakeholder values functioned as a driver for CR supply on the micro level.

The fourth proposition

[P4] A responsible identity is built upon the whole value chain of the firm.

The role of CR is substantial in the case company’s identity. The identity is seen to be parallel with the key stakeholders’ identity. However, guests (external key stakeholders) have little effect on the corporate identity because they come in some many roles. The team members (key internal stakeholder), especially the management, are the ones that are the identity of a company, and create hence the corporate values.

“Values are something that should be reflected throughout the business”, a key informant stresses. Therefore identity is not something that changes over a week, or two, or not even a year. It was found that it is crucial that the whole value chain agrees with the values of the case company. At Scandic, image building as well as identity, are seen as internal dialogue processes, in which absolutely everybody in the value chain takes part. The reasons for this are: 1) firstly because it is much more motivating for team members if they can participate and contribute to the identity building; and 2) secondly, guests meet with team members and they have to have a lingua franca, a common understanding. “Otherwise an image from an agency says that this is the most sustainable company in the world, and then the team members saying that well we haven’t heard that”.

These findings support the fourth working proposition. As well as any identity, a responsible identity is built upon the whole value chain of a firm. The key internal stakeholders create/are the identity of a firm since the reflection is based on the corporate values of whole value chain.

The fifth proposition

[P5] If a demand for corporate responsibility does not exist, firms can create it by supplying corporate responsibility.

This fifth proposition seems to have some value as the case company started to supply CR without existence of actual demand for it. Within a time frame of three

years or more, the demand became more active. On the other hand, there is no evidence that specifically the supply of CR by the case company created the demand. Therefore this working proposition cannot be validated. However, under similar industry conditions (first mover situation) and macro-conditions (rising awareness in environmental issues) that the case company had, the proposition could be partly supported.

It was found that if the demand responds to the supply of CR, there is a time delay between action and perception of three to four years. Hence it could be deduced that *if a demand for corporate responsibility does not exist, firms can hasten its emergence by supplying corporate responsibility.*

Table 1. Revised and supported propositions.

<i>[P1] A reflected image is more likely to lead to desired results than a merely pragmatic image.</i>
<i>[P2] A key stakeholder oriented firm forms and re-forms its values according to its key stakeholders' values.</i>
<i>[P3] A key stakeholder oriented firm adjusts the amount of its CR activities according to the context of its key stakeholders.</i>
<i>[P4] A responsible identity is built upon the whole value chain of the firm.</i>
<i>[P5] If a demand for corporate responsibility does not exist, firms can hasten its emergence by supplying corporate responsibility.</i>

Discussion

The purpose of this research was to explore and analyze the possible strategic implications of CR with a model building approach. The findings suggest that to a large extent corporate responsibility can be a strategic issue. However, a strategically successful position requires other attributes than merely a responsible image.

Corporate responsibility can increase both cost efficiency by saving natural resources and increase differentiation by adding value to a firm through favourable image creation. Accordingly it seems that a firm can enhance its competitive position with CR. However, the model is not committed to that argument even though the question is related to the research problem. Instead, the following model (Figure 1) describes how a firm can differentiate itself with corporate responsibility (CR) and in particular with environmental responsibility.

Environmentally Responsible Image Differentiation

It was found that treating stakeholders as one group (in case of strategic CR) is an unacceptable loose and inaccurate viewpoint. This is because a firm has a myriad amount of stakeholders with different expectations and various interests that are often (also) contradictive – a firm is incapable to cater all of its stakeholders. Therefore this study used an modified approach to stakeholder theory (Freeman 1984) that can be referred as the *key stakeholder approach*.

In the model (Figure 1) the key stakeholders are identified and divided into internal and external parties. In this specific case study, corporate responsibility was internally driven (starting from internal stakeholder) by the team members. CR can also be driven by external stakeholders, i.e. externally driven corporate responsibility. In this case study, the external key stakeholders were not driving the CR – yet they did become active after the case company started to supply CR. This study proposes that [P5] if a demand for corporate responsibility does not exist, firms can hasten its emergence by supplying corporate responsibility.

In addition to internal and external key stakeholders, there exists key stakeholders that belong to both and/or neither parties, e.g. shareholders. Especially, the interests and the amount of initiative are distinctive factors between stakeholders and key stakeholders. In the case company the shareholders lacked interest in CR.

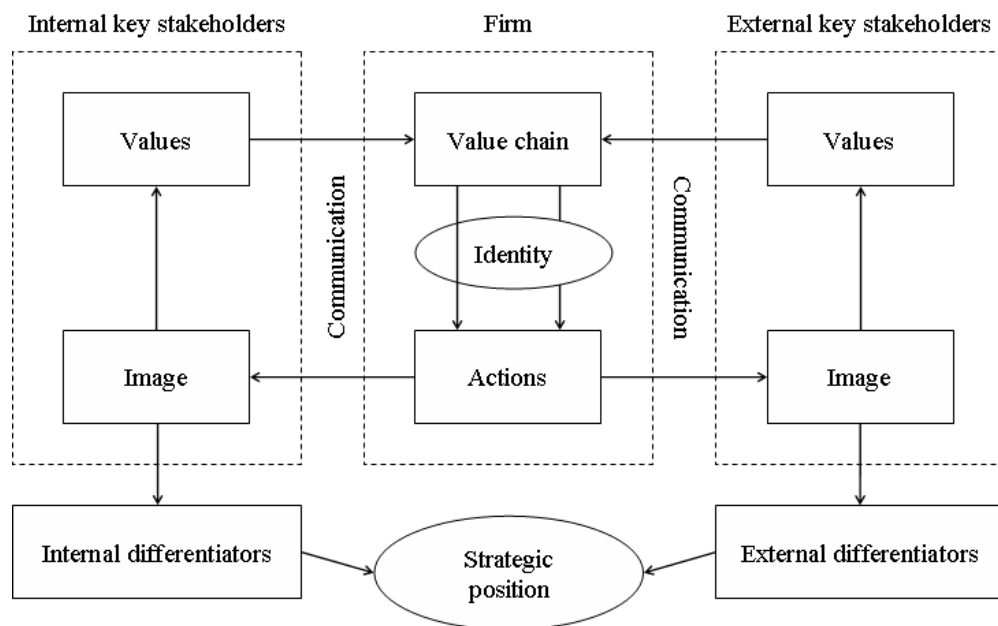


Figure 1. Key stakeholder approach to image differentiation

According to the revised model, a firm can differentiate itself with an environmental responsible image. This image is a perception in the key stakeholders (both in internal and external) and results as internal and external differentiators that can enhance firm's strategic position. The internal differentiators and benefits of an environmental image are: a more preferred employer, an enhanced employees' motivation, and cost savings. The external differentiators or benefits of an

environmentally responsible image are: a better reputation, a more preferred partner and supplier, and a greater guest loyalty.

The image perception is built through communication (supply) that should be based on actual CR actions since [P1] a reflected image is more likely to lead to desired results than a merely pragmatic image. The amount of CR actions vary in different countries of operation since [P3] a key stakeholder oriented firm adjusts the amount of its CR activities according to the context of its key stakeholders. The CR actions that a firm renders are reflected from the firm's responsible identity – however, the identity may not be affected every time there is a change in corporate values, or at least there is a time delay. The responsible identity is a result of internalized CR values throughout the whole value chain of a firm since [P4] a responsible identity is built upon the whole value chain of the firm. These transfigured values are originated from the key stakeholders' values since [P2] key stakeholder oriented firm forms and re-forms its values according to its key stakeholders' values.

A firm is driven on four different levels (Figure 2) that direct firms' aggressiveness towards CR. On the micro level, which the revised model illustrates (Figure 1), firms operate under individuals' and stakeholders' expectations. On the industry level, or meso level, firms are pushed to CR by their partners and competitors. On the macro level, firms are required to supply CR de jure, i.e. in an accordance with society laws and regulations. And lastly on the highest level, the global level, firms are pushed towards corporate responsibility by the fact that the present ecosystem is fragile and necessitates increased attention in protecting it.

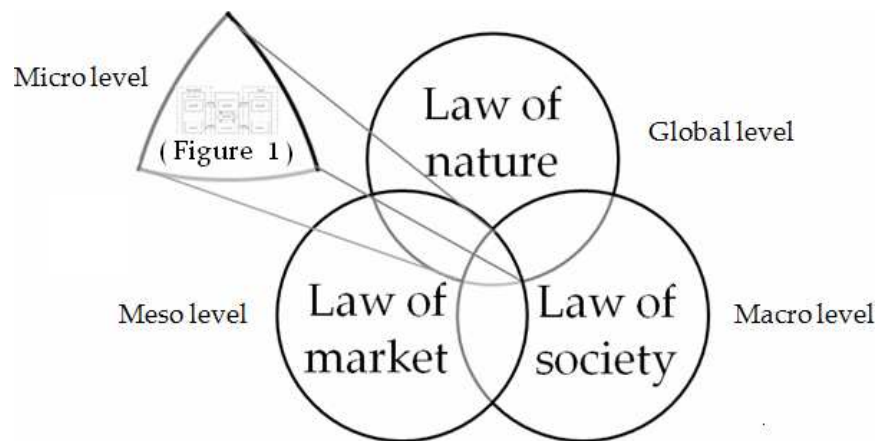


Figure 2. Micro/meso/macro/global-level drivers for CR

Even though this study focused on the differentiation strategy instead of cost leadership strategy, it can be concluded that the image differentiation with CR is inclusive to cost efficiency. These generic strategies should not be seen as entirely separate or different options, especially in the case of the environmentally responsible image. As Hollensen (2007: 119) concluded that “firms have a competitive advantage in a market if they offer products...with higher perceived value to the customers *and* lower relative costs than competing firms”. Thus

corporate responsibility can be a matter of increasing both the value and lowering costs.

Managerial Implications

CR management is about guaranteeing that a firm actually survives in the long run. In order to maintain the short-term profitability, firms should start with small steps towards CR but change the whole way of thinking (*values*) and apply it throughout their value chain. Companies that see CR as something that marketing department could take care of would probably do better by not doing anything at all and put the money to something else.

When a company becomes environmentally responsible it can often rip easy cost benefits by merely utilising their resources efficiently, whereas the image differentiation requires more time, commitment, and additional resources.

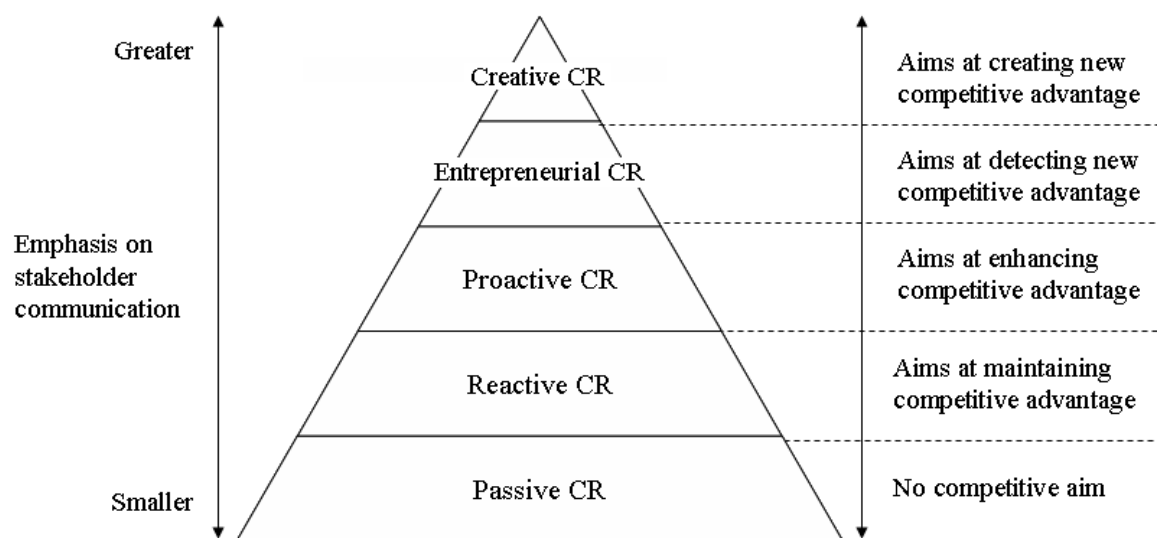


Figure 3. Five levels of CR aggressiveness and competitive aims (adapted from Ansoff & McDonnell 1990; Ketola 1992, 2005).

Deciding the amount of CR (*actions*) depends on the competitive aims. Ansoff and McDonnell (1990: 422) identified five levels of strategic aggressiveness: stable, reactive, anticipatory, entrepreneurial, creative – and Ketola (1992, 2005, 2008) has applied these on environmental and CR strategies. The levels seem applicable for CR aggressiveness of a firm. Passive, reactive and proactive CR is dependent on the competitive environment, whereas entrepreneurial and creative CR is less dependent, respectively.

This study identified competitive aims for each level (Figure 3). As managerial implications, leaders/managers are propounded to decide what are their competitive aims regarding their CR and act accordingly. As firms increase their CR aggressiveness, greater emphasis should be laid on stakeholder communication (*words*). Hereby the Holy Trinity of CR (values-actions-words) converge (cf. Ketola 2006b).

Future Research Opportunities

As a single case study, the results and conclusions lack ability to be generalized – therefore multiple case studies and quantitative testing are highly propounded. This study focused on *a* firm. Further studies are conducted with a supply-chain perspective.

References

- Ansoff, H. I. & McDonnell, E. (1990). *Implanting Strategic Management*. London: Prentice Hall.
- Aragón-Correa, A. & Sharma, S. (2003). A contingent natural-resource based view of proactive environmental strategy. *Academy of Management Review* 28:1, 71-88.
- Bendixen, M. & Abratt, R. (2007). Corporate identity, ethics and reputation in supplier-buyer relationships. *Journal of Business Ethics* 76:1, 69-82.
- Burke, L. & Logsdon, J. M. (1996). How Corporate Social Responsibility Pays Off. *Long Range Planning* 29:4, 495-502.
- Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance. *The Academy of Management Review* 4:4, 497-505.
- Cramer, J. (2005). Company Learning about Corporate Social Responsibility. *Business Strategy and the Environment* 14:4, 255-266.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman.
- Friedman, H. H. & Friedman, L. W. (2009). How Virtuous is Your Company? A Checklist. *Electronic Journal of Business Ethics and Organizational Studies* 14:1, 14-20.
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report* 8:4, 597-607.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal* 29:2, 75-91.
- Guba, E. G. & Lincoln, Y. S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication and Technology Journal* 30:4, 233-252.
- Haberberg, A. & Rieple, A. (2008). *Strategic Management: Theory and Application*. Oxford: Oxford University Press.
- Halme, M.; Roome, N.; & Dober, P. (2009). Corporate responsibility: Reflections on context and consequences. *Scandinavian Journal of Management* 25:1, 1-9.
- Hatch, M. J. & Schultz, M. (Eds.) (2004). *Organizational Identity: A Reader*. Oxford: Oxford University Press.
- Heikkurinen, P. & Ketola, T. (2009). A Responsible Identity: Reflections to Image and Reputation through Awareness Approach. *Proceedings at CCI Conference on Corporate Communications*, Wroxtton, UK, 5-8th of June 2009.

Hollensen, S. (2007). *Global Marketing: A decision-oriented approach*. London: Prentice Hall.

Judge, W. Q. & Douglas, T. J. (1998). Performance Implications of Incorporating Natural Environmental Issues into the Strategic Planning Process: An Empirical Assessment. *Journal of Management Studies* 35:2, 241-262.

Ketola, T. (1992). Environmental Management and Leadership – Neste as an Example. *Hallinnon tutkimus* 2, Tutkimusselosteita.

Ketola, T. (2005). *Vastuullinen liiketoiminta*. Helsinki.: Edita.

Ketola, T. (2006a). Uskonto ja filosofia vastuullisen liiketoiminnan voimavaroina. In: Ketola, T. (Ed.) *What Corporate Responsibility Research Can Give to Business Know-how: Values, Strategies and Practices*. Turku: Turku School of Economics, Series KR–1:2006, 47-64.

Ketola, T. (2006b). Do you trust your boss? – A Jungian Analysis of Leadership Reliability in CSR. *Electronic Journal of Business Ethics and Organization Studies* 11:2, 6-14.

Ketola, T. (2007). How to Turn Corporate Responsibility Strategies into Business Strategies? *European Academy of Management Conference*. Ecole Centrale, HEC-Paris and INSEAD, Paris, 16–19th of May 2007.

Ketola, T. (2008). *From Psychopaths to Responsible Corporations - Waking up the Inner Sleeping Beauty of Companies*. New York: Nova Science Publications.

Klassen, R. D. & McLaughlin, C. P. (1996). The Impact of Environmental Management on Firm Performance. *Management Science* 42:8, 1199-1214.

Kotler, P. & Lee, N. (2005). *Corporate Social Responsibility. Doing the Most Good for Your Company and Your Cause*. New Jersey: John Wiley & Sons.

Mäntylä, M.; Syrjä, T.; Vainio, A.; Vehkala, M.; & Wuori, O. (2001). *Pk-yritysten kilpailukyky*. Vaasa: University of Vaasa, Levón Institute Publication Series 86.

Marconi, J. (1996). *Image Marketing. Using Public Perceptions to Attain Business Objectives*. Illinois: NTC Business Books.

McWilliams, A. & Siegel, D. (2001). Corporate Social Responsibility: A Theory of the Firm Perspective. *Academy of Management Review* 26:1, 117-127.

Miles, M. B. & Huberman, A. M. (1984). *Qualitative Data Analysis: A Sourcebook of New Methods*. Newbury Park: Sage Publications.

Miles, M. P. & Covin, J. G. (2000). Environmental Marketing: A Source of Reputational, Competitive, and Financial Advantage. *Journal of Business Ethics* 23:3, 299-311.

- Miller, D. (1992). The Generic Strategy Trap. *Journal of Business Strategy* 13:1, 37-41.
- Mintzberg, H.; Ahlstrand, B.; & Lampel, J. (1998). *Strategy Safari - The complete guide through the wilds of strategic management*. Edinburgh Gate: Pearson Education Limited.
- Niiniluoto, I. (1980). *Johdatus tieteenfilosofiaan*. Keuruu: Otava.
- Näsi, J. (1996). *Arenas of Strategic Thinking*. Helsinki: Foundation for Economic Education.
- Peng, M. W. (2006). *Global Strategy*. Taunton: Thomson South-Western.
- Porter, M. E. & Kramer, M. R. (2006). The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review* 12:78-92.
- Porter, M. E. (1980). *Competitive Strategy - Techniques for Analyzing Industries and Competitors*. New York: The Free Press A Division of Macmillan.
- Porter, M. E. (1985). *Competitive Advantage - Creating and Sustaining Superior Performance*. New York: The Free Press A Division of Macmillan.
- Porter, M. E. (1996). What is Strategy? *Harvard Business Review* 74:6, 61-78.
- Pruzan, P. (2001). Corporate Reputation: Image and Identity. *Corporate Reputation Review* 4:1, 50-64.
- Richter, A. H. M. (2001). *From Compliance to Competitive Advantage: The Effect of Corporate Culture and Profitability on Environmental Performance*. Berkeley: Doctoral dissertation at University of California.
- Scandic (2009). *The case company's websites* [Online]. [Referred to 15.2.2009]. Available: www.scandic.com.
- Siltaoja, M. E. (2006a). *The relationship between corporate social responsibility and corporate reputation from a value-laden viewpoint: An empirical study in a Finnish newspaper context*. Jyväskylä: Licentiate thesis at University of Jyväskylä.
- Siltaoja, M. E. (2006b). Value Priorities as Combining Core Factors Between CSR and Reputation. *Journal of Business Ethics* 68:1, 91-111.
- Uusitalo, H. (1991). *Tiede, tutkimus ja tutkielma: Johdatus tutkielman maailmaan*. Juva: WSOY.
- Van Marrewijk, M. (2003). Concepts and Definitions of CSR and Corporate Sustainability: Between Agency and Communication. *Journal of Business Ethics* 44:2-3, 95-105.

Winsemius, P. & Guntram, U. (2002). *A Thousand Shades of Green. Sustainable strategies for competitive advantage*. London: Earthscan Publications.

Yin, R. K. (1989). *Case Study Research: Design and Methods*. Thousand Oaks: Sage Publications.

Yin, R. K. (2003). *Case Study Research: Design and Methods*. Thousand Oaks: Sage Publications.

SEED INDUSTRY RESPONSIBILITY TO AGROBIODIVERSITY; A DOCUMENT ANALYSIS OF CORPORATE SELF- vs. NGO PERCEPTION

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Abstract

The loss of agrobiodiversity (AB) has been identified as one of the major challenges for humankind by experts since crop genetic diversity is the basis for plant breeding and crop improvement. Today the major responsibility to provide sufficient and high quality seeds has gradually moved from farmers/SMEs to transnational seed corporations. Hence, the question arises how TNCs manage the assets which they control and stakeholders' ability to participate in AB management. In our paper we merge the topics of CSR and AB management especially with regard to conservation of PGRFA. In our empirical work we analysed corporate self perception and NGO perception and want to present the outcomes of our document analysis in this paper. Though it is one of the most controversial topics in corporate and NGO discussion, CSR engagement in AB management so far has hardly been subject to scientific discussion.

Keywords: diversity, agrobiodiversity management, plant genetic resources for food and agriculture, stakeholder participation

Introduction

While it is commonly acknowledged that biodiversity of natural life is under threat there is still little public awareness that agrobiodiversity (AB) - in our paper we refer to plant genetic resources for food and agriculture (PGRFA) only - is crucial to feed the world's population. While the international discussion focuses on the situation in developing countries, the loss of genetic diversity is especially worrisome in the European context (Hammer et al. 2003; Negri 2005). The cost of wrong decisions by those who control these assets – mostly large transnational corporations (TNCs) - might assume alarming proportions for society at large. In our paper we try to answer the question what seed companies actually do to improve AB management and stakeholder participation. The special requirements to manage AB are: to foster diversity and conservation of PGRFA as well as access to PGRFA and knowledge, know-how and technology. As a major point of reference we adapted the GRI Guidelines (GRI 2006) which constitute well acknowledged CSR rules of conduct. We used this adapted framework¹ for our document analysis, thus merging the areas of AB management and CSR. The results of our document analysis – which constitute a first step in our empirical research on this topic – are presented in this paper.

¹ For further information on the framework, please visit <http://www.sustainability.at/>

Sample

We analysed CSR and annual reports of 10 large multinational seed corporations and online documents of 10 NGOs (see Annex A). When selecting the TNC sample we conducted extensive literature review but unfortunately were not able to include professional industry reports on the agro-chemical and seed industries due to our limited financial resources. However, the communications of the ETC Group (2005a; 2007a; 2007b) were identified as an appropriate and reliable source for identifying the largest seed companies. We conducted literature and online research as well as expert interviews to identify the most important NGOs who are engaged in the field of access to PGRFA and/or technology and knowledge transfer, conservation issues and/or plant breeding. For both TNCs and NGOs the online availability of high quality data in English or German as well as their engagement in Europe was a major selection criterion.

Results of the Study

The next paragraph shows the results of our content analysis of ten global seed companies and ten NGOs. The results are structured according to the three dimensions of sustainable development: i.e. Economy, Environment and Social issues.

Economy

A specific characteristic of the seed industry is the high market concentration which is also subject to NGO and company reporting (e.g. Bayer 2007c:92; BASF 2007:14; IgNN 2006b; CBD 2008d). Limagrain (2007:40) states that “*seeds are a “vector for technology”, indispensable and strategic, that must be controlled. This explains why we are witnessing a powerful movement of concentration in the seeds world*”. NGOs see this situation as a threat to AB and food security (FoE 2006:6) given the decline from thousands of seed companies and public breeding institutions thirty years ago to ten companies which now control more than two-thirds of global proprietary seed sales (ETCGroup 2008b:3; SF 2006:12).

This concentration in the seed industry emerged primarily through: a) mergers and acquisitions, b) patents on life (BD 2005:3,4) and c) co-operations (ETCGroup 2008b:13). All analysed companies refer to several takeovers and joint ventures within the last years (FoE 2009:13; Syngenta 2007:19; Limagrain 2007:14,52; Bayer 2007a:12,29; Dow 2007a:22; Genewatch 2000:10). One of the most prominent cases heavily criticised by NGOs is the merger between Monsanto and Delta&Pine which now strongly control the global cotton seed market (ETCGroup 2005b:1). While public sector plant breeding is declining (ETCGroup 2008a:1) these large TNCs get access to high quality genetic material that was once owned and developed by small seed companies (Greenpeace 2009a:3; CBD 2008c).

The changes in intellectual property rights regulations and specifically in patent law foster this market concentration, a fact that NGOs strongly criticise (e.g. Genewatch 2007:1). TNCs on the other hand, in their reports stress the importance of strong

intellectual property protection to push innovation and to amortise their investments into R&D (Landec 2007:92; Syngenta 2007:11; DuPont 2007:34; Monsanto 2007b:6; Bayer 2007a:53,81; Dow 2007c:10; BASF 2007:39). Regarding the means of protection only Limagrain (2007:35), advocates against patents on life and for the alternative Proprietary Variety Certificate to be integrated into all protection systems. The high seed industry interdependencies are not denied by the analysed companies. In contrast, e.g. Monsanto (2007b:5) and Dow (2007c:10) are proud to report on their co-operation. However, patents are also perceived as risk factors by seed companies themselves since legal uncertainties leave much space for costly patent claims (Monsanto 2007b:9; Landec 2007:92; BASF 2007:39). NGOs furthermore criticise that patents are used to create monopoly rights and to limit competitors' access to technology and genetic resources (Greenpeace 2009a:4). In this respect the term 'competitor' is not only used when referring to other seed companies but also to farmers who want to replant or cross-breed protected seeds (Monsanto 2007b:9). NGOs claim that farmers have a traditional right to conserve, exchange and replant seeds (Grain 2008a:9; LVC 2008d; Genewatch 2006a:3; Greenpeace 2009a:3; FoE 2006:10; SF 2006:10,20). They argue that companies try to make profit by patents and market control rather than by innovation (Genewatch 2007:1; ETCGroup 2008a:3). Furthermore they (e.g. ETCGroup 2008a:6, 2005:1-3; FoE 2006:11; Greenpeace 2009a:19; BD 2005:2) criticise the broad scope of pending patents, which extend far beyond a single crop, include multiple stresses and sometimes try to include the whole food production chain. The patents often do not only cover the method, but all related seeds and plants, even after further crossing and propagation. In addition they criticise that companies more and more try to patent plants and seeds generated by conventional breeding techniques (Greenpeace 2009a:24; BD 2005:3) where the technical input required is relatively minor and can hardly be seen as inventive. So far, about 70 patents on conventional breeding have been granted in Europe and more than 500 patent applications including these techniques are currently submitted (Greenpeace 2009a:16,31).

The third factor contributing to market concentration within the seed industry are co-operations and partnerships between seed companies and research institutes, NGOs and other organizations. Hereby Monsanto holds contracts with BASF (Monsanto 2007a:28; BASF 2007:45), Dow (2007c:10) and Bayer (CBD, 2008b) and Syngenta report on their partnership with DuPont (DuPont 2007:4). These strong interdependencies are reflected by the fact that companies are sometimes subject to legal action for non-compliance with anti-trust laws (Monsanto 2007b:13; Bayer 2007a:11; Greenpeace 2009a:12; ETCGroup 2006:2; CBD 2008a).

Furthermore all analysed companies are engaged globally in different research projects with universities (e.g. DuPont 2007:34) and other research institutes (e.g. Limagrain 2007:14) as well as in the development and testing of new varieties and technologies (Monsanto 2007a:35; Bayer 2007c:68; BASF 2007:45; Dow 2007c:11). All analysed companies are engaged in Public-Private-Partnerships with strong focus on developing countries. Monsanto reports of its special interest in Africa and wants to *“improve the access for farmers to quality hybrid corn and vegetable seeds”* (Monsanto 2007a:10,13). They also cooperate with African NGOs which handle donated hybrid seeds (Monsanto 2007a:6-14). Companies see these partnerships as a means of CSR to improve people's access to products and technologies in order to fight hunger and poverty (Monsanto 2007a:11). However, NGOs perceive these

activities as a means of TNCs to enter new markets (SF 2006:12) and to introduce their new (GM) varieties (CBD 2008b) by offering royalty-free samples to the poor (ETCGroup 2008a:11). This viewpoint is reflected by the Monsanto statement: *"Some of the people who are starting these programs will be our customers in the future. A piece of this will be philanthropic, but there's a piece that's the ground floor of a whole new generation of customers"* (Monsanto 2007a:8). The NGO Grain (2008c:2,3) further argues that seed aid often focuses on the replacing of local varieties with a handful "high-yielding" seeds from research laboratories. This can then lead to dependency, the undermining of local seed systems and the eradication of local seed diversity.

As we take a look at companies' relationship to farmers and thus, to local seed systems, the findings show a controversial picture. In their reports the analysed companies definitely acknowledge that farmers are their most important stakeholder group. They want to help them achieve higher yields and offer them new seed products with resistance to e.g. diseases, drought and specific herbicides (DuPont 2002:7) or special trainings on modern agricultural techniques (Bayer 2007a:16). However, NGOs (LVC 2007:43; SF 2008b:20) argue that especially TNCs in the seed industry are not considering small peasants, even more, are often operating against them (LVC 2008d). Ever more peasants have become farmers and hence, have lost their traditional knowledge of preserving, using and cross-breeding indigenous seeds (LVC 2007:43). Since a few companies worldwide are dominant suppliers of commercial seeds also the choice of farmers is decreasing (Greenpeace 2009a:3; Grain 2008a:3; ETCGroup 2005b:1; LVC 2007:18; FoE 2006:9).

NGOs argue that the technology of GE offers the opportunity to seed companies to protect their products in a way that allows them to control the food chain. Therefore they put high pressure on farmers to plant GMO crops (LVC 2008d; Grain 2008c:5). Farmers who stick to conventional plants, they argue, would have hardly any legal protection against contamination (FoE 2006:11). Furthermore NGOs state that companies use the unclear legal situation (Greenpeace 2009a:23) to patent genetic material that had been developed by local communities in the course of the centuries (Grain 2008a:11). NGOs tend to call that "biopiracy" (e.g. Greenpeace 2009a:4,17; LVC 2008b; SF 2008b:40). This question of Access and Benefit Sharing concerning company profits from genetic resources derived from the centres of origin – mostly in the global south – has been subject to former scientific discussion (e.g. Mackie et al. 2006; Peña-Neira, S. et al. 2004; Chalmers & Nicol 2006).

Environment

Although companies state in their reports that biodiversity and its conservation are very important and the basis for plant breeding (DuPont, 2007:34; Syngenta, 2007:6; Bayer, 2008:3) they do not report on a clear strategy regarding any conservation measures. Companies mainly see their contribution to AB in improving and launching new varieties (Limagrain, 2007:36; Bayer, 2008:3). In addition, Limagrain (2007:36) advocates for conservation of species in the natural environment as well as for seed banks. Apart from that companies do not report on specific AB conservation measures. They rather mention their engagement to reduce the negative impact of modern agriculture on the natural environment and to protect the 'wild' biodiversity.

Thus, they stress their donations to wildlife conservation organizations (DuPont, 2007:25; Dow, 2007a:65) and their help to farmers to reduce the negative impacts of agricultural techniques (Syngenta, 2007:3). As adequate measures they mention high quality seeds to achieve higher yields per acre in order to reduce land usage (Bayer 2008:3), the application of a broad-spectrum herbicide without tilling the field, i.e. “conservation tillage” (Monsanto 2007a:33) and the training of farmers on how to use their products and techniques responsibly, i.e. “integrated crop and pest management” (Bayer 2008:4; Syngenta 2007:3). These TNC activities are not accredited by NGOs which identify them as trivial (BD 2008:10; CBD 2008b). They consider biodiversity as the natural capital and small-scale farming as the proper method for food security especially in times of climate change (SF 2008b:24,25). Small peasants are seen as the protectors of biodiversity (LVC, 2008f) and the true experts in “life sciences” (ETCGroup 2008b:8,9). They are perceived as the ones who use millions of farmer-bred varieties, mostly food crops, which are diverse, patent-free, decentralized and adapted to different cultural, environmental, climate and geographical conditions (ETCGroup 2008b:9).

When it comes to climate change both, TNCs and NGOs, report of the same challenges (SF 2008b:9) but see different solutions. For example, they agree that agriculture is not only affected but also a major contributor to climate change (Monsanto 2007a:26; Greenpeace 2008a:6; SF 2008b:12). Throughout their reports companies state that they try to reduce their own emissions (DuPont 2006a:4; Syngenta 2007:8; Monsanto 2007a:26; Bayer 2007a:5) but moreover to help the farmers, to reduce their emissions by using the company's products and techniques, e.g. GE crops in combination with non-selective herbicides and minimum tillage to reduce energy input and improve carbon storage in soils (BASF 2007:94; Syngenta 2007:8,9; Monsanto 2007a:29).

Overall, companies see the solution not only for climate change but also for poverty, resource scarcity, and the rising demand for food, feed and fuel in their products and technologies (Landec 2007:89; KWS 2007a:6; DuPont 2006b:4; Syngenta 2007:11; Limagrain 2007:33; Monsanto 2007a:26; Bayer 2007b:8; BASF 2007:46; Dow 2007c:10; Grain 2008b:31; CBD 2008b). Therefore they try to improve the productivity of the plants and develop new seed products with resistance to diseases and specific herbicides. Field crops should be of higher quality, more nutritious, better suited for specific use and meet market expectations (DuPont 2006b:4; KWS 2007b:7; Limagrain 2007:12; CBD 2008a). Monsanto's R&D efforts focus on environmental-stress adaptation including drought-tolerant crops and nitrogen-efficiency genes which should also lead to higher yields (Monsanto 2007a:26). Bayer (2007a:77) states that their breeding programmes focus on crop varieties to withstand drought, flood, salinity, heat and cold. NGOs on the other hand deny a positive role of the seed industry to adapt to climate change and propose other – biodiverse - farming systems (Greenpeace 2008a:2,4; ETCGroup 2008a:12; SF 2006:15, 2008b:17) as well as diversity of culture and knowledge systems (SF 2008b:7). Also “sustainable small scale agriculture” (ETCGroup 2008b:9; LVC 2008g), favouring food production for local consumption and ecological as well as organic farming are seen as successful adaptation strategies while industrial agriculture is seen as vulnerable to climate change because it is based on uniformity and monocultures, centralized distribution systems and dependencies as well as intensive energy and water inputs (SF 2008b:4,13; LVC 2008b).

The debate on climate change is not only about climate ready seeds but also on carbon trading and particularly agrofuels. Companies consider them as a solution to decrease carbon emissions linked to fossil fuels and to meet the rising energy demand (Bayer 2007b:25) while NGOs see them as a threat to small scale farming and food security (LVC 2007:9, 2008b; CBD 2008a). In the future large TNCs might grow agrofuels on farmland that had been used by local food producers to grow a diversity of food crops (FoE 2006:12). Especially for industrial countries, NGOs suggest a change in production and consumption patterns (LVC 2008c) instead of the production of agrofuels.

Another related, vital and long lasting issue is which breeding technologies are the best for mankind and the environment. Seed companies agree that modern breeding technologies, especially GE, offer the future solutions for the challenges of mankind (Syngenta 2007:11; Monsanto 2007a:23) while they perceive traditional breeding and social structures out of date (IgNN 2007a; BASF 2007:46). While companies argue that GE can produce better, higher yielding seeds which need less pesticide applications (Monsanto 2007a:41) NGOs (e.g. Greenpeace 2008a:4; SF 2006:10) conceive GMOs as a threat to biodiversity. NGOs therefore refuse GE solutions and argue that companies primarily push GE crops in order to obtain patents and monopoly rights (ETCGroup 2008b:14; FoE 2006:6).

Furthermore NGOs claim that GE crops do not fulfil company promises (Greenpeace 2008a:2,6; FoE 2009:7,13; BD 2008:13; Grain 2008b:31; Genewatch 2007:2), are not reliable (ETCGroup 2008a:7) and rather cause crop failure (SF 2008b:28; CBD 2008b) than to improve yields. This notion – which is especially popular with the European population (Grain 2008a:7) is strongly attacked in the analysed company reports (Syngenta 2007:13; BASF 2007:108) and TNCs state that they try to comply to the strict laws. Nevertheless there are many claims that GMOs contaminate the environment (Genewatch 2006c:1; IGNN 2007b; CBD 2008b; FoE 2006:10; SF 2008b:29; LVC 2008a:2,3; Grain 2009:2) and there are often legal actions against companies for non-compliance with environmental laws (DuPont 2007:37; Monsanto 2007b:6,15; Bayer 2007c:81; Dow 2007a:72; LVC 2008a:3; CBD 2008c, 2008d). Companies state they do their best to avoid negative impacts of GMOs on biodiversity (Dow 2007a:65; DuPont 2007:34; Bayer 2008:3), test GMOs carefully (Bayer 2007a:88) and offer new technologies that e.g. produce seeds whose fertility can be activated or deactivated by chemical agents as a means of biological containment. The latter R&D efforts are heavily criticised by NGOs as “terminator and suicide seeds” or “zombies” (Genewatch 2005:7, 2006c:2; Grain 2008a:3). They perceive them as unreliable (Genewatch 2006b:2; Grain 2008a:4) and unjust systems to control reproduction next to being a threat for food security altogether (Genewatch 2005:7, 2006b:2; LVC 2008d; Grain 2008a:4).

Social Issues

Regarding the social dimension of CSR policies in the seeds industry one major point of discussion is the influence that companies exert on politics, governments and the society, i.e. their lobbying efforts. All analysed companies are members in several networks, advisory boards, councils, alliances, international bodies, associations etc. (DuPont 2007:20; Dow 2007a:49; Syngenta 2007:35; Land O'Lakes 2007b:25; Monsanto 2007a) and some also send employees as leased labourers to ministries (CBD 2008b). Furthermore many of them have partnerships with a multitude of institutions like companies, NGOs and research institutes. They actively participate in different research projects and programmes (e.g. KWS 2007a:10).

In addition TNCs openly report on their cooperation with governments (Monsanto 2007a:7-9; Bayer 2007b:22; BASF 2007:17) and their use of public funding (Bayer 2007a:51; Dow 2007a:56; CBD 2008b). While European based TNCs do not directly support political parties (DuPont 2007:49; BASF 2007:92) American based traditionally do (e.g. Dow 2007a:93). One exception from this rule can be found as CBD reveals that Bayer supported the US elections in 2008 with huge monetary amounts (CBD 2008b). NGOs criticise that companies heavily influence the legal framework in their favour, e.g. patent law or the release of GMOs (Greenpeace 2009a:5,26; Bayer 2007b:22; ETCGroup 2008a:1,9; FoE 2009:36; LVC 2008a:2,4; IgNN 2006a; CBD 2008a) and accuse them to put pressure on decision makers (CBD 2008b) or even to bribe them (CBD 2009; FoE 2006:5). In some cases companies indeed report that they have been subject to legal action for corruption – mostly in order to reach registration of their products in other countries (Monsanto 2007b:15; Dow 2007a:91). Others (DuPont 2007:49; Bayer 2007a:46; BASF 2007:17) state that they are not involved in cases of bribery. Monsanto (2007a:14) admits to encourage “... the governments of Africa to put in place sound regulations that would allow field trials of these existing biotech traits so that scientists and the public can observe firsthand the safety and benefits of this technology for their farmers”. Also, Dow mentions regular meetings with key government stakeholders to shape legislation (Dow 2007a:89-92). The analysed companies tend to see new regulations as risk and perceive the existing legal framework, e.g. on biotechnology products as very strict (Syngenta 2007:13).

Another important CSR issue regards human rights. While companies generally report on their legal compliance (BASF 2007:17; Bayer 2007a:70; Dow 2007a:47). NGOs give an account of different incidents where companies or their contractors have violated human rights including major incidents like e.g. death threats against researchers (CBD 2008a) or physical attacks on demonstrating NGO members (LVC 2008a:2). The latter occurred at a Syngenta site in Brazil in October 2007 (Syngenta 2007:13) when one member of La Via Campesina was killed by the militia. The demonstrators perceived Syngenta's GM field testing as unlawful and as a threat to local communities' environmental, social and economic performance. While Syngenta mentions this incident in their CSR report they do not actually take responsibility for it (LVC 2008a:12).

Next to these cases NGOs also criticise indigenous rights violations referring to land grabbing for rededication without compensation (Grain 2008a:24, c:32, 2009:21;

LVC 2009:2,3; CBD 2008a) – e.g. to produce soy or biofuels (LVC 2007:8; FoE 2006:12). This is perceived as a misuse of market power to deprive local communities of their rights (Grain 2008a:21; IgNN 2006c; FoE 2006:11; IgNN_2008a) and to introduce GMOs and rise seed prices (Greenpeace 2009a:11; CBD 2008c; LVC 2008b). Notwithstanding, companies (e.g. Dow 2007a:27,47) claim that they want local communities to have access to biotechnology and local germplasm and in some cases they donate their protected seeds for free, e.g. in the course of natural disaster (Monsanto 2007a:9).

While human rights issues are more important in the context of the global south, a major risk factor for TNCs concerning the European market is the relatively low public acceptance of GMOs. (Syngenta 2007:13; Limagrain 2007:4; Monsanto 2007a:47; Bayer 2007a:88) as company sales are negatively affected (Monsanto 2007b:9). They try to reshape the debate on AB and biotechnology issues not only by contacts to the media (e.g. interviews, press releases) and their own websites and company reports (Limagrain 2007:35; Dow 2007a:47, 2007b:19) but also by supporting schools (Dow 2007a:90, 2007b:18), universities (e.g. the “Bayer Science & Education Foundation”, Bayer 2007a:9,72 or the “Knowledge Factory”, BASF 2007:92,93) and different fellowship programmes (Bayer 2007a:32).

NGOs criticise their engagement as a biased influence to foster the acceptance of GMOs (CBD 2009; FoE 2006:4,7; LVC 2007:9). They furthermore assume that TNCs use new trends and challenges to convince an unwilling public to accept GMOs (ETCGroup 2008a:3; Genewatch 2008:6). In fact, public concerns range from risks associated with safety and environmental impacts to the ethical and political implications arising from potential social inequalities at individual level and worldwide (Genewatch 2008:12). While companies report to seek dialogue with stakeholders and critics (Bayer 2007a:57; Dow 2007a:47; DuPont 2007:34; Monsanto 2007a:53; Bayer 2007a:26) NGOs do not see the public invited for participatory dialogue (Genewatch 2008:27; IgNN 2008c). They do not feel involved in the scientific process although some of them would have sufficient expertise to be involved in more specialized debates (Genewatch 2008:14; LVC 2008e) and see uninvited participation mostly as the only way to raise their voice (Genewatch 2008:21-23). Furthermore NGOs criticise that the majority of NGOs is not involved in decision making processes that affect a whole range of stakeholders (IgNN 2008b).

Concerning health and safety issues companies report to train farmers on how to use agricultural chemicals and other products and techniques properly (Bayer 2007a:16; Syngenta 2007:33; Monsanto 2007a:47; Land O'Lakes 2007a:3). Besides, they report on their efforts to fulfil customer expectations on seed and food quality and trait purity (Bayer 2007b:10,11; Dow 2007c:14; Monsanto 2007a:55; BASF 2007:39), to conduct (field) tests and extensive trials for new products (DuPont 2007:9; Syngenta 2007:33; Bayer 2007a:88; Dow 2007a:96) and to develop high-level health and safety standards to ensure that products are safe for people and the environment (Monsanto 2007a:55; Bayer 2007b:4; BASF 2007:104; Dow 2007a:96). NGOs on the other hand, are concerned about toxic residues in food because seeds or plants were treated with chemicals (Greenpeace 2009b:4; CBD 2008a, 2008c). Furthermore they mention that there is a lack of independent studies on the safety of GE crops for animals and humans and mention studies which found health threats linked to GMOs (Grain 2009:30). Also, they report on the deregulation of the corporate controlled

food system which in their opinion lead to food scandals with often severe consequences, e.g. Bayer's GE rice scandal where experimental GE varieties accidentally entered global rice supplies in 2006 (ETCGroup 2008b:7,8; Greenpeace 2009b:3). Slow Food (2008b:22) observes a shift from local food systems to supermarket-based chains which contributes to a loss of food knowledge and variety. NGOs further criticise that the current labelling regulations and the low traceability (FoE 2009:34) do not allow consumers to make responsible buying decisions (SF 2008b:22; LVC 2008e). Furthermore they talk about unethical and irresponsible TNC media and advertisement campaigns to gain the confidence of farmers (FoE 2006:10). Companies on the other hand state that they comply with the labelling regulations (Monsanto 2007a:55; Syngenta 2007:24; Bayer 2007b:14; Dow 2007a:96) and with responsible marketing practices (Bayer 2007a:93; Dow 2007a:97).

Summary and Outlook

Although TNCs' practices are strongly attacked by the NGO community, throughout their CSR reports the analysed seed companies do not report much on their proactive engagement on AB management issues as formulated in our research questions. Seed companies' contribution to increase diversity of PGRFA therefore remains controversial. On the one hand – especially for the industrial world – their contribution to crop improvement cannot be denied since they are the major breeders nowadays while farmers are only the users of their technology and products. On the other hand, their promotion of major cash crops, like soy or plants for agrofuels, and selection criteria that focus on varieties that are suited for monocultures and large scale commercialization, have definitely contributed to a severe reduction of diversity on the field. Surprisingly, the analysed seed companies do not show major concern for conservation issues anyway - given the fact that on-farm conservation is the only way to reproduce seeds and keep them alive over decades. Moreover, they see farmers only as customers and fight their efforts to breed or replant seeds as a means of competition – thus, they even try to limit their access to PGRFA. Large seed companies obviously try to solve AB challenges rather by technology than by participation. Our findings do not show any evidence that the companies substantially involve other stakeholders in their AB management strategies and practices. Nor do the analysed NGOs as critics of the current economic system and TNCs' role in it, offer many recommendations on how seed companies could improve their management practices. We are aware that corporate and NGO documents do not only refer to our research questions but cover a wide range of topics. Therefore we will conduct further empirical research – surveys and interviews with a larger number of seed companies and major stakeholders - to get a more detailed picture.

Acknowledgements

The project team thanks the Austrian National Bank for their support (Jubiläumsfonds-Project number: 12313).

Project team: Uwe Schubert, Astrid Schäfer, Sabine Kleinsasser, Markus Hametner, Petra Wächter

References

Bayer (2007a). *Science For A Better Life. Sustainable Development Report 2007*.

Bayer (2007b). *Strengthening Crops – Securing Yields. Corporate Brochure 2007/2008*. Bayer Crop Science.

Bayer (2007c). *Science For A Better Life. Bayer Annual Report 2007*.

Bayer (2008). *Integrating crop and biodiversity management – Our contributions*. Bayer Crop Science.

BASF (2007). *Shaping the Future. Report 2007*. BASF – The Chemical Company.

BD (2005). *Syngenta's Rice Monopolies*. Berne Declaration & Swissaid & Greenpeace. April 2005.

BD (2008). *Glaring Contradictions between Appearance and Reality - Syngenta's Corporate Responsibility Report*. Berne Declaration. April 2008.

CBD (2008a). *Stichwort Bayer 1/2008*.

CBD (2008b). *Stichwort Bayer 2/2008*.

CBD (2008c). *Stichwort Bayer 3/2008*.

CBD (2008d). *Stichwort Bayer 4/2008*.

CBD (2009). *Stichwort Bayer 1/2009*.

Chalmers, D. & Nicol, D. (2006). Commercialisation of biotechnology: public trust and research. *International Journal of Biotechnology* 6:2/3, 116-133.

Dow (2007a). *2007 Global Reporting Initiative Report. Including UN Global Compact Communication on Progress*.

Dow (2007b). *Sustainability Report 2007*. Dow Benelux B.V.

Dow (2007c). *Transforming. 2007 Corporate Report*. The Dow Chemical Company.

DuPont (2002). *Science, Solutions and Customer Success*. Pioneer.

DuPont (2006a). *2006 DuPont Data Book*.

DuPont (2006b). *2015 Sustainability Goals*.

DuPont (2007). *DuPont Economic, Environmental and Social Performance Data in the Global Reporting Initiative Format*. June 2007 Update.

ETCGroup (2005a). *Global Seed Industry Concentration – 2005*. September/October 2005.

ETCGroup (2005b). *Syngenta to let Mega-Genome Patent Lapse: "Daisy-cutter" Patent Bomb Busted*. February 2005.

ETCGroup (2006). *Monsanto Announces Takeover of Delta & Pine Land and Terminator Seed Technology (again)*. 16. August 2006.

ETCGroup (2007a). *The World's Top 10 Seed Companies – 2006*. April 2007.

ETCGroup (2007b). *The World's Top 10 Seed Companies – 2006*. October 2007.

ETCGroup (2008a). Patenting the "Climate Genes"... And capturing the Climate Agenda. *Communique 99*. May/June 2008.

ETCGroup (2008b). Who Owns Nature? Corporate Power and the Final Frontier in the Commodification of Life. *Communique 100*. November 2008.

FoE International (2006). Monsanto - Who benefits from GM crops? Monsanto and the corporate-driven genetically modified crop revolution. *Communique 110*. January 2006.

FoE International (2009). Food Sovereignty - Who benefits from GM crops? Feeding the biotech giants, not the world's poor. *Communique 116*. February 2009.

Genewatch (2000). *Syngenta - Switching off farmers' rights?* October 2000.

Genewatch (2005). GM CONTAMINATION: Can Biological Containment Work for Crops and Society? *Briefing 33*. December 2005.

Genewatch (2006a). *SAY NO TO SUICIDE SEEDS TERMINATOR TECHNOLOGY THREATENS FARMERS, THE ENVIRONMENT AND FOOD SECURITY WORLDWIDE: TAKE ACTION NOW*. Issued on behalf of the UK Working Group on Terminator Technology. January 2006.

Genewatch (2006b). Why Terminator Technology Won't Prevent GM Contamination. *Genewatch UK Briefing*. January 2006.

Genewatch (2006c). *First contamination report reveals worldwide illegal spread of genetically engineered crops*. March 2006.

Genewatch (2007). Revolution on Ice, The promises made for GM crops are the same as those made 20 years ago – and they remain unfulfilled. *Prospect Magazine 141*. December 2007.

Genewatch (2008). *Participatory Science and Scientific Participation - The role of Civil Society Organizations in decision-making about novel developments in biotechnologies*. Final report.

Grain (2008a). *Seedling*. April 2008.

Grain (2008b). *Seedling*. July 2008.

Grain (2008c). *Seedling*. October 2008.

Grain (2009). *Seedling*. January 2009.

Greenpeace (2008a). *Food Security and Climate Change: The answer is biodiversity. A review of scientific publications on climate change adaptation in agriculture*. June 2008.

Greenpeace (2009a). *The future of seeds and food - under the growing threat of patents and market concentration*. April 2009.

Greenpeace (2009b). Bayer's Double Trouble - When genetically engineered rice meets a toxic pesticide. *Briefing*. March 2009.

GRI (2006). *Sustainability Reporting Guidelines. Version 3.0*. 2000-2006 GRI.

Hammer, K. et al. (2003). In situ and on-farm management of plant genetic resources, *European Journal of Agronomy* 19:4, 509-517.

IgNN (2006a). Terminator-Saatgut in grünem Kleid. *Bauernstimme Dezember 2006*.

IgNN (2006b). Nicht die beste Stimmung. *Bauernstimme Juni 2006*.

IgNN (2006c). Der Minister und die Betroffenen. *Bauernstimme April 2006*.

IgNN (2007a). Im Mai gibt's Nudeln. *Bauernstimme Juni 2007*.

IgNN (2007b). Von empfängnisfähigen Kreuzungspartnern und eindringenden Samenkörnern. *Bauernstimme April 2007*.

IgNN (2008a). Die strengen Gralshüter vergangener Zeiten. *Bauernstimme Oktober 2008*.

IgNN (2008b). Besser eine als keine. *Bauernstimme Juni 2008*.

- IgNN (2008c). Brüssel will besseres säen - wird es gut? *Bauernstimme April 2008*.
- KWS (2007a). *The future is orange*. KWS SAAT AG.
- KWS (2007b). Annual Report 2006/2007. KWS SAAT AG.
- Landec (2007). *Smart Polymers. Infinite Degrees of Potentia., Annual Report 2007*. Landec.
- Land O'Lakes (2007a). *Nurturing Growth. 2007 Annual Report*. Land O'Lakes, Inc.
- Land O'Lakes (2007b). *Bringing the Land O'Lakes Difference to International Development*. Land O'Lakes International Development.
- LVC (2007). *Seed heritage of the people for the good of humanity*. Women Seed Forum in South Korea.
- LVC (2008a). *The Case of Syngenta - Human Rights Violations in Brazil – 2008*.
- LVC (2008b). UNFCCC: Don't trade off climate! *Via Campesina Position Paper*. December 2008.
- LVC (2008c). Small farmers feed the world. Industrial agrofuels fuel hunger and poverty. *Via Campesina Position Paper*. June 2008.
- LVC (2008d). Protocol on Biosecurity and the Convention on Biodiversity: No to the privatization of biodiversity! *Via Campesina Position Paper*. May 2008.
- LVC (2008e). *Consultation on the European legislation concerning the marketing of seeds*. Open letter of the European Farmers Coordination (CPE) and of COAG (Coordinadora de las Organizaciones de Agricultores y Ganaderos, Spain). March 2008.
- LVC (2008f). *We, Small Farmers, are the Solution to World Hunger*. Distributed by Via Campesina at the CBD plenary meeting on May 22, 2008. May 2008.
- LVC (2008g). *Sustainable Agriculture as a Way of Struggling Against Climate Change*. January 2008.
- LVC (2009). *Declaration of Rights of Peasants - Women and Men*. La Via Campesina, International Peasant Movement. March 2009.
- Limagrain (2007). *Limagrain from earth to life. Annual Report 2007*.
- Mackie, J.E. et al. (2006). Corporate social responsibility strategies aimed at the developing world: Perspectives from bioscience companies in the industrialised world. *International Journal of Biotechnology* 8:1-2, 103-118.
- Monsanto (2007a). *Monsanto – Growth for a better World. 2007 Pledge Report*. Monsanto Company 2007.

Monsanto (2007b). *Growing, Monsanto*. 2007 Annual Report. Monsanto Company 2007.

Negri, V. (2005). Agro-Biodiversity Conservation in Europe: Ethical Issues. *Journal of Agricultural and Environmental Ethics* 18, 3-25.

Peña-Neira, S. et al. (2004). Equitably sharing benefits from the utilization of natural genetic resources: the Brazilian interpretation of the convention on biological diversity. *Electronic Journal of Comparative Law* 6:3.

SF (2006). *Manifesto on the Future of Seeds*. The International Commission on the Future of Food and Agriculture. 2006.

SF (2008). *Manifesto on Climate Change and the Future of Food Security*. The International Commission on the Future of Food and Agriculture. 2008.

Syngenta (2007). *Syngenta Corporate Responsibility Report 2007*.

Annex A – List of the analysed companies and NGOs

Seed Company	URL
BASF	http://www.agrar.basf.de
Bayer Crop Science	http://www.bayercropscience.com/
Dow Chemical	http://www.dowagro.com/
Du Pont	http://www2.dupont.com/DuPont_Home/en_US/index.html
Groupe Limagrain	http://www.limagrain.com
KWS AG	http://www.kws.de/
Land O'Lakes	http://www.landolakesinc.com/
Landec Corp.	http://www.landec.com/ , http://www.landecag.com/
Monsanto	http://www.monsanto.com/
Syngenta	http://www.syngenta.com
NGO	
Coalition against BAYER-Dangers (CBD)	http://www.cbgnetwork.org/
Bern Declaration (BD)	http://www.evb.ch/
ETC Group	http://www.etcgroup.org
Friends of the Earth (FoE)	http://www.foeurope.org , http://www.foei.org
Genewatch UK	http://www.genewatch.org
GRAIN	http://www.grain.org
Greenpeace	http://www.greenpeace.de/ , http://www.greenpeace.org
IG Nachbau (IgNN)	http://www.ig-nachbau.de/
La Via Campesina (LVC)	http://www.viacampesina.org/
Slow Food (SF)	http://www.slowfood.com/

A VALUE CHAIN ANALYSIS OF THE ORGANIC COTTON INDUSTRY: THE CASE OF UK RETAILERS AND INDIAN SUPPLIERS.

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Note: I am very sad to have to report that Rajbir was killed in a car accident in India in June (2009).

Abstract

This paper analyses the different activities within the value chain of organic cotton in India to understand where, and how, value is added in each of the stages of the production process. Transforming a cotton crop into a textile and then into a final item of clothing involves many stages of processing, often in many different countries, using many skills and technologies. We examine this chain from the farming of the cotton crop (in this case in India) to its eventual sale in clothes' retailers (in this case in the UK).

Key words: Fashion industry; organic cotton; value chain analysis; India.

Introduction

This paper analyses the different activities within the value chain of organic cotton in India to understand where, and how, value is added in each of the stages of the production process. A value chain analysis is a method of studying and analysing how value is added at different activities, normally within an organisational setting, through examining the costs of various activities and how these activities are coordinated (Porter 1985). However this concept has also been used to study international trade from a political economy framework (Gereffi and Korzeniewicz 1994; Girvan 1987) and at an industry-wide level (Dahlstrom and Ekins 2005), and in line with these views and an earlier, less detailed, cotton industry analysis (van Elzakker 1999) this paper adopts an industry wide scope.

Transforming a cotton crop into a textile and then into a final item of clothing involves many stages of processing, often in many different countries, using many

skills and technologies (Fletcher, Waayer, Vreeland and Grose 1999). We examine this process from the farming of the cotton crop (in this case in India) to its eventual sale in clothes' retailers (in this case in the UK).

We argue that this paper is timely, for, despite increasing awareness of, and interest in, sustainable methods in both food and yarn production, there is some confusion as to what organic and organic certification really means². Organic cotton is cotton that is farmed without the use of synthetic chemicals such as pesticides and fertilizers. But farming is only one of the stages of garment manufacture, and, as Fletcher and Waayer (1999) note, 'production and processing systems which take account of the environmental, social and economic health of the entire system are important ... it is not enough for a product to be produced organically and then processed in a conventional polluting system'. A t-shirt made of organic cotton would typically be labelled as containing certified organic fibre, but certification would not necessarily apply throughout the whole supply chain. In contrast, a fully-certified organic T-shirt, has to be certified as organic throughout the whole chain from cotton fields until it is finally sold in a store (Sanfillipo 2007). Because there is no clear demarcation at present between the two usages of the term organic on the high street, both types of garment are sold at a premium over non organic cotton clothes.

In this study we examine the production chain of fully certified organic cotton, organic cotton, and non-organic cotton t-shirts in order to understand where value is added in each category. This paper deconstructs the various stages involved in the production of organic cotton garments and compares the value added at each stage when compared to a conventional cotton garment. As part of the process we consider the various drivers of demand for organic cotton.

Industry Background

Cotton was always cultivated organically, like all crops, until the early 20th century. However, the demand for 'cosmetically perfect produce' (Pretty and Hine 2005) and higher yields led to the increased use of synthetic pesticides and fertilizers, and subsequently to genetically modified cotton. After almost sixty years of chemical enhancement of crops, people started to become aware of the social and environmental costs of these practices. The first international regulation on pesticides came into force in 1985 (Pretty and Hine 2005), and in the following years a small number of 'organic pioneers' began to cultivate cotton as a rotational crop on specialised organic farms, resulting in the birth of 'organic cotton' as we know it today. This led eventually to the accreditation and certification of organic produce (Ton 2002). In 1992, motivated by environmental awareness and the potential for environmental consumerism, some apparel designers and companies launched eco-

² Certification is carried out by independent bodies; there is no one set of regulations and the cost of certification varies between these bodies, hence it is difficult to work out the precise cost of certification per garment. Typical costs are \$3500 for the first year and \$2500 each subsequent year, which includes ten transactions free of charge. There is no limit on the number of products per transaction as long as they are part of one invoice, therefore tending to benefit larger batches. Additional certificates can be obtained at a price of \$25 per certificate. It has not been possible to work out the per garment (or per kg) cost of these certifications. The 'per piece' calculation involves very complex and detailed data which were not available despite repeated requests.

friendly ranges setting a trend for 'eco-look' garments. In 1994 when this short-lived trend died out, it brought a crisis in the organic cotton market, particularly in the US; sales fell dramatically, resulting in a 50% fall in the production of organic cotton crops (Ton 2002). Even though the awareness of organic methods was growing, it was still limited to environmentally aware consumers.

In the late 1990s and early 2000s there was a resurgence of interest in sustainable methods, accompanied by a huge expansion in the range, design and quality of organic clothes and the organic infrastructure in general (Ton 2002). This was paralleled by an increasing awareness of sustainability issues among the general public, media and government bodies, and a reversal in the downward trend of organic cotton sales

Methodology

Multiple data sources were used for this study. Interviewees were selected for their knowledge of the different stages of an organic cotton value chain (see Table 1). Most interviews were in person although some were conducted over the phone or via email questionnaire. Data also came from visits to sites where cotton was produced, spun, knitted, dyed or sewn into the final garment. In order to have comparable results, a single jersey cotton T-shirt with twenties count (170 grams per square metre) was selected as the base garment.

Table 1: List of interviewees

<i>All stages of value chain</i>
Agrocel Industries: General Manager (Service Division) ; Senior Scientist; Centre Co-ordinator; Field Manager (Service Division)
<i>Knitting, dyeing and manufacturing stages</i>
Impulse Ltd: General Manager (Merchandising) ; Senior Manager (technology)
<i>Dyeing & Finishing stages</i>
V&S Textiles Pvt Ltd: Technical Director; Technologist
Knitcraft Apparels: General Manager
Master Apparels: Director
<i>Dyeing , finishing, quality and market stages.</i>
M&S UK, Sustainable Raw Materials and Cotton Specialist
Organic Dyeing bhuj: Vegetable Dyeing specialist
<i>Ginning stage</i>
Trident: Senior Technologist; Senior Manager (spinning)
Shyam Cotton and General Mills: Director
Maral Overseas: General Manager (Yarn) ; Manager (Exports)
Market and certification: General Manager (Knits) ; Ex Designer (M&S)
<i>Farming stage and research projects</i>
PAN UK: Cotton Project Coordinator
Helvetas Swiss Association for International Cooperation: Organic Cotton
Competence Centre: Senior manager
Punjab Agricultural University Scientist
Organic cotton farmer
<i>Quality and costing of the final garment</i>
Poeticgem UK, Senior Manager

The Demand for Organic Cotton

Demand sustainability is one of the major problems faced by organic producers. Organic cotton is susceptible to considerable fluctuations in demand, which plays an important role in the values achievable by organic cotton producers. There has been a surge in demand for organically produced goods in recent years. Worldwide, the production of organic cotton increased by nearly 3000% between 1992 and 2007 (Table 2), and is forecast to continue to grow (Ferrigno 2006; Willer and Yussefi 2007). Despite this growth, the organic cotton market (Table 3) represents only approximately 0.1% of the total clothing market world-wide (all fibres), and in the UK is still probably less than 1% (Sanfillipo 2006).

Table 2: Organic Cotton Production Worldwide (in Tonnes)

	1992- 1993	1993- 1994	1994- 1995	1995- 1996	1996- 1997	1997- 1998	1998- 1999	1999- 2000	2000- 2001	2001- 2004	2004- 2005	2005- 2006	2006- 2007
Total	2075	3826	6150	7482	5507	5562	5575	7545	6480	N. A	25394	31017	58000

Source: Ferringo (2006) and USDA (2009)

Table 3: Estimated Global Retail Sales of Organic Cotton Products

	2001	2005	2006	2007	2008
Estimated global retail Sales (millions \$ USD)	245	583	1073	1911	2618

Source: Klein (2006)

The Main Factors Affecting The Growth Of The Organic Cotton Industry

There are many factors that affect the growth of the organic cotton industry. These include, inter alia, consumer demand for organic products, a recognition by firms of the benefits in terms of sales and profits from the increasing consumer awareness of organic methods, and the institutionalisation and regulation of the industry with its attendant reputational benefits. Some of these appear to be stimulating the growth of the industry and some appear to be working against it.

Factors Stimulating The Growth Of The Organic Cotton Industry

There are a number of factors that influence the growth of an industry and which affect the values calculated as part of a value chain analysis. Over time and through the increasing awareness of the industry and its products, learning and efficiency effects, the result of economies of scale, are likely to increase unit profitability. Of these growth factors the various media have played probably the most important role in raising ethical expectations of business and in achieving the public visibility of corporate social responsibility (CSR) issues (Haberberg, Rieple, Gander, Martin-

Castilla, and Helm 2008; Bansal 2005; Maignan and Ralston 2002). This visibility is vital for organic cotton as the ethical issues surrounding non-organic production are still not well known by the general public (Sanfillipo 2007). Research by Verdict (2007) found that such knowledge was a powerful driver behind the purchase of organic products, and a lack of media coverage was at least partly responsible for the lack of demand that led to the organic cotton crisis in the US in 1994 (Ton 2002).

There now appears to be increasing concern about the damage caused by the production of conventional cotton. Most of this comes in the form of both environmental and social loss, such as human life, water pollution and damage of natural ecosystems, soil erosion and the emission of nitrogen peroxide, a greenhouse gas (Alfoeldi, Fließbach, Geier, Kilcher, Niggli, Pfiffner, Stolze, and Willer 2002). As an example, it has been estimated that only 0.1% of applied pesticides reach the target pests, leaving the remaining 99.9% to impact the environment (Pimentel 1995). Pimentel (1997) showed that the environmental costs of using pesticides in the US alone may be as high as \$9 billion a year, and also calculated that for every \$1 spent on pesticides, the achievable profits of \$3-5 were counteracted by environmental costs of \$3. Another study by the United Nations found that the social and environmental costs of pesticides in Nicaragua during the cotton boom approached \$200 million per year, yet income from cotton production was only \$141 million (Myers 1999).

The development of the organic cotton industry has been aided by increasing consumer awareness of the benefits of organic food production, which began earlier in the 1970s / 1980s (Tregear, Dent, and McGregor 1994). However, some specialists in the field of organic cotton caution that this is no guarantee that the sales of eco-textiles will follow the same growth path (Ton 2002). Nevertheless, in line with institutional theory (Haberberg and Rieple 2007; Bansal 2005; Maignan and Ralston 2002), more companies appear to be joining in the so-called 'green bandwagon'; the number of UK retailers selling organic cotton is estimated to have increased by 95% from 200 in 2004 to 390 in 2005 (Sanfillipo 2006).

This take-up by retailers appears to be due to escalating media attention as well as awareness of the potential for increased profits from organic products, in part the result of improvements to the firm's reputation. A number of recent surveys have pointed out a positive correlation between the selling of ethical products and brand performance (yougov website 2006 and 2007 surveys). Pioneering, ideologically-driven, companies like 'Gossypium', 'People Tree' 'Wild Life Works' and 'Patagonia' which sell mainly organic and fair-trade products started in business due to ethical concerns, even though demand in the initial stages was low. Now, larger corporations such as Marks and Spencer, Nike, Next and Reebok are increasingly promoting ethical products, finding that it helps differentiate their offer. These companies' size and influence, and their formal involvement with the Organic Exchange (a US-based organisation that promotes and researches organic production methods) and similar agencies, such as Pesticides Action Network, Greenpeace, FiBL (the German Research Institute for Organic Agriculture) which promote the cause of the environment in general and organic products in particular, institutionalises organic cotton further into the mainstream retail environment (Haberberg et. al. 2008).

Governments, particularly in Europe, are also stimulating support for organic production. The use of incentives and taxes to reduce the use of chemicals in farming in Germany and Sweden are recent examples of positive interventions (OTA 2007). A Delphi study conducted by the University of Cambridge (Allwood 2006) found that participants expected environmental practices to be increasingly forced through by legislation. This is likely to bring prices down as subsidies encourage participation and increase the entry of new competitors.

Factors Preventing The Growth Of The Organic Cotton Industry

Although there are a number of forces encouraging the move to organic production, other forces counteract these. Prices are still too high to encourage mass migration to organic cotton products. On average in 2007, a fully certified organic cotton t-shirt was priced at \$44³ nearly three times more than a conventional cotton T-shirt. There is also, still, a lack of awareness of the consequences of the different production methods. An understanding of these, although increasing, is still some way off reaching saturation. Our data gathering in India in 2007 found that the majority of farmers and ginners, and even the specialists at an agricultural university, were not aware of the environmental benefits of organic cotton.

Another important factor is the willingness of retailers and manufacturers to give long-term commitments to organic methods, something which directly affects the adoption of organic cotton production methods by farmers. There is a 3 year conversion phase that farmers have to go through before they can produce certifiable organic cotton, during which time yields decline. Hence a long-term commitment is needed to encourage the conversion process. This might be compensated by a supportive economic infrastructure provided by governments or aid agencies, but this infrastructure is not yet in place. In addition to compensating for the initial loss of yield, it needs to counter the supportive framework currently provided by a 'ready-made network of researchers, pesticide experts, advisers and companies' (Fromartz 2007) who promote non organic methods. This means that the whole conversion process looks too risky to many.

The current consumer demands for 'fast fashion', i.e. short-lasting garments at throw away prices with little emphasis on quality, also appears to be driving sales away from higher priced, higher quality products such as those made from organic cotton. Organic garments have longer production lead times, making them less able to compete with non-organic clothes, which can be supplied much more quickly, thereby satisfying the demand for constantly new and different items. Although there is some evidence that the demand for fast, value, clothing is decreasing, this has not yet reached mainstream markets (Verdict 2007).

Since one of the main factors encouraging the demand for organic cotton products is a concern for sustainable and/or ethical practices, it has to compete for discretionary

³ In this paper as an aid to comparability, we are using US dollars as the unit of currency, even though our data relate to the UK and India

consumer spending with alternative ethical materials like hemp, jute, sisal, coir (CUP 2007) and Fair-trade products. Another potential threat to the growth of organic cotton is from genetically modified (GM) cotton. Our interviews revealed that an initial reduction in attack from pests, a cosmetically enhanced product and lack of data on any of its harmful effects, is encouraging some Indian farmers to grow GM plants in preference to either organic or normal crops. In many cases this is supported by both explicit and less obvious government support for such practices. Although organic products currently appear to be the preferred 'ethical' choice of concerned consumers in developed countries, there is another school of thought that says that growing crops more economically and with less waste is a better way of providing the most benefits to the greatest number. In poorer countries this may be a hard choice to make. In many parts of India farmers are more familiar with the term BT cotton (a form of GM cotton) than organic cotton.

There are therefore a number of factors from both the demand and the supply side that are likely to influence the development of the organic cotton industry and which will affect the shape and economics of the value chain over time. In the next section we present a value chain analysis of organic cotton in India as it is currently constituted.

A Value Chain Analysis Of The Organic Cotton Industry In India

The value chain that we present in this section is representative of only one moment in time - April 2007, when our data were gathered. In this section we compare the value chain of an a) organic cotton, b) certified organic, and c) a conventional cotton t-shirt and identify the details of value addition at each stage in their production. Table 4 summarises the prices achieved at each stage of the value chain; we will discuss each of these stages in more depth below⁴

⁴ All the values in these are expressed in US dollars which have been converted from Indian Rupees, using the average prevalent rate during April 2007, 41 INRs = \$ 1

Table 4: Value addition at each stage of cotton production

Price (US\$) ➔	Selling price per kg: conventional cotton	Selling price per kg: organic cotton	Selling price difference between organic and conventional goods (per kg)	Profit at each stage (after taking account of wastage from organic raw materials) (Per Kg)	Amount of raw material required from each stage to make a 0.25kg T-shirt	Per T-shirt costs of each stage	Per T-shirt cumulative costs at each stage resulting from the use of organic materials
Stages & product ⬇							
Farming (crop)	0.56	0.60	0.04	0.04	1.367 Kg	0.06	0.06
Ginning (fibre or lint)	1.29	2.00	0.71	0.58	0.492 Kg	0.29	0.35
Spinning (yarn)	2.56	4.50	1.94	0.97	0.354 Kg	0.34	0.69
Knitting (grey fabric)	3.17	5.60	2.43	0.43	0.343 Kg	0.15	0.84
Dyeing & Finishing (dyed fabric)	5.60	9.10	3.50	0.84	0.319 Kg	0.26	1.10
Garment stitching	12.68	18.84	6.16	2.63	0.255Kg	0.67	1.77

** Category C (cheaper) includes high street retailers that sell organic garments, but it is not their core range. Category E (expensive) are mainly ethical goods' retailers, for whom organic cotton garments form a core range. We discuss the differences between these types of retailers below in the section on the retailing stage.

*** Category C retailers tend to buy organic cotton lint and finish the processing using their own facilities. This means that they don't pay a premium for organic materials at each stage. However, in order to account for additional expenses during processing we have included \$0.20 towards extra costs in category C's overall price. There is no differentiation between Category C and Category E processes at this stage.

**** Four t-shirts weigh 1 kg. The retail price (\$44) of a fully certified organic t-shirt is based on the average selling price at specialist ethical retailers in the UK in July 2007. The price at high street retailers was \$30 for products that were made from organic cotton but were not fully certified at all stages. We have converted £ to \$ at the rate of 1:2, the rate prevailing in April 2007.

The Farming Stage

Farming is the initial and the most crucial stage in the production of organic cotton fibre. The costs of a normal cotton crop at this stage come from the costs (and opportunity costs) of the land and labour, the costs of raw materials such as water and seeds, and chemicals such as fertilizer and pesticides. There are also hidden costs which are often not represented in calculations of the farming economy, and which organic methods have made more obvious. As many traditional farmers in developing countries like India are not well educated, many of these costs remain

unacknowledged. Pesticide use, for example, can lead to health problems in the farmer, resulting in fewer productive working hours.

They also include the vicious circle of chemical use known as the 'treadmill' effect (Myers 1999). Research has revealed that overuse of herbicides and pesticides can induce resistance in pests, weeds and diseases. Also, as pesticide use increases, rather than the target pest being killed, friendly organisms such as earthworms which improve soil quality, and bird species, which would otherwise have eaten many of the pests, are destroyed instead (Pretty 2005; Myers 1999; OTA 2007). So, even though yields may improve temporarily, these levels are not sustainable and may even fall over the longer term due to loss of fertility of the soil, and consequent crop failures. Organic farming has also been shown to make land easier to plough and help crops to sustain periods of drought better (Eyhorn et al. 2007). In contrast, conventional farming leads to the death of helpful bacteria, makes soil acidic and leads to the erosion of topsoil. One study showed that organic fields had eight more inches of topsoil than their chemical-using neighbours and organic bio-sensitive farming produced six inches more topsoil over a fifty year period – sixty times faster than would otherwise have been expected (OTA 2007).

The need to compensate for soil infertility means that farmers are driven to buy ever rising quantities of chemicals - whose upwardly-mobile prices are set by increasingly powerful international suppliers (Glin et al 2006). In some parts of India agricultural chemicals are estimated to take up to 60% of the farmer's production budget (www.peopletree.co.uk). Most small farmers in developing countries have to take loans to fund the costs of chemicals, the interest rates on which are high, sometimes over 30% (Eyhorn et al 2007). In many cases they are not able to pay back these loans and get trapped in an increasing spiral of debts. One Indian NGO (DEEP) estimated that the economic depravity caused by use of pesticides led to 40,000 farmers committing suicide in just one Indian state, Punjab, between 1990-2007 (www.defendersofpanjab.org), resulting in a potentially large value loss both for the industry and society.

For organic farmers on the other hand, there is considerable potential for value addition, the result of not falling prey to the vicious cycle of non-organic methods; they use fewer chemicals and can also obtain a price premium on the organic crop (Pawar 2007; Eyhorn et al 2007; EJV 2007; Glin et al 2006). In fact our study identified value addition opportunities that are currently being missed. For example, rotation crops, such as clover, which are used in organic farming to break the pest lifecycle, could themselves be sold as an organic crop (Eyhorn et al 2007).

Studies have also shown that after an initial fall, organic yields can go up substantially to almost the same levels as conventional crops (Pawar 2007; Eyhorn et al 2007). Other studies suggest that they could even be up to 21% higher (Blaise 2006). And, even though there appears to be a widespread belief that labour costs are higher, organic farms in fact tend to use between 40% and 65% less labour for pest management, while the labour hours needed for weeding and applying fertilizers is about the same (Eyhorn et al. 2007; Allwood, Laursen, de Rodriguez and Bocken 2006). Variable production costs have been estimated to be 13-20% lower in the case of organic cotton; thus gross margins would be higher, even without the price premium that organic crops command (Eyhorn et al 2007) (Table 5). Overall,

organic cotton farms typically achieve incomes 10-20% higher than conventional ones.

However, the initial costs of organic farming are higher than conventional methods; in the first two-three years the yield typically falls by 10-20%, or even by as much as 50% (Pawar 2007). This acts as one of the principal stumbling blocks in the growth of organic cotton cultivation (Agrocel 2007) (Table 6). As a result, a number of organisations that promote organic methods have emerged to provide support in the initial stages of conversion from normal to organic methods. These include Agrocel and Maikaal bioRe in India, which provide technical support to the farmers as well as buying their crops at a premium of 8 to 20 % over and above normal organic cotton prices (Agrocel 2007; Eyhorn et. al. 2007).

The figures in Table 6 identify the breakeven point for a farmer converting to organic methods. The data are a compilation of various sources from our primary research. The fall in yields is assumed to be around 20%, based on the pooled findings of various studies. The recovery period for yield is assumed to be 3 years. From this table, it can be seen that positive returns from a conversion to organic methods are likely to be achieved after six years.

Once farmers have gone through this transition phase there are grounds for assuming that they will sustain at least these levels of yields and income (Blaise 2006; Eyhorn, et. al. 2007).

Economic performance ^a	2003		2004	
	Organic (n= 58)	Conventional (n= 112)	Organic (n= 62)	Conventional (n= 108)
Hired labour costs	101. 00	86. 00	73. 91	63. 31
Total input costs	78. 54	126. 65	64. 06	114. 28
. seed costs	25. 30	27. 69	31. 68	45. 13
. fertilizer costs	38. 28	62. 13	29. 97	47. 71
. pest management item costs	14. 95	36. 82	2. 37	21. 44
Other costs ^b	9. 58	5. 23	15. 17	14. 46
Variable production costs	189. 13	217. 93	153. 15	192. 28
Cotton revenue excl. premium	750. 89	688. 84	479. 51	452. 91
Cotton price premium	150. 17	0	95. 91	0
Cotton crop revenue ^c	905. 41	689. 69	578. 84	454. 00
Revenue from wheat	76. 89	95. 54	57. 37	131. 86
Cotton gross margin	716. 30	471. 76	425. 71	261. 95
Wheat gross margin	57. 91	69. 13	45. 08	102. 75
Field gross margin ^d	774. 21	540. 91	470. 77	363. 13

Source – Eyhorn et al. (2007)

Table 5
Economic performance of organic and conventional cotton fields

^a *The average exchange rate was 46 INR/US\$ in 2003 and 45 INR/US\$ in 2004*

^b *costs for hiring equipment, fuel and variable irrigation expenses.*

^c *including the value of the pulse intercrop*

^d *sum of the gross margins of the cotton crop and the subsequent wheat crop.*

	Yield Kg per hectare	Price US \$ per kg	Total income US \$ Per hectare	Labour costs US \$ per hectare	Fertilizer and other costs US \$ per hectare	Pest manage ment cost US \$ Per hectare	Total Costs US\$	Profit US \$ Per hectare	Value loss/ addition US \$ Per hectare	Cumulative value addition US \$ Per hectare
Year 0*	1300	0.56	729.30	95.12	104.90	41.50	241.50	487.80	0	0
Year 1	1050	0.56	589.00	112.20	80.50	17.10	209.70	379.30	(108.50)	(108.50)
Year 2	1100	0.56	617.10	112.20	80.50	17.10	209.80	407.30	(80.50)	(189.00)
Year 3	1200	0.56	673.20	112.20	80.50	17.10	209.80	463.40	(24.40)	(213.40)
Year 4	1280	0.60	775.60	112.20	80.50	17.10	209.80	565.80	+78.00	(135.40)
Year 5	1300	0.60	787.80	112.20	80.50	17.10	209.80	578.00	+90.20	(45.20)
Year 6	1300	0.60	787.80	112.20	80.50	17.10	209.80	578.00	+90.20	+45.00

*Year '0' refers to the year prior to the start of organic conversion. Hence the yield in year 0 is that from conventional farming methods

Table 6: The break-even point of converting to organic methods

The Ginning Phase

Ginning is the process of removing seed from cotton fibres (lint). The process involves their physical removal either with saw blades (saw-gin machine) or roller blades (roller-gin machine). Even though chemicals are not used in the ginning stage and the process is the same for both organic and conventional cotton, a price premium can still be achieved at this stage. But, in order to gain full organic certification a mill has to store and process organic cotton separately from non organic crops.

There are some other sources of value at this stage. These are the by-products of the ginning process, principally cattle feed and cotton seed oil which are produced after the seed has been separated from the lint. At the moment these by-products are sold at the same prices as conventional ones because chemicals such as caustic soda are used in their manufacturing. This is an area where additional value could be achieved, were different, organically-approved, chemicals to be used, allowing both cattle feed and cotton seed oil to be sold under organic certification. In fact, ginners who have already paid a premium price for the organic cotton crop then lose that premium by failing to sustain organic certification through to the by-products. Table 7 shows the value addition accruing from various products obtained during the ginning process. Table 8 shows the value addition possible at the ginning stage.

One of the reasons why organic cotton commands a premium at this stage is because there is a perception held by some buyers that the organic cotton fibre has a longer staple length and fewer impurities. These are held to result in a better quality yarn, and thus fabric. Explanations for this include the fact that the ginning mills tend to be located close to the organic farms, and hence the crop suffers less damage in transportation, and also because organic crops generally tend to be handled more carefully than conventional ones. However evidence is equivocal on whether the fibres are in fact different.

Cost in USD\$	Percentage of each by-product produced at the ginning stage	Conventional cotton per kg	Remittance per 100 kg of conventional crop	Organic cotton per kg	Remittance per 100kg of organic crop
Before Ginning					
Raw cotton	100	0.56	56.00	0.60	60.00
After Ginning					
Fibre*	35	1.29	45.24	2.00	70.00
Seed oil	7.8	1.10	8.56	1.10	8.56
Cattle feed	63.7	0.22	14.00	0.22	14.00
Wastage	1.3	0	0	0	0
Total value after ginning (per 100 kg)			67.80		92.56

* the prices quoted are based on a staple length of approx 29 mm

Table 7: The value of the products of the ginning stage

Price difference in organic and conventional cotton lint (per Kg)	Additional cost of organic cotton crop required to produce 1 Kg of organic cotton lint	Value addition at the ginning stage
\$ 0.71	\$ 0.58	\$ 0.13

Table 8: Value addition at the ginning stage

The Yarn Manufacturing Stage

Yarn manufacture includes different sub processes such as leaning, mixing, carding, combing, drafting, twisting, and winding. Most of these are physical processes that are the same for both organic and non-organic cotton. However, as with ginning, there has to be a clear segregation of the operational area if a company is processing both types of cotton. If this can be achieved, then a premium can be obtained (Table 9).

Price difference in organic and conventional cotton yarn (per Kg)	Additional cost of organic cotton lint required to produce 1 Kg of organic cotton yarn	Value addition at the yarn stage
\$ 1.95	\$ 0.98	\$ 0.97

Table 9: Value addition at the yarn stage

The Fabric Manufacturing / Knitting Stage

Knitting is a mechanical process of changing yarn into fabric. There is no difference between organic and conventional cotton knitting. The only thing that has to be taken into account while processing certified organic cotton is to not to use oils that contain heavy metals or other potentially contaminating pollutants in the mechanical knitting process. Once again, manufacturers that can achieve this can obtain a premium (Table10).

Price difference in organic and conventional cotton griege fabric (per Kg)	Additional cost of organic cotton yarn required to produce 1 Kg of organic cotton griege fabric	Value addition at knitting stage
\$ 2.43	\$ 2.00	\$ 0.43

Table 10: Value addition at the knitting stage

The Fabric Finishing Stage

Fabric finishing is a crucial stage in the manufacture of cotton products. It is the final stage before the garment is cut and stitched. Finishing involves dyeing, printing, mercerising and other processes that give the fabric added benefits or features. There are no universally-agreed standards or regulations for the finishing of organic cotton products, although there are a number of independent organisations that use their

own standards to certify various finishing processes as organic. However, by any objective measure the fabrics produced following these standards cannot be considered truly organic because of the permitted use of chemical, non vegetable, dyes. The main aim of these certification processes is to ‘maintain the integrity of the organic nature of the fibre as much as possible’ (Sanfillipo 2007). The chemicals used in this kind of procedure are slightly more expensive than conventional chemicals (a difference of 2 - 12 cents per kg).

There are other concerns as to whether these products should be labelled as organic. The first is to do with the quality of the finish. For example, some organic certifications allow chemicals to be used in small proportions to achieve certain finishes and quality; full colour fastness, whiteness and softness can only be achieved using non organic chemicals. Standards can also vary between countries. One of the certifying organisations, GOTS, allows the use of certain chemicals in the US but not in the UK. So at the moment, the certification process is rather vague and open to some interpretation. Nevertheless a premium can be obtained at this stage (Table 11).

Price difference in organic and conventional cotton finished fabric (per Kg)	Additional cost of organic cotton griegie fabric required to produce 1 Kg of organic cotton finished fabric	Value addition at finishing stage
\$ 3. 46	\$ 2. 62	\$ 0. 84

Table 11: Value addition at the finishing stage

Garment Cutting and Stitching

Garment cutting and stitching is the final stage of production before the finished clothes are sent to retailers. Owing to the fact that both organic and conventional cotton are stitched following same process, there is little scope for value addition at this stage, although a premium price (5% typically) is usually charged by garment manufacturers. The cutting process normally results in a significant wastage of fabric, the costs of which are higher for organic cotton producers simply because of the higher costs of the raw materials.

Organic cotton can lose some of its properties when stored with non-organic cotton. It is possible for the free formaldehyde (a skin irritant and carcinogenic) that is sometimes used in the production of normal cotton to be transferred to the organic products. Packing organic garments separately in paper bags helps to avoid contamination, as well as mis-labelling and fraud, but this results in an additional cost of around 8 cents per garment. The value addition at the garment stitching stage is shown in Table 12.

Price difference in organic and conventional cotton t-shirt (per Kg equivalent to 4 t-shirts) supplier's stage	Additional cost of organic cotton finished fabric required to produce 1 Kg of organic cotton t-shirt	Value addition at garment stitching stage
\$ 6. 16	\$ 3. 53	\$ 2. 63

Table 12: Value addition at the garment stitching stage

The Retailing Stage

Once a garment has been made, the price difference between an organic and conventional cotton t-shirt is approximately \$ 1. 54. However, retailers are then able to achieve a significant price differential simply because of market factors such as reputational effects and consumer demand, and are typically able to charge a considerable premium for an organic cotton t-shirt.

Our research indicates that there are two different categories of retailers, with different pricing strategies for organic cotton goods. Category C (cheaper) includes high street retailers that sell organic garments, but it is not their core range. Retailers in this category include Gap, Marks and Spencer and HandM. Category E (expensive) are mainly ethical goods' retailers, for whom organic cotton garments form a core range. Retailers in this category include People Tree, Natural Store and Green Apple. These two categories of retailers tend to configure their value chains differently. The Category C retailers buy organic fibre and fabric, and then process it according to their own standards. The products thus made are sold as 'made from organic cotton'. The retail price of these t-shirts on average was around \$30, \$14 more than a conventional cotton t-shirt.

Profits achieved by these retailers is high. They are able to charge high prices while not paying premium prices for truly organic products which are certified at all stages of the supply chain; the raw material they buy is only certified at the farming stage. Category E retailers certify their products at all stages of production. Some also obtain additional certificates such as Fair-trade. Their t-shirts are priced at an average of \$44, \$28 higher than conventional cotton, and \$14 higher than Category C retailers' products. For these companies, value is added through reputational effects; a price premium is charged for their ethical products, whilst costs are relatively low. However, because of their high prices, demand is relatively low (Table 13).

Price difference in organic and conventional cotton finished fabric (per Kg) at retail stage	Additional cost of organic cotton t-shirt at supplier stage	Value addition at the retail stage
Category E retailer		
\$ 112	\$ 3. 71	\$ 108. 30
Category C retailer		
\$ 14	\$ 0. 37	\$ 13.63

Table 13: Value addition at the retail stage

Conclusion

Our study has shown that the use of organic cotton can add value at each stage of the production process, both to farmers and intermediaries. Organic methods also have wider social and environmental benefits that come from the use of sustainable methods (Alfoeldi et. Al. 2002). We also identified opportunities for value addition that are currently being missed, for example the sale of organically grown rotation crops like clover.

In the future, a number of changes to the cotton production industry are likely to affect the shape and scope of the value chain. It is predicted that the demand for organic cotton will grow substantially in the coming years (Organic Exchange 2008). And this demand is likely to be increasingly met by producers in developing countries, who are now benefitting from better support services, know-how, and the economic and regulatory infrastructure necessary to allow them to shift to organic production. This is likely to affect the price of organic cotton at each stage of the production process, although whether this will be up (as the currencies of developing countries increase in value), or down (as more organic cotton enters the market leading to economies of scale), is difficult to predict.

However, even though organic farming is forecast to grow, it is likely to be a different issue where organic dyeing is concerned. It can take up to 2-3 months to prepare small quantities of organic dyes, adding to the cost of full certification. Moreover there is a concern that increased use of organic dyes would mean more pressure on natural resources; the use of organic dyes can mean large scale deforestation, increasing the likelihood that its take-up would be resisted by environmentally-aware consumers. Indigo dyes, for example, whose current demand is 14m kilos, would, if produced naturally, require 400m kilos of indigo leaves, 98% of which would become acid waste (Fletcher et al 1999). The implication is that category C retailers are likely to be the biggest and most profitable sellers of organically farmed (but not fully certified) cotton in the future, as they are now.

We have also highlighted some important social effects from the adoption of organic methods, such as the improvement in health and well-being of organic farmers. Though the economic benefits may seem relatively small at the farming stage compared to some of the other stages, these are meaningful amounts to a small farmer in a developing country. In addition to the mark-up on the crop itself, farmers can achieve other valuable benefits. Organic methods lower the costs of pest management, increase yields, reduce crop failures, and as a result help to reduce farm debts (Pawar 2007; Eyhorn et al 2007; Glin et al 2006; OTA 2007). Farmers receive free training in organic production from the sustainable farming agencies which has a side benefit of increasing the farmers' general know-how in efficient farming techniques. They also have better health which means that medical costs are lowered and time off sick is reduced. Recent development in carbon-offsetting schemes also has the potential to increase organic farmers' earnings through carbon trading, estimated to be able to contribute 5-10% of income (Soth 2007).

However, it is now becoming clear that any distinctions between pure economic effects and social effects are becoming blurred, as a commitment to an ethical stance is an important source of distinctiveness and branding in the fashion industry in its own right. As one retail industry commentator said, 'In today's competitive business landscape, commitment to environmentally ethical ways of doing business are now irrevocably linked to product placement, branding policies, target markets and the attraction, recruitment, and retention of the very best staff' (Blackwell 2007). Organic cotton appears likely to be appearing on retailers shelves in increasing volumes for some years to come.

References

Alfoeldi, T., Fließbach, A., Geier, U., Kilcher, L., Niggli, U., Pfiffner, L., Stolze, M., and Willer, H. (2002). *Organic Agriculture and the Environment*. Organic Eprints, Food and Agriculture Organisation of the United Nations, Rome. Available: <http://orgprints.org/573/>.

Allwood, J., Laursen, S. E., de Rodriguez, C. M., and Bocken, N. M. P. (2006). *Well Dressed*. University of Cambridge Press, Cambridge.

Azqueta, D. and Sotelsek, D. (2007). Valuing nature: From environmental impacts to natural capital. *Ecological Economics* 63, 22-30.

Bansal, P. (2005). Evolving sustainably: A longitudinal study of corporate sustainable development. *Strategic Management Journal* 26 197-218.

Blackwell, J. (2007). Sustainability - a simple question of economics. *The Retail Bulletin* available: http://www.theretailbulletin.com/news/sustainability_a_simple_question_of_economics_20-04-07/ (accessed 24 August 2008).

Blaise, D. (2006). Yield, boll distribution and fibre quality of hybrid cotton (*Gossypium Hirsutum* L.) as influenced by organic and modern methods of cultivation. *Journal of Agronomy and Crop Sciences* 192, 248-256.

Blaise, D., Rupa, T. R., and Bonde, A. N. (2004). Effect of organic and modern method of cotton cultivation on soil nutrient status. *Communications in Soil Science and Plant Analysis* 35, 1247–1261.

Central Institute for Cotton Research (2007). *Integrated Pest Management: Practice for Cotton*. Indian Ministry of Agriculture. available: <http://cicr.nic.in/> (accessed 12 July 2008).

Ciba (2006). *Products from Ciba Specialty Chemicals approved by IMO for Organic Cotton*. ETAD, Switzerland.

Cottoncounts (2007). *Cotton from field to fabric*. Cottoncounts. Available: <http://www.cotton.org/pubs/cottoncounts/fieldtofabric/harvest.cfm> (accessed 12 July 2008).

Dahlstrom, K. and Ekins, P. (2005). Combining economic and environmental dimensions: value chain analysis of uk iron and steel flows, *Ecological Economics*. 58, 507-519.

DEEP (2009). *Agricultural Issues in Punjab*. DEEP. available: <http://www.defendersofpanjab.org/#/agriculturalissues/4529624640> (accessed on 18 March 2009).

Defra (2007). *Defra's Greenhouse Gas (GHG) Conversion Factors for Company Reporting (Green Electricity, Transport Methodology Paper and Act on CO2 Calculator)*. Defra. available:

<http://www.defra.gov.uk/environment/business/envrp/conversion-factors.htm>
(accessed 13 August 2008).

Diebäcker M. (2000). Environmental and social benchmarking for industrial processes in developing countries; a pilot project for the textile industry in India, Indonesia and Zimbabwe. *Integrated Manufacturing Systems* 11, 491-500.

Director (2007). The New Economy: Leadership. How smart directors are leading the campaign for clean business. *Director*. available:

<http://www.carbontrust.co.uk/publications/publicationdetail.htm?productid=PFL294>
(accessed 12 December 08).

Ecomtrading (2000). *About Cotton: The Cotton Supply Chain*. Ecomtrading. available: <http://www.ecomtrading.com/website.nsf/CottonPhotoGallery?OpenPage>
(accessed 13th August 2008).

Environmental Justice Foundation (2007). *The Deadly Chemicals in Cotton*. Pesticide Action Network UK, London.

Erkan R., and Sule T. (2002). Prospects and challenges for developing countries in trade and production of organic foods and fibre. *British Food Journal* 104, 371-390.

Eyhorn, F , Mader P., and Ramakrishnan M. (2007). The viability of cotton based organic farming systems in India. *International Journal of Agricultural Sustainability* 5, 25-38.

Eyhorn, F., Mader P., and Ramakrishnan M. (2007). *The Impact of Organic Cotton Farming on the Livelihoods of Smallholders : Evidence from the Maikaal Biore Project in Central India*. Organic eprints. available: <http://orgprints.org/10362/>
(accessed 12 December 2008).

Fashion Capital (2007). Organic Clothing: a Trend or Our Future? *Fashion Capital*. available:

<http://www.fashioncapital.co.uk/content/view/5588/1/OrganicClothingatrendorourfuture/>
(accessed 12 December 2008).

Fashion Capital (2007). Style Addict: Is Style Finally Getting a Conscience? *Fashion Capital* available:

www.fashioncapital.co.uk/content/view/8262/98/StyleAddictIsstylefinallygettingaconscience/e/
(accessed 12 December 2008).

Ferringo, S. (2006). Organic Cotton Fiber Report, Organic Exchange, Berkeley, CA.

Fletcher, K., Waayer, N., Vreeland J. M. and Grose, L. (1999). *Creating a final product, in Myers, D. and Stolton, S., (Eds.). Organic Cotton: From Field to Final Product*. Intermediate Technology Publications Ltd, London, pp. 45-64.

Fliessbach, A. and Mäder, P. (1997). *Carbon Source Utilization by Microbial Communities in Soils Under Organic and Conventional Farming Practice*, in Insam, H., and Rangger, A., Eds.. *Microbial Communities - Functional versus Structural Approaches*. Springer-Verlag, Berlin, , pp. 109-120.

Fliessbach, A., Oberholzer, H-R., Gunst, L. and Mäder, P. (2007). Soil organic matter and biological soil quality indicators after 21 years of organic and conventional farming. *Agriculture, Ecosystems and Environment*. 118, 273-284.

Fromartz, S. (2006). *Organic Inc. Natural foods and How They Grew*. Harcourt, Orlando.

Garibay, S. V., and Jyoti, K. (2003). *Market Opportunities and Challenges for Indian Organic Products*. Research Institute of Organic Agriculture FiBL. Frick, Switzerland. available: <http://orgprints.org/2684/01/garibay-2003-Market-Study-India.pdf> (accessed 12 December 2008).

Glin, C., L., Kuseu, J., Thiam, A., Vodouhe, S.,D., Dinham, B., Ferrigno, S. (2006). *Living with Poison: Problems of Endosulfan in West African Cotton Growing Systems*. Pesticide Action Network UK. London.

Haberberg, A. ; Rieple, A; Gander, J. ; Castilla-Martin, J-I; and Helm, C. (2007). Patterns in the adoption of Corporate Social Responsibility Practices, paper presented at the *Corporate Responsibility Research Conference* 15-17th July, Leeds.

Haberberg, A., and Rieple, A. (2008). *Strategic Management: Theory and Application*. Oxford University Press, Oxford.

Hayden. F. G. (1993). Ecosystem valuation: combining economics, philosophy, and ecology. *Journal of Economic Issues* 27, 409-420.

Herath, G. (1998). Agrochemical use and the environment in Australia. *International Journal of Social Economics*. 25, 283-302. (accessed 12 December 2008)

ILO (2000). *Labour Practices in the Footwear, Leather, Textiles and Clothing Industries*. International Labour Office, Geneva, available: <http://www.ilo.org/public/english/dialogue/sector/techmeet/tmlfi00/tmlfir.htm>

Jackson G. J. (2007). *Organic Cotton Farming in Kutch, Gujarat, India*. Agrocetl, Mandvi.

Joergens, C. (2006). Ethical fashion; myth or future trend. *Journal of Fashion Marketing and Management* 10, 360-371.

Kilcher, L. (2007). *How Organic Agriculture Contributes to Sustainable Development*. JARTS Witzenhausen, Supplement 89, page pp. 31-49 available: <http://orgprints.org/10680/> (accessed 12 December 2008).

Kilcher, L., Huber, B., and Schmid, O. (2006). *Standards and Regulations* in Willer, Helga and Yussefi, Minou (Eds.). *The World of Organic Agriculture. Statistics and*

Emerging Trends. Research Institute of Organic Agriculture. FiBL, Switzerland, pp. 74-83. available: <http://orgprints.org/10375/> (accessed on 12 December 2008).

Klein, C.R. (2006). *Organic Cotton Market Report; An In-Depth Look at a Growing Global Market*. Organic Exchange, Berkeley, CA.

Kuosmanen, T., and Kortelainen, M. (2007) Valuing environmental factors in cost-benefit analysis using data envelopment analysis. *Ecological Economics* 62, 56-65.

Lanting, H., Raj, D. A., Sridhar, K., Ambatipudi, A., and Brenchandran, S. (2005). *Case Study on Organic Versus Conventional Cotton in Karimnagar, Andhra Pradesh, India*. In M. S. Hoddle (ed.) *Second International Symposium on Biological Control of Arthropods*, USDA Forest, Riverside, USA, pp. 302-317.

Maignan, I., and Ralston, D. A. (2002). Corporate social responsibility in Europe and the U.S.: insights from businesses' self-presentations. *Journal of International Business Studies* 33, 497-514.

Martin, S. (2005). *Formaldehyde in Clothing*. Allergy, Sensitivity and Environmental Health Association. Available: <http://www.asehaql.org.au/?q=node/120> (accessed 19 Oct 2009).

Morgan, L. (1999). Pesticides and groundwater in the State of Washington. *Environmental Management and Health* 10, 7-10.

Myers, D., and Stolton, S. (1999). *Organic Cotton: From Field to Final Product*. Intermediate Technology Publications, Rugby.

OTA (2007). *Export Study – Chapter 3: Europe*. OTA. Available: http://www.ota.com/organic/mt/export_chapter3.html (accessed 2 December (2008)).

Rizk, H. F. S., El-Abssawy, A. A., Khoder, M. L. (2002). An analysis of pesticide impact on air quality, especially surface ozone. *Environmental Management and Health* 13, 152-162.

Pawar, C. (2007). *Organic Farming: Generality, Status, Definition, Methodology and Benefits*. Shree Vivekanand Training and Research Institute, Mandvi.

Pretty, J. (2005). *The Pesticide Detox*. Earthscan, London.

Sanfilippo, D. (2007). *Food and Fairness Briefing on Hidden Costs of Pesticide Use in Africa*. Pesticide Action Network UK, London.

Sanfilippo, D. (2007). *My Sustainable T-shirt: A Guide to Organic, Fair Trade, and Other Eco Standards and Labels for Cotton Textiles*. Pesticide Action Network UK, London.

Sanfilippo, D. (2005). *Organic Cotton in the UK*. Pesticide Action Network UK, London, available: <http://www.pan-uk.org/Projects/Cotton/pdfs/market2005.pdf> (accessed 2 December 2008).

Sinden, J. A., Griffith, G. (2007). combining economic and ecological arguments to value the environmental gains from control of 35 weeds in Australia. *Ecological Economics* 61, 396-408.

Soil association (2007). *Organic Textiles - Some Common Questions Answered*. available:

http://www.soilassociation.org/web/sa/saweb.nsf/printable_library/NT000097A2
(accessed 2 December 2008).

Soth, J. (2007). *Pros and Cons of Climate Change; Additional Income for Organic Cotton Farmers Via Carbon Certificates*. (Internal presentation, received through email from F. Eyhorn).

Ton, P. (2002). *The International Market for Organic Cotton and Eco-Textiles*. Pesticide Action Network UK, London.

Tregear, A., Dent, J. B., McGregor, M. J. (1994). The demand for organically grown produce. *British Food Journal* 9, 21-25.

United States Department of Agriculture (2007). *Cotton Ginning: From Seed Cotton to Lint*. available: from: <http://www.swcgrl.ars.usda.gov/ginning.htm> (accessed 2 December 2008).

United States Department of Agriculture (2007). *Overview of a Cotton Gin*. USDA. available: <http://www.ars.usda.gov/Main/docs.htm?docid=5260andpage=5> (accessed 12 July 2008).

United States Department of Agriculture (2009). Trade statistics USDA reports, 2000-2009: Available from

<http://www.fas.usda.gov/cotton/circular/2002/05/table01.pdf>,
<http://www.fas.usda.gov/cotton/circular/2006/08/table01.pdf>, and
<http://www.fas.usda.gov/cotton/circular/2009/March/cottonfull0309.pdf>.

University of Rochester Medical Centre (2004). *Nanotechnology and Health: Rochester Expert Warns of Toxicity in New Wave of Science*. University of Rochester Medical Centre. available:

<http://www.sciencedaily.com/releases/2004/04/040407081930.htm> (accessed 12 July 2008).

Verdict (2007). *The Future of Ethical Sourcing*. Verdict Research, London.

Van Elzakker, B. (1999). *Comparing the Costs of Organic and Conventional Cotton*. In D. Myers and S. Stolton (eds.) *Organic Cotton: from Field to Final Product*. Intermediate Technology Publications, London.

Walley, K. Custance, P., Parsons, S. (2000). UK consumer attitudes concerning environmental issues impacting the agrifood industry. *Business Strategy and the Environment* 9, 355-366.

Willer, H., Yussefi., Eds . (2007). *The World of Organic Agriculture - Statistics and Emerging Trends* (2007). International Federation of Organic Agriculture Movements, Bonn, Germany and Research Institute of Organic Agriculture, Frick, Switzerland.

Wilson, C. (2000). Environmental and human costs of commercial agricultural production in South Asia. *International Journal of Social Economics* 27, 8-38.

Yougov surveys (2006). *Marks and Spencer: ethical adverts boost corporate reputation*. Yougov, London. available:
<http://www.brandindex.com/content/newsMain.asp?jID=3andaId=2855andsID=10andwID>, (accessed 10 October 2008).

Yougov Surveys (2007). *Ethical brands, the business*. Yougov, London. available:
<http://www.brandindex.com/content/newsMain.asp?jID=3andaId=4926andsID=10andwID=0andUID=> (accessed 12 December 2008).

Zuberi, M. I. (1998). Environmental, sociocultural and developmental linkages in a south Asian setup International. *Journal of Socia*

INSTITUTIONALISING IDEALISM: PATTERNS IN THE ADOPTION OF CORPORATE SOCIAL RESPONSIBILITY PRACTICES

Alison Rieple, Jon Gander and Adrian Haberberg

Abstract

In this conceptual paper we discuss the idiosyncratic institutionalization of CSR practices. Our discussion highlights idealism as the primary stimulus for the instigation of CSR within organizations. We argue that CSR institutionalization differs from the 'normal' pattern in which there is an increasing recognition within a field of the instrumental benefits of a practice, moving towards isomorphic conformity where social rather than economic benefits are sought. With CSR institutionalization, initiatives arise out of socially embedded concerns, and rapidly move to a condition of coercion and then to mimetic isomorphism, in the process bypassing or truncating an instrumentally-motivated stage of development. Because the primary locus of CSR is outside the immediate organizational field, the expected pattern of institutional development is subject to a period of flux and debate exacerbated by CSR's high visibility to media and civil society and by the lack of clear instrumental benefits for the firm.

Keywords: Corporate social responsibility, CSR, Institutionalization, Practice adoption, Idealism

Introduction

Corporate Social Responsibility (CSR) has generated an extensive discussion across business-based journals, mainstream journalism, and corporate literature. This literature (see Lee, 2008 for a comprehensive historical review) includes investigations and discussions of the nature of CSR, normative arguments for and against it as part of good management praxis, and economic tests of the link between CSR and corporate financial performance (Orlitzky et al. 2003). More recently, as socially responsible corporate behavior has entered the mainstream of management thinking (Economist, 2008; Lee, 2008) scholars have turned their attention to the question of what induces managers to pursue it: the cognitive processes at work during the adoption decision (Basu & Palazzo, 2008) and the institutional environment that frames it (Campbell, 2006, 2007; Winn & Angell, 2000).

In this paper we focus on certain characteristics that we infer to be common to all practices labeled as CSR, namely idealism, moral stance, a concern for the wellbeing of stakeholders, and drawing on wider concerns for human rights and sustainability (Garriga & Melé, 2004). Our model highlights the important role of idealism as the primary stimulus for the instigation of CSR practices. We also argue that CSR institutionalization differs from the 'normal' pattern in which there is an increasing recognition within a field of the instrumental benefits of a practice moving towards isomorphic conformity where social rather than economic benefits are sought.

Instead CSR institutionalization follows a pattern in which initiatives arise out of socially embedded concerns, rapidly moves to a condition of coercion and then to mimetic isomorphism, and in the process bypasses or truncates an instrumentally-motivated stage of development. Because the primary locus of CSR is owned by stakeholders from outside the immediate organizational field, the expected pattern of institutional development is subject to a period of flux and debate exacerbated by CSR's high visibility to media and civil society (Bansal, 2005; Maignan & Ralston, 2002) and by the lack of clear instrumental benefits for the firm.

We begin by reviewing the literature on CSR and institutionalization in order to propose an alternative perspective on the process of institutionalization specific to the idiosyncrasies of CSR praxis.

Institutional Theory

Institutional theory, as it relates to organisations, is concerned with the way in which a practice is adopted by a field leading to its eventual reification as a social fact which guides behaviour. In most treatments of institutionalisation early adopters of new practices, the precursors of institutions, are driven by a desire to improve performance, a rational maximisation approach (Tolbert & Zucker, 1983). However as practices become more widespread they become detached from performance benefits and the locus of the adoption decision becomes increasingly exogenous to the organisation. Practices then begin to take on a certain legitimacy and further adoption becomes more structural, and unconscious (Meyer & Rowan, 1977, DiMaggio and Powell, 1983).

This process of institutionalization has been examined by a range of theorists (Dacin et al., 2002; Powell & DiMaggio, 1991; Scott, 1987; Tolbert & Zucker, 1996; Zucker, 1987), who have identified the factors that influence whether practices become embedded within organizations and shared between them. These include a mix of instrumental/economic and social considerations. Instrumental considerations include whether it is possible to make a prior estimation as to a practice's value and effect; how visible the benefits are post adoption (Rogers, 2003); and the extent to which considerations of social contagion and network externalities render its value dependent upon aggregate demand (Becker, 1991; Kretschmer et al., 1999). These may determine whether managers emulate practices seen in other organizations in the belief that rivals' adoption of a practice is indicative of private information as to its value (Haunschild, 1993; Strang & Macy, 2001). Emulation may arise from the desire to replicate the instrumental benefits of a practice, while uncertainty as to the true extent of such benefits makes non-mimetic adoption less likely (Aragón-Correa & Sharma, 2003; Greve, 1998). As further sets of managers decide to imitate the initial emulators, an informational cascade (Bikhchandani et al., 1992; Davis & Greve, 1997) may lead to widespread 'bandwagon' adoption of a practice in the belief that it will bring benefits, followed by its equally widespread abandonment should those benefits turn out to be ephemeral or illusory (Bikhchandani et al, 1992; Rao et al., 2001; Strang & Macy, 2001).

Social considerations include issues to do with legitimacy and power (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Suchman, 1995). Legitimacy may be defined as: ‘a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions’ (Suchman, 1995: 574). It confers personal and organizational rewards: improved survival prospects for the organization (Baum & Oliver, 1991, 1992; Singh et al., 1986); enhanced status for its members; and enhanced access to resources for both (Meyer & Rowan, 1977). Power relates to stakeholders’ control of resources which confers upon them what Suchman (1995) terms ‘pragmatic legitimacy’ and may allow them to force through the adoption of a given practice; DiMaggio and Powell (1983) term this ‘coercive isomorphism’. The extent to which legitimation is the driving force of adoption relative to instrumental considerations is unclear (Kraatz & Moore, 2002; Kraatz & Zajac, 1996; King & Lenox, 2000; Rivera & de Leon, 2004) suggest that the threat of resource sanctions is a necessary driver of institutionalization, and that considerations of legitimacy alone are insufficient to influence practice adoption.

Corporate Social Responsibility

Corporate social responsibility (CSR) encompasses “the economic, legal, ethical, and philanthropic expectations placed on organization by society at a given point of time” (Carroll & Buchholtz, 2000: 35) and a corporation’s concern for society or for the impact its actions make on society (Boatright, 2007; De George, 2006). It is a broad concept whose boundaries are conceived differently by different theorists and adopters (Carroll, 1979; Hill, Stephens, & Smith, 2003; Snider et al., 2003; Wilson, 2000). However there are a number of defining characteristics that can be ascribed to CSR practices.

The first is an idealistic moral dimension; the decision to adopt necessarily requires value judgments as to whether it is right or wrong, alongside judgments of its economic worth or cost. This is reflected in the normative, philosophical debate as to whether ethical considerations or the political position of business in society confer any responsibility on managers to take account of the interests of stakeholders other than shareholders and hence to focus deliberately on issues beyond and even in place of profit maximization.

The second characteristic is that economic benefits are tangential to the proclaimed purpose of the practice, which is instead powered by values that reside in civil society. Situated in a discourse of public good, interest in the practice is likely to be high and there is the potential for it to achieve notoriety, driven perhaps by attention from a knowledgeable, opinionated, media (Bansal, 2005).

Linked to these characteristics is the third idiosyncrasy of CSR practices; their durability in the face of conflicting or unclear evidence for their instrumental benefits. CSR proponents are able to draw sustenance from outside the organizational field allowing them to counter demands from within the field for the economic benefits to be evidenced.

Towards a re-Conceptualization of CSR Institutionalization

A number of theorists have considered the institutionalization of CSR practices (Ackerman, 1973; Jennings & Zandbergen, 1995; Bansal & Roth, 2000; Winn & Angell, 2000; Moir, 2001; Christmann, 2004; Bansal, 2005; Clemens & Douglas, 2005; Sharma & Henriques, 2005).

We suggest, however, that none of these writers has identified the particular attributes of CSR practices and which we argue results in a pattern of adoption that is significantly different from that of other practices. We propose that the institutionalization of a CSR practice follows five stages in which the relative importance of idealism, economic rationality and social legitimation varies as the practice becomes institutionalized. During this process the locus of primary motivation for the adoption of the practice by the firm moves from outside the organizational field to inside and back out again.

Isolated Implementation/Idealism

Given their origin in civil society, CSR practices can emerge from a wide array of sources; philosophical writings, social movements such as environmentalism, religious conviction, or a personal sense of moral purpose or outrage. Though engaged in what could be considered an entrepreneurial act the motivation of CSR adopters at this stage contrasts sharply with that of the classic entrepreneur. It is at best sketchily related to any instrumental benefits that might accrue and is primarily directed towards realizing public, rather than private, benefits (Austin et al., 2006; Emerson, 2003, 2006). This phenomenon has also been observed in the case of practices outside the normal remit of CSR where idealism is strongly to the fore, such as in the early days of the world wide web and the open source software movement (Economist, 2000; Feller & Fitzgerald, 2002; Stallman, 1999).

Lantos (2001) referred to this type of adoption path as altruistic CSR; we prefer the term 'idealistic CSR', since the motivation in question may come as much from the adopter's desire to do what is 'right' as from any inclination to benefit others. Thus, some early adopters of company pension schemes in the UK were motivated by the wish to avoid the repugnant task of choosing which supplicant retirees were deserving of a company's limited largesse (Hannah, 1985). The early adopters of organic farming were driven by a desire to avoid harming the land, based in part on scientific observations, but also on a set of distinct values (Egri, 1997).

The development of the practice is quite likely to be piecemeal, and undertaken without support or resources from the organizational field. For example, techniques for organic farming in the southern Mediterranean countries of Europe were developed by the farmers themselves, with scientists and researchers becoming involved only in the 1980s. This individualistic approach is a matter of necessity rather than choice: the moral stance of the founders will stimulate an evangelical attitude and an openness to share ideas with potential emulators or converts.

Coercive Adoption

The second stage of CSR institutionalization is coercion. Key stakeholders in civil society will begin to lobby for adoption. These stakeholders include government agencies, customers, trades unions as well as lobbyists. Codes of practice and certification schemes may appear without having been worked through or promoted by the organization field, and compliance with these will increasingly become a condition for doing business, an example being membership of the Dow Jones Sustainability or FTSE 4 Good indices, even if their value is questioned (Chatterji & Levine, 2006). There will be clear and unavoidable economic penalties for non-adoption in terms of ineligibility for grants and tenders, and perhaps restricted access to loans. Adopters at this point may well lack any semblance of idealistic enthusiasm for the practice, and implement it either defensively or reactively (Carroll, 1979), with compliance being a matter of upgrading formal systems to the point where managers can 'tick the boxes' when compliance is audited. In the UK currently there are pressures from government and health professionals on food manufacturers to label products with their salt, sugar and calorie content in an attempt to improve consumers' health. Firms for their part are only selectively choosing to do this, depending on their motives (King & Lenox, 2000; Rivera & de Leon, 2004). It is unclear whether there are any instrumental benefits to this practice at this stage.

Mimetic (Bandwagon) Isomorphism

It is a distinctive attribute of CSR practices that they have the potential to quickly gain prominence as an area of public interest, driven perhaps by media attention, pronouncements by legislators and other political figures, or by a scandal (Bansal, 2005). The upshot of a sudden surge of attention of this kind may be an information cascade that results in widespread, 'bandwagon', adoption of the practice, perhaps in a bowdlerized form of mimetic isomorphism. Bansal (2005), when examining the adoption of sustainable development practices by large, well-established, publicly quoted corporations in three capital-intensive Canadian sectors, found that media pressure was a coercive factor at an early stage of the institutionalization path.

However, the lack of any clear instrumental benefits makes this a risky phase for some in the organization field. The current moves by corporations to offset their carbon dioxide output (Daley, 2007; Gettler, 2007; Moore, 2008; Watts, 2006) appears to have led to premature judgments involving misinterpretations of scientific and other evidence, resulting in extreme cases in measures that achieve neither public nor private benefit. The adoption of bio-fuels in America and Europe appears to be a case in point (Berger & Vidal, 2008; Chakraborty, 2008; Clout, 2008; Farrow, 2007; Olive, 2008; Thomson, 2008).

Because of the potential for this conflict between competing logics, the organizational and civil society fields, relationships between the initial adopter constituency and the newer adopters may become increasingly emotional as the lack of ideological motivation in the mass of adopters becomes plain. Accusations of insincerity, bandwagon-jumping, or 'greenwashing' may emerge as idealists seek to

maintain some degree of control and differentiation (see, for example, Brown, 1994; Lubbers, 2002; Watts, 2006). Criticism has been leveled from some quarters at the 'industrialization' of organic food production (Clark, 2007; Shea, 2007). Similarly, Virgin Atlantic's 2008 test flight using biofuels in a Boeing 747 was dismissed in some quarters as a 'stunt' or 'high-level greenwash' (Barkham, 2008; Marotte, 2008; Williams 2008). However, one interpretation of this move is that it was an experimental effort to identify the instrumental benefits of the CSR practice, something that would actually be necessary for its institutionalization within the organization field. Such hostile reactions impede the adoption of the practice.

The State of Flux

The disillusionment of firms with public reactions to their efforts, and the persistence of managerial and shareholder doubts over instrumental benefits, results in a re-examination of the assumptions underpinning CSR. This state of flux fits with Porter and Kramer's assessment of the current stage of CSR adoption as a 'hodge-podge of uncoordinated CSR and philanthropic activities disconnected from the company's strategy that neither make any meaningful social impact nor strengthen the firm's long-term competitiveness' (Porter & Kramer, 2006: p 83). The state of flux is resolved by a move towards instrumentally-motivated CSR or 'enlightened self interest' (Moir, 2001; Wilson, 2004). This is where detailed attention is given to the financial pay-offs to CSR implementation (Winn & Angell, 2000) as well as to its social benefits. This represents a shift towards a more endogenously-driven period of CSR adoption.

Institutionalized Adoption: Practice Taken for Granted/ Normative

Only when the economic case for a CSR practice has become clearer, assuming that this ever happens, is it likely to be more widely adopted and finally institutionalized. These may include cost savings, the ability to charge premium prices for their offerings, or the ability to attract, motivate and retain talented employees (Donaldson & Preston, 1995; Jones, 1995), or the fear of competitors gaining share from ethically motivated consumers. Recognition of the instrumental benefits may be triggered by particular events; the uptake of organic farming in Europe was assisted by, for example, the discovery of BSE in British cattle in 1989 (Lynggard, 2007).

At this point the path of CSR institutionalization converges with that of normal practices. When institutionalized, CSR becomes part of the recipe or rules of the game of the industry (Spender, 1989) or strategic group (Porac, et al., 1989). Perceptions as to its desirability are shared by buyers, suppliers and other external constituencies alike (Tushman & Romanelli, 1985). Significant numbers of customers and influential stakeholders begin to question the integrity or intelligence

of non-adopters; the moral content of CSR practices may be expected to lend extra sharpness to such questions.

However, the institutionalization of CSR is likely to be partial, local, and in a constant state of negotiation – more so than normal practices. It is arguable that no CSR practice has been truly institutionalized within a broad organizational field or even an industry, and certainly not within an international field. Discovery of unanticipated consequences, and questionable evidence over the economic case (Utting, 2000; Pedersen, 2007) may result in a de-institutionalization of the CSR practice (Scott, 2008). The recent withdrawal of pension commitments by firms, resistance by SMEs to maternity leave (and even stronger resistance to paternity leave), and the resuscitation of nuclear power as an ‘environmentally-friendly’ technology are examples of this. We suggest that higher levels of societal involvement and subsequent discursive examination of the principles and practical applications of CSR make this more likely to happen than less visible, lower profile organizational practices.

Discussion and Suggestions for Further Research

In this paper, we have identified five adoption phases in the institutionalization of a CSR practice. We have suggested that, contrary to the traditional path to institutionalization, the initiatives for CSR practices typically originate outside the organizational field. Their characterization as part of the social good, as well as the role of the media in focusing on the issues, tends to transform a theoretical ideal to the status of best practice or regulatory requirement without it ever having been worked through the organization. This is often supported by formal institutions such as governmental regulations or awards, which would normally emerge at a much later stage in the institutionalization process. This means that the stage of experimentation and the causal identification of instrumental benefits that occurs at the early stages of other institutional developments is skipped. We hypothesize that this may have unanticipated consequences; ‘prizes’ such as the Corporate Conscience Award, awarded by the US-based Council on Economic Priorities, or a place on the FTSE 4 Good index, which are intended to promote socially responsible practices in firms, may not achieve this. The award of the Corporate Conscience Award and the from the US Environmental Protection Agency’s Climate Protection Award to Enron (Bradley, 2008) appears at least to indicate exogenous coercive factors that are not as yet properly operational. A focus on the achievement of such premature awards has the potential to lead to unanticipated consequences (Merton, 1936), such as distracting firms from focusing on their own business strategies (Porter & Kramer, 2006), or wasting resources on measures of esteem that are at best inaccurate and at worst misleading.

One distinctive feature of CSR is its idealistic content, which has profound effects upon practice adoption. At the inception of the practice, it is characterized by a pre-entrepreneurial period during which idealism reigns and instrumental considerations of profit are largely absent. Because of the high levels of public attention that the idealistic aspects of a CSR practice can attract, its social acceptability is determined by a broader constituency than an organizational field, and considerations of social

fitness have a more profound influence. The emotions attached to CSR also make it a potentially important determinant of buyer power, although the signals from consumers may be hard to interpret by firms who are working to already-established, and probably contradictory, industry recipes.

The early coercion that we claim is typical of CSR adoption places some organizations in an uncomfortable position, exhorted to implement ideologically-driven practices that have not been demonstrated to generate economic benefits. Because coercive forces kick in early, organizations have not yet had the opportunity to try to identify workable applications of CSR ideals. Organizations are thus placed in an invidious position in which their early attempts to identify instrumental benefits to those CSR values inscribed in regulatory or best practice metrics are accused of being cynical by lobbyists such as stopgreenwashing.org. We suggest that this period of flux may not be an opportunistic attempt by firms to capture the outcomes that favor them but rather represents an attempt to experiment and perform the necessary operational refinements that would in a normal institutional development path have preceded the development of sectoral standards and ranking tables. In this experimental context, it seems that firms are tempted to exaggerate their prowess, which engenders a hostile and emotional reaction from wider society leading to a retrenchment and potential reluctance to implement further CSR initiatives. Firms that are able to recognize that this stage is experimental and hold back their communications' function may encounter less hostile reactions.

In conclusion, our examination of CSR practice adoption has allowed us to surface the important role of idealism, which has been underplayed in previous explanations of institutionalization processes. In this paper, we have examined the manner in which the interaction between idealism and instrumentalism unfolds over time and how the interplay between idealism and public concern affect the institutionalization of CSR practices.

References

- Ackerman, R. (1973). How companies respond to social demands. *Harvard Business Review* (July-August), 88-98.
- Aragôn-Correa, J. A. & Sharma S.(2003). A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review* 28:1, 71-88.
- Austin, J. Stevenson, H. & Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different or both? *Entrepreneurship Theory and Practice* 30: 1, 1-22
- Bansal, P. (2005). Evolving sustainably: A longitudinal study of corporate sustainable development. *Strategic Management Journal* 26:3, 197-218.
- Bansal, P. & Roth, K. (2000) Why companies go green: A model of ecological responsiveness. *Academy of Management Journal* 43:4: 717-36.
- Barkham, P. (2008). Virgin's biofuel is a PR stunt says BA boss. *The Guardian* 15 March, 11.
- Basu, K. & Palazzo, G. (2008). Corporate social responsibility: a process model of sensemaking. *Academy of Management Review* 33: 1, 122–136.
- Baum, J. & Oliver, C. (1991). Institutional linkages and organizational mortality. *Administrative Science Quarterly* 36, 187-218.
- Baum, J. & Oliver, C. (1992). Institutional embeddedness and the dynamics of organizational populations. *American Sociological Review* 57:4, 540-559.
- Becker, G. (1991). A note on restaurant pricing and other examples of social influences on price. *Journal of Political Economy* 99:5, 1109-1116.
- Bikhchandani, S., Hirshleifer, D., & Welch, I. (1992). A theory of fads, fashion, custom and cultural change and informational cascades. *Journal of Political Economy* 100:5, 992-1026.
- Boatright, J. R. (2007). *Ethics and the Conduct of Business, 5th edition*. Upper Saddle River, NJ: Prentice Hall.
- Borger, J. & Vidal, J. (2008). New study to force ministers to review climate change plan. *The Guardian* 19 June, 1
- Bradley, R. (2008). *Corporate social responsibility and energy: lessons from Enron*. Lindenwood University St Charles, MO: Institute for Economics and the Environment.
- Brown, S. (1994). European chemical industry - clean-up or "greenwash"? *Reuters News* 1 June.

- Campbell, J. (2006). Institutional analysis and the paradox of corporate social responsibility. *American Behavioral Scientist* 49:7, 925-938.
- Campbell, J. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review* 32:3, 946-967.
- Carroll, A. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review* 4:4, 497-505.
- Carroll, A. & Buchholtz, A. K. (2000). *Business and society*. Cincinnati, OH: South-Western College.
- Chakraborty, A. (2008). Secret report: biofuel caused food crisis. *The Guardian* 4 July, 1.
- Chatterji, A. & Levine, D. (2006). Breaking down the wall of codes: Evaluating non-financial performance measurement. *California Management Review* Winter.
- Christmann, P. (2004). Multinational companies and the natural environment: Determinants of global environmental policy standardization. *Academy of Management Journal* 47:5, 747-760.
- Clark, L. (2007). Business as usual? Corporatization and the changing role of social reproduction in the organic agrofood sector. *Studies in Political Economy: A Socialist Review* 80, 55-74.
- Clemens, B. & Douglas, T. (2005). Understanding strategic responses to institutional pressures. *Journal of Business Research* 58:9, 1205-1213.
- Clout, L. (2008). Biofuels are blamed for increase in food prices. *The Daily Telegraph* 19 June, 6.
- Dacin, M., Goodstein, J., & Scott, W. R. (2002). Institutional theory and institutional change: introduction to the special research forum. *Academy of Management Journal* 45:1, 45-57.
- Daley, J. (2007). Beware the forest of green schemes, *The Independent* 20 October.
- Davis, G. & Greve, H. (1997). Corporate elite networks and governance changes in the 1980s. *American Journal of Sociology* 103:1, 1-37.
- De George, R. T. (2006). *Business Ethics, 6th edition*. Upper Saddle River, NJ: Prentice Hall.
- DiMaggio, P. & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review* 48, 147-160.
- Donaldson, T. & Preston, L. (1995). The stakeholder theory of the corporation: Concepts, evidence and implications. *Academy of Management Review* 20:1, 65-91.

- Economist. (2008). The next question, 17 January.
- Egri, C. (1997). War and peace on the land: An analysis of the symbolism of organic farming, *Studies in Cultures, Organizations and Societies* 3:1, 17-40.
- Emerson, J. (2003). The blended value proposition: Integrating social and financial returns. *California Management Review* 45:4, 35-51
- Emerson, J. (2006). Moving ahead together: Implications of a blended value framework for the future of social entrepreneurship. In A. Nicholls (Ed). *Social Entrepreneurship: New Models for Sustainable Social Change*. Oxford: Oxford University Press, 391-412
- Farrow, T. (2007). Biofuels switch a mistake, say researchers. *The Guardian* August 17.
- Garriga, E. & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics* 53, 51-71.
- Gettler, L. (2007). Carbon claims can be a load of hot air. *The Age* 3 May, 5.
- Greve, H. R. (1998). Managerial cognition and the mimetic adoption of market positions: What you see is what you do. *Strategic Management Journal* 19, 967-988.
- Hannah, L. (1985). Why employer-based pension plans? The case of Britain. *The Journal of Economic History* 45:2, 347-354.
- Haunschild, P. (1993). Interorganisational imitation: The impact of interlocks on corporate acquisition activity. *Administrative Science Quarterly* 38, 564-592.
- Hill, R., Stephens, D., & Smith, I. (2003). Corporate social responsibility: An examination of individual firm behavior. *Business and Society Review* 108:3, 339-364.
- Jennings, P. & Zandbergen, P. (1995). Ecologically sustainable organizations: An institutional approach. *Academy of Management Review* 20, 1015-1052.
- Jones, T. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review* 20:2, 404-441.
- King, A., & Lenox, M. (2000). Industry self-regulation without sanctions: The chemical industry's responsible care program. *Academy of Management Journal* 43:4, 698-716.
- Kraatz, M. & Moore, J. (2002). Executive migration and institutional change, *Academy of Management Journal* 45:1, 120-143.
- Kraatz, M. & Zajac, E. (1996). Exploring the limits of the new institutionalism: the causes and consequences of illegitimate organizational change. *American Sociological Review* 61:5, 812-836.

- Kretschmer, M., Klimis, M., & Choi, C. J. (1999). Increasing returns and social contagion in cultural industries. *British Journal of Management* 10, 61-72.
- Lantos, G. (2001). The boundaries of corporate social responsibility. *Journal of Consumer Marketing* 18:7, 595-630.
- Lee, M. (2008). A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. *International Journal of Management Reviews* 10:1, 53-73
- Lubbers, E. (2002). Battling big business: Countering greenwash, infiltration and other forms of corporate bullying. Monroe, Maine: Common Courage Press.
- Lynggaard, K. (2007). The institutional construction of a policy field: A discursive institutional perspective on change within the common agricultural policy. *Journal of European Public Policy* 14:2, 293-312.
- Maignan, I. & Ralston, D. A. (2002). Corporate social responsibility in Europe and the U. S.: Insights from businesses' self-presentations, *Journal of International Business Studies* 33, 497-514.
- Margolis, J., & Walsh, J. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly* 48, 268-305.
- Marotte, B. (2008). Wild green yonder? *The Globe & Mail*, 25 February, A3.
- Merton, R. (1936). The unanticipated consequences of purposive social action. *American Sociological Review* 1:6, 894-904.
- Meyer, J., & Rowan, B. (1977). Institutional organizations: Formal structure as myth and ceremony. *American Journal of Sociology* 83, 340-363.
- Moir, L. (2001). What do we mean by corporate social responsibility? *Corporate Governance* 1:2, 16-22.
- Moore, L. (2008). Carbon neutral claims doubted. *Montreal Gazette* 31 January, B1.
- Olive, D. (2008). Ill-conceived rush to ethanol. *The Toronto Star* 29 June, A06.
- Oliver, C. (1997). The influence of institutional and task environment relationships on organizational performance: The Canadian construction industry. *Journal of Management Studies* 34:1, 99-124.
- Orlitzky, M., Schmidt, F., & Rymes, S. (2003). Corporate social and financial performance: a meta analysis. *Organization Studies* 24:3, 403-441.
- Porac, J., Thomas, H. & Baden-Fuller, C. (1989). Competitive groups as cognitive communities: The case of Scottish knitwear manufacturers. *Journal of Management Studies*, 26, 397-419.

- Porter, M., & Kramer, M. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review* 80:12, 56-69.
- Porter, M., & Kramer, M. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review* 84:12, 78-92.
- Powell, W. & DiMaggio, P. (1991). Introduction. In W. Powell & P. DiMaggio (Eds.). *The new institutionalism in organizational analysis* Chicago, IL: University of Chicago Press, 1-38.
- Pedersen, R. (2007). Perceptions of performance: How European organisations experience EMAS registration. *Corporate Social Responsibility and Environmental Management* 14, 61-73.
- Rao, H. Greve, H., & Davis, G. F. (2001). Fools gold: Social proof in the initiation and abandonment of coverage by Wall Street analysts. *Administrative Science Quarterly* 46, 502-526.
- Rivera, J. & de Leon, P. (2004). Is greener whiter? Voluntary environmental performance of western ski areas. *Policy Studies Journal* 32:3, 417-437.
- Rogers, E. R. (2003). *Diffusion of innovations, 5th edition*. New York: Free Press.
- Scott, W. (2008). *Institutions and organizations: ideas and interests, 3rd Edition*. Thousand Oaks: Sage.
- Scott, W. (1987). The adolescence of institutional theory. *Administrative Science Quarterly* 32, 493-511.
- Sharma, S. & Henriques, I. (2005). Stakeholder influences on sustainability practices in the Canadian forest products industry. *Strategic Management Journal*, 26:2, 159-180.
- Shea, C. (2007), New grub street. *Columbia Journalism Review*, May-June. http://www.cjr.org/essay/newgrub_street.php
- Singh, J., Tucker, D., & House, R. (1986). Organizational legitimacy and the liability of newness. *Administrative Science Quarterly* 31, 171-193.
- Snider, J., Paul, R., & Martin, D. (2003). Corporate social responsibility in the 21st century: A view from the worlds most successful firms. *Journal of Business Ethics* 48:2, 175-187.
- Spender, J. -C. (1989). *Industry recipes – The nature and sources of managerial judgment*. Oxford: Blackwell.
- Stallman, R. (1999). The GNU operating system and the free software movement. In *O'Reilly Open sources: Voices from the open source revolution*. [Referred to on 3.10.2006]. Available: <http://www.oreilly.com/catalog/opensources/book/stallman.html>,

- Strang, D., & Macy, M. (2001). In search of excellence: Fads, success and adaptive emulation. *American Journal of Sociology* 107:1, 147-182.
- Suchman, M. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*. 20:3, 571-610.
- Thomson, J. (2008). Oxfam: Biofuel drive pushes 30m to poverty. *The West Australian*, 28 June, 69.
- Tolbert, P. & Zucker, L. (1983). Institutional sources of change in the formal structure of organizations: the diffusion of civil service reform, 1880-1935. *Administrative Science Quarterly*, 28, 22-39.
- Tolbert, P. & Zucker, L. (1996). The institutionalization of institutional theory. In S. R. Clegg, C. Hardy, & W. Nord (Eds.). *Handbook of Organization*. London: Sage, 175-190.
- Tushman, M. & Romanelli, L. (1985). Organizational evolution: A metamorphosis model of convergence and reorientation. In L. L. Cummings, & B. M. Staw (Eds.), *Research in Organizational Behavior*. Greenwich, CT: JAI Press, 171-222.
- Utting, P. (2000). Business responsibility for sustainable development. *Geneva 2000 Occasional Paper 2*. United Nations Research Institute for Social Development. Available:
[http://www.unrisd.org/unrisd/website/document.nsf/0/1ca8a49e3513de1c80256b610059ba0d/\\$FILE/utting.pdf](http://www.unrisd.org/unrisd/website/document.nsf/0/1ca8a49e3513de1c80256b610059ba0d/$FILE/utting.pdf)
- Watts, R. (2006). Greenwash: Adding up the cost. *The Sunday Telegraph*, 8 October, 8.
- Williams E. (2008). First biofuel flight dismissed as Virgin stunt. *Independent*, 25 February.
- Wilson, I. (1975). What one company is doing about today's demands on business. In G. Steiner, (Ed). *Changing Business-Society Interrelationships*. Los Angeles, CA: Graduate School of Management, UCLA. Cited in Carroll (1979) op. cit.
- Wilson, I. (2000). The new rules: Ethics, social responsibility and strategy. *Strategy and Leadership* 28:3, 12-16.
- Wilson, I. (2004). The agenda for redefining corporate purpose: five key executive actions. *Strategy and Leadership* 32:1, 21-26.
- Winn, M., & Angell, L. (2000). Towards a process model of corporate greening. *Organization Studies* 21:6, 1119-1147.

CULTURAL CONTEXT OF CSR: COMPARATIVE STUDY OF DANNISH AND CHINESE COMPANIES

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Abstract

With an outset in the two perspectives of the nation-institutions (countries) and the interpretation of culture by business organizations, this paper reflects on whether or not cultural differences matter in business adoption of CSR strategies and if so, how this is reflected in companies.

Based on the foundations of Hofstede's cultural studies, Historical Institutionalism, Social Constructivism and Stakeholder theories, comparative analyses were carried out in the contexts of China and Denmark respectively. Information on nation-institutions was sourced from literature reviews, whilst data on business organizations was sampled from their existing reports and by way of a questionnaire survey.

The analyses show that the influence of culture on CSR policies appears to be relevant however its impact and influence on the companies in each nation-institution is notably different. Globalization also has an influence, however the mechanism differs. The development of CSR waves and modes vary and can be related to the capacity building inherent in the nation-institutions. Lastly, despite the variation in capacity building and CSR policies, we actually found that the performance in sustainability reporting were similar in China and Denmark.

Keywords: CSR, Culture, Globalization, Sustainability, Reporting, Institutions

Introduction

Corporations have had to adapt to various forms of pressures, whether from within the organisation or the communities where they operate, or internationally. Corporate social responsibility (CSR) can be said as one of the new pressures companies have had to face due to the increasing concern of the influence that companies have on society. CSR is interpreted as the continuing voluntary commitment and effort by businesses to contribute to economic development while improving its environmental performance and enhancing the quality of life of the workforce and their families as well as of the community and society at large.

With the advent of technology, goods and information are now moving faster, the world as we know it is becoming more and more closely interconnected. Thus, the question on how CSR fits in society, how it works in companies and if there are differences when set in varying locations become important to know. Is it the cultural norms and behaviours that decide the depth of commitment to the policy or the level it is carried out in the company? What does that mean to the countries and to the way CSR is conducted? How do they adapt and translate internationalism or globalization?

What are the differences in the way they adopt these international values and how does it relate to the company itself? How does the culture of the company influence the policy or does it have no influence? Understanding the culture of a country is important in conducting the day-to-day operations in the country. But is this truly so? Or does globalization force people to adapt so much so that culture is no longer existent in companies; rather it only exists when one is outside business?

In anthropology, culture refers to inherited artefacts, good ideas, habits and value; other definitions suggest knowledge, belief, arts and morals (Burke 2004). The authors define culture as a common identity and knowledge that are shared by collective group of persons. Culture is sometimes taken for granted in that it is so much ingrained in a person or in a group, that information that are already common knowledge are no longer that conspicuous since like-minded persons already have this realisation and the piece of information is familiar and thus most are apathetic. It is also with this common knowledge that they share, that makes behaviour, attitude and reactions become also similar in this collective group. Thus, it is in this perspective that makes the idea of comparing Danish and Chinese cultures, two contrasting cultures, appears relevant since the differences can then be more conspicuous. This research shows that social norms and behaviours can be shown in the way companies conduct business, specifically through their CSR projects and how their CSR policy functions within the company.

The Chinese philosophical foundations of Confucius and Mencius, as well as its traditional hierarchical system are influential in the governance of Chinese companies. The cultural institution of Danish people is instrumental in the historical formation of its social welfare state, and this is believed to have influenced corporations in the way they conduct business and possibly its commitment to CSR.

Hofstede (2000) gives another perspective on culture, in which he refers to culture as a kind of mental programming, a continuous process in which every person acquires the patterns of thinking, feelings, and potential acting, throughout their entire lifetime. With this, he describes that everyone belongs to a number of different groups and categories of people at the same time, therefore, people carry several layers of mental programming that corresponds to different levels of culture. Within this research, national culture is particularly important as the authors would like to distinguish between the Chinese and the Danish attitudes towards corporate social responsibility, from a nation's point of view. Although with Hofstede's approach, nations and societies are not equated, and he distinguishes that common culture applies more to societies rather than nations. The five dimensions of culture by Hofstede (2000) are as follows:-

(i) Small vs. Large Power Distance

The first dimension, power distance, is very much related to inequality in a society. Hofstede (1991) defines power distance as *the extent to which the less powerful members of institutions and organizations within a country expect and accept that*

power is distributed unequally. Power distance explains the behaviour of individuals in reaction to differences in physical and intellectual capacities which could be translated to power, wealth and status. In this research, the power distance from the organizational point of view and consequently the state condition is looked at. From the perspective of organizations, especially in relations between boss-subordinate, Hofstede's (2000) research proves that Danish corporations have a lower power distance in comparison to Chinese corporations. Societies with small power distances such as Denmark emphasize on equal rights of which skills, wealth, power and status need not go together. On the other hand, China, showing a large power distance, is the exact opposite, in which the person with power is perceived to be right and they also have special privileges.

(ii) Individualism vs. Collectivism

Individualism and its antonym collectivism, is about whose interest takes precedence; is it the interests of the individual or is it the interests of the group as a whole? Hofstede (1991) defines this dimension as follows: *Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onwards are integrated into strong, cohesive ingroups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty.* An important characteristic of individualist society is that social conversations are important in that there is a constant need for verbal communication and that silence is considered abnormal. However, for a collectivist society, the act of being together in a social setting is considered sufficient and often there is no compulsory communication unless there is a need to convey information. Hofstede (2000) was also able to make the association that countries which show medium to low individualism index (IDV) scores usually have a form of state capitalism. This also corresponds with the high likelihood of the state having a more dominating role in the economic system. Similar association can be made with regards to freedom of press in that low IDV scores are usually correlated with more controlled mass media. China which scored the lowest IDV, show all these characteristics of this collectivist's nature. It is the exact opposite with Denmark. Despite Denmark sharing a similar agricultural background as China, Denmark scored high IDV. This could be explained by national wealth relation, in that the wealthier a country, the higher the individualism trait. Denmark also went through modernization much earlier than China did, thus making this an important factor for driving pursuits of self-interests to increase wealth.

(iii) Masculinity vs. Femininity

The third dimension, discusses about gender roles that are either masculine or feminine. While masculinity is associated with assertiveness and competition, femininity is related to nurturance and concern for relationships and for the living environment. In societal terms, a masculine society has distinct social gender roles in that men should be assertive, tough and focused on material success, while women

are supposed to be more modest, tender and concerned with quality of life. For the feminine society, social gender roles overlap in that both men and women are supposed to be modest, tender and concerned with the quality life. In this respect, the Chinese and the Danish are different from each other. Denmark had an extremely low masculinity score, which as explained by Hofstede (2000) is possibly due to the fact that the Viking period in Scandinavia meant that women had to manage the villages while the men were away, thus women and men played equally important roles in sustaining their livelihoods. While in China, the score is roughly sixty percent, the relatively neutral result is probably a consequence of the long history of absolute male dominant culture and the efforts of enhancing female status quo in societies after the foundation of new China.

(iv) Uncertainty Avoidance

The fourth dimension, uncertainty avoidance, can be defined as the extent to which the members of a culture feel threatened by uncertain or unknown situations. In this aspect, Denmark scored a low uncertainty avoidance index, which suggests that citizens believe that they can participate in political decisions at the lowest, local level. This means that they believe that their voice, if heard would make a difference, which also creates a positive political climate since citizen protests are actually acceptable. Interestingly, Chinese-speaking regions such as Taiwan and Hong Kong also scored low in uncertainty avoidance index. The Chinese empire centred around one person, the Emperor, and it was governed by general principles such as Confucianism which advocated loyalty to the Emperor. Thus, this notion of loyalty is so inbred in the Chinese that they are more willing and prepared to act on orders, so long as the decision was mandated by the emperor or in this modern times; the central government.

(v) Long term versus short time horizon or Confucian Dynamism.

The last dimension, Confucian dynamism, is of particular importance as it was an addition due to the realization that eastern countries (such as China, Japan and Korea) share distinctively different values from Western countries. Hence, the Chinese Value Survey was formulated in which values that are not apparent in western societies were included, such as “filial piety” (Hofstede and Bond, 1988) to better represent Eastern thoughts. Figure 1 illustrates the values associated with Confucianism. These values, also broadly termed as Virtue and Truth, are connected with the practical idea of long term and short term orientation respectively. The values on the left hand side are related to long term orientation value while the right hand side is related to short term orientation.

<i>Exhibit 3</i>	
VALUES ASSOCIATED WITH CONFUCIAN DYNAMISM	
<i>The relative importance of:</i> Persistence (perseverance)	<i>But the relative unimportance of:</i> Personal steadiness and stability
Ordering relationships by status and observing this order	Protecting your face
Thrift	Respect for tradition
Having a sense of shame	Reciprocation of greetings, favours, and gifts

Figure 1: Values Associated with Confucian Dynamism. Source: Hofstede G., Bond M. H., 1988.

The explanation of these five dimensions provides the foundation for this research, within the cultural context. Of particular importance are the first and the second dimensions; power distance and the collectivism or individualism characteristic. Danish society with a low power distance has a more individualistic nature, but they are also in some ways collectivistic when looking from a historical point of view and also its agricultural background. Chinese society, on the other hand, possesses a large power distance in superior-inferior relationships and they are collectivistic by nature, due to its fundamental Confucian values as well as its political progression.

The research was framed based on institutional theory to analyse Denmark and China as nation-institutions. The analyses on the progression (or deterioration or that it remains relatively unchanged) from what they were in the past and its present performance in CSR, are based on historical institutionalism theory (Thelen and Steinmo, 1992) and the study by Chappel and Moon (2005). The three pillars of institutions (regulative, normative and cultural cognitive) are especially relevant in determining the elements/forces which are at play in moulding the institution (in this case, the nations).

The concept of collective rationality (Scott 2001) was applied to identify the multiple actors and forces that create multiple fields of interactions. These fields of interactions are acting and re-acting between nation-institutions and the organizations (companies) that subsequently affect and shape organizations (and even nations); thus resulting to the present states of organizations. The following field-levels are deemed to be relevant for this research; (a) Socio-economic environment, (b) Political environment, (c) Environmentalism movement, and (d) Globalization. The various stakeholders are identified based on the framework by Carroll (2003). This serves as the foundation for understanding the process of capacity-building in each nation-institution. Social constructivism theory (Hannigan 2006) is used to explain the process in which a certain issue in CSR, amongst various issues raised in

the multiple field-levels, are brought to the top of the agenda, in each nation-institution.

The following hypotheses were discussed:-

Hypothesis #1

The Danish and the Chinese share historically similar agricultural backgrounds that effectively foster collectivism; therefore, it is believed that corporations in Denmark and China should share similarities in behaviour and attitudes towards CSR.

Hypothesis #2

Although there are similarities in culture between the Danish and the Chinese, there must be some distinction that causes the difference in development of CSR in these countries. This is believed to be the difference in political conditions and the environmentalism movement in these respective countries.

Hypothesis #3

Although the attitude towards CSR is similar, the forces of globalization play a bigger part in driving the direction of CSR in corporations.

Hypothesis #4

As Danish corporations have a longer history of reporting compared to Chinese corporations, Danish corporations thus have more comprehensive reports and also they are at a higher stage of reporting compared to Chinese corporations.

Hypothesis #5

As Denmark is wealthier than China, Danish government as well as Danish corporations have more resources compared to the Chinese government and the Chinese corporations. Thus, this facilitates the development of CSR in Danish corporations and also enables Danish corporations to steer into more specific areas, compared to Chinese corporations.

Methodology

The initial literature survey centred on Chinese and Danish historical and cultural background to provide an idea of how societies had evolved up till now, the values they retained and also the aspects that stayed prominent in them. Background research was also done concerning CSR and the history of its adaptation in the respective countries.

A survey questionnaire was designed for the purpose of this research. The questionnaire was in two languages, English and Chinese. With a questionnaire done in a local language, the Chinese representatives would be more comfortable in

answering the questions. Most Danish are generally proficient in English thus there was not any need to translate the questionnaire to Danish. It was relatively easy to get the Danish companies to participate, however, with the Chinese companies; the researchers had to rely on personal connections in China, which is regarded as the most common and effective way in Chinese culture to persuade companies to participate. Five Danish companies participated; Arla Foods, Carlsberg, Danisco, Dong Energy, and Grundfos. Six Chinese companies agreed to participate; Shenhua Group Corporation, Tsinghua Tongfang Co., Dongfeng Motor Company Limited (DFM), Shanghai Honghu Technology, NVC Lighting Technology Corporation and Grundfos Group in China. Figure 2 illustrates the framework of this research.

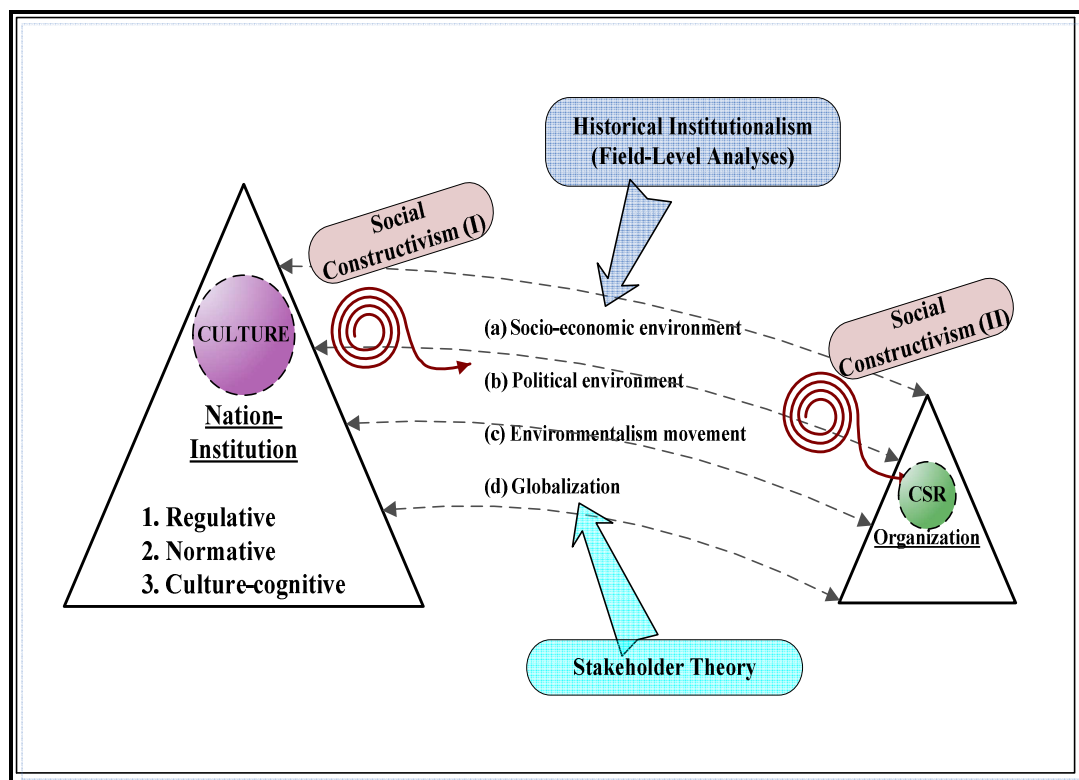


Figure 2: Framework of Research; perspectives from fundamental theories, namely, the Field-Level Analyses from Historical Institutionalism perspective, Stakeholder Theory and Social Constructivism.

Results & Discussion

Capacity Building

The beginnings and the foundation of Denmark's social and economic conditions, proved to be more favourable for stability, compared to that of China, thus contributing to an earlier start for Denmark in terms of wealth capacity-building. Additionally, the Chinese economy had suffered many setbacks in the past through its failed attempt at heavy industrialization and agricultural reforms. From this discussion, it is obvious that China has had a more difficult beginning than that for

Denmark. Therefore, naturally, China has yet to reach the level of stability and progress that Denmark possesses. This is a possible reason why Denmark is at the forefront in terms of CSR development while China is still relatively new in their efforts.

From this historical analyses, one could say that the Chinese had a relatively more difficult political climate compared to the Danish, especially when comparing the period from 1950s and onwards. The Chinese government had to rejuvenate its economy, after the failures of economic reforms during Mao's era, whereas, the Danish political climate was much more stable after World War I. In terms of environmental protection, it also seemed that both governments had taken necessary actions that were concrete. However, for the Chinese case, the time when it established its first Environmental Protection Law, coincided with the period when it just embarked on the open door policy, thus suggesting that the one-party Chinese government was influenced by international pressure. In contrast, the Danish government seemed to have been pressured by its internal "green" political parties to enforce environmental protection. Therefore, it can be concluded that the capacity building, in terms of political environment, was much more conducive in Denmark due to its multi-party system, compared to the one-party system in China.

It was found that the environmentalism movement in Denmark was generally more effective than the movement in China. The environmentalism movement which was a bottom-up approach was more effective in increasing knowledge as well as the passion to protect the environment. On the other hand, the government in China, while it tried to improve the knowledge of environmental issues through its education system, but as China had a later start; they would not have been able to ignite as much passion in its citizens for environmental protection. Therefore, in terms of capacity building through environmentalism, it seemed that Denmark had a better foundation than China.

Globalization seems to be playing an important role in CSR development in Denmark, although the CSR actions of Danish companies appear to be more internally motivated as they answered that international organizations only influence moderately in shaping their CSR direction. However, that the Danish companies are following the UN Global Compact and/or GRI Guidelines, do give an indication that they are committed to CSR development. On top of this, Danish companies also responded that international market was a strong influence in their CSR policy-making. For China, it appears that globalization only plays an indirect role in shaping CSR direction, although it is believed that it is a strong pressure. The Chinese government plays a more significant and direct role. However, similar to earlier discussion, the top-down approach of Chinese government can also be used to explain this. The Chinese government, facing with international pressures, are the ones making the directives for the companies to include CSR in businesses. Therefore, it can be concluded that globalization pressures seemed to be more significant in China than in Denmark.

Culture in Nation-Institutions

The cultural norms that affect the behaviour and attitudes of Chinese and Danish societies were duly analysed and thus could be discerned. Chinese and Danish societies are different but they also share some similarities.

Both the Chinese and the Danish place an importance in education and thus possess an intrinsic belief in improving themselves by acquiring knowledge. The Chinese had long been using a meritocratic kind of governance which meant only the best scholars were accepted into imperial courts. The Cultural Revolution however, disrupted this process of acquiring knowledge and thus delaying the progress and made it more difficult for environmental movements and knowledge interest groups to flourish. The Danish, on the other hand, had a smoother progression from its folk high school movements to its present day knowledge-based industries.

Ancient Chinese society, believed in Confucian values which frowned upon accumulation of wealth. However present day China, is much more inclined to accumulate wealth now, but it retains its socialistic and Confucian-influenced values in that some of the money attained should also be donated back to society. Danish society, although it modernized earlier than China did, but so did the environmental consciousness; thus the Danish are also inclined to genuinely want to contribute to society. Wealth can be attained but high taxes are charged in order to maintain its welfare state system.

Sharing similar agricultural beginnings, olden day Chinese and Danish societies exhibit an aspect of collectivistic behaviour; working and acting as a group or in co-operation with others was the way of life and also their emphases on social welfare. However, as Denmark experienced modernization period while China was hindered by its troubled socio-political situation, it resulted in Danish society taking up capitalism much earlier on and thus transforming itself into being more individualistic when it comes to economy, but still retaining its collectivistic attitude, as what can be seen in the Danish welfare state today.

In Chinese society, those with power and status are generally more highly regarded than those without thus they are more conscious of the hierarchical structure in society. Chinese people project a large power distance whereas it is the opposite with Danish society, which exhibits a small power distance. The Danish are much more inclined to include individuals in decision-making due to the collective bargaining history it has. In Danish egalitarian society, everyone are treated as equals. Therefore, individuals given the two different conditions (China and Denmark), the Danish are more encouraged to provide comments and critiques to those in leadership compared to the Chinese. Both Chinese and Danish societies have a low uncertainty avoidance index. This can be related to the amount of trust that they put in leadership. For the Danish, the reason for this trust is the participative democracy that evolved from the folk high school movement. Whereas for the Chinese, trust stem from the notion of loyalty to those in leadership, from the days of Imperial China to its present state.

The findings are summarised in table A below:-

Table A: Summary of the cultural norms and behaviours observed in Chinese and Danish Societies

Chinese Society	Danish Society
1. Emphasizes on knowledge but cultural revolution disrupted the process of acquiring knowledge, thus environmental consciousness was delayed.	1. Emphasizes on knowledge and process of acquiring knowledge steadily progressed, thus aiding in environmental consciousness.
2. Wealth should be shared or partly contributed to society, due to socialistic and Confucian values.	2. Wealth accumulation under capitalism is a norm but high taxes are paid under its welfare state system.
3. Collectivistic due to socialist background.	3. Individualistic in terms of economy, but retains collectivistic behaviour in social welfare-state.
4. Large power distance, in that hierarchy in societal structure is important.	4. Small power distance, in that hierarchy in society is not that crucial.
5. The opinions of those with power and status are considered more important.	5. Egalitarian society. Everyone's opinions are given consideration.
6. Low uncertainty avoidance as Chinese society believes that government leaders will make a collective decision that benefits all.	6. Low uncertainty avoidance as Danish society practices participative democracy where reaching consensus through dialogue is vital.
7. Place trust in leadership.	7. Place trust in the democratic system.

Culture in Organizations

The observations from the CSR reports, the responses received from the questionnaire surveys and the information gathered from the companies form the basis of the cultural analyses between the Danish and Chinese corporations. The aspects of culture, the associated norms and behaviours give clues as to whether the cultural values that are practised in nation-institutions could be translated into organization.

The results of the questionnaire affirm the small power distance relationship in Danish organizations. The opinions of the individual employees are generally valued since there seem to exist a platform and as well as the freedom to propose concepts for CSR projects. From the responses gathered from Chinese companies, they appear to have a larger power distance, whereby the CSR projects are generally not proposed by individual employees; rather it is usually the top management who does so. For Chinese corporations, this large power distance suggests that the development of CSR in corporations originates from a top-down approach, as they are more conscious of the hierarchical structure in the company. Danish companies, however, are much more inclined to include individual employees in the process of decision-making; one also mentioned that they set up collaborative groups to formulate policies on CSR. This behaviour in Danish companies is largely due to the participative democracy that exists in Denmark and thus is also seen to prevail in the corporations.

In line with the collectivistic behaviour in Chinese society, the responses from the questionnaire survey to Chinese companies show that governmental policies are of significant influence on the choice of CSR projects. In Danish companies, it is the opposite, in which governmental policies have little to no effect on the choice of CSR projects. This not only shows that Danish corporations are independent and have freedom to steer their directions, but this also affirms the hypothesis that Danish corporations are individualistic in behaviour. Although Danish society is generally collectivistic, the corporations behave differently as Denmark practices a free-market economy, thus allowing the market to dictate the economy without much government intervention.

Collectivism is also related to nationalistic behaviour, which in this context, means having a consideration for the country's needs in the activities of the corporation. Unlike Danish corporations, Chinese corporations exhibited a more nationalistic behaviour as some of the Chinese corporations professed intentions to expand their CSR focus from a local to a more national context. In China, one of its biggest problem is poverty, thus when Chinese companies were asked of their preferred projects, five out of six companies selected "building a school". This portrays their desire to participate in nation-building activities. Contrastingly, Danish corporations seemed to be more focused on the local context for their CSR projects. Their preferred projects vary a lot more than the Chinese corporations; most chose projects with environmental or cost-saving implications. Environmental-themed projects suggest the desire to help the world, while cost-saving projects seemed to only benefit the corporations. However, it is noted that there was one Danish company that mentioned that the choices of projects were too narrow, but nevertheless, the responses from the other four companies served as the basis of this argument. Therefore, it appears that Chinese corporations follow closely to its country's needs, whereas, this nationalistic behaviour was not demonstrated by Danish corporations.

Interestingly, Chinese companies mentioned labour unions as one of the major proponents for CSR proposals. Labour unions seem to be influential in CSR development in Chinese companies as they are strongly associated to the government, and thus also to the Chinese Communist Party. This may be due to the long history of the active role of labour unions in all kinds of movements in China. The working class is considered the highest rank in the socialist mode. In contrast, labour unions play an almost insignificant role in the CSR development of Danish companies. One Danish company also noted that employees are given the choice to join labour unions hence participation is not compulsory. Once again, this indicates that the collectivistic behaviour that is present in Chinese society can also be observed in companies.

In power-relations, the strong influence that the government has on the Chinese companies was observed. The Chinese government seemed to be able to control these companies well through the government policies and the fact that labour unions are also government-affiliated. This power that the Chinese government has over the companies could be related to the "guan xi" or the social network relationships that seems to determine the degree and also the kinds of favour that the government would afford companies (Xu 2005). Although not proven here, it is believed that the reason that Chinese companies seem willing to follow government policies could be due to the fear of losing out in the economic pie. But then again, it could also be the

high degree of trust they place in those in leadership. Leadership, in this respect, not only comprises the top management of the company, but also the government leaders, since the top management actually tries to maintain good relations with the government leaders. The decisions that leaders make could be considered as credible thus few are doubtful of them. In comparison, Danish companies did not seem to portray a strong affinity to government directives; rather they seem to respond more to market needs.

It is then not surprising that Chinese companies seem to demonstrate a sense of duty towards the government, which also translates from the feeling of responsibility one has for its country. This behaviour is observed through the responses of the Chinese companies which seem to share the government's common aim to eradicate poverty, which is part of the government's effort in creating a harmonious society. This could be due to China's socialistic roots, in that decisions made by individuals should be for the common good; putting the collective needs above any individual's. This is largely due to the responsibility companies feel in helping the country to reach its goals. This was not observed in Danish companies which appear to be more concerned with societal needs.

The findings are compiled below:-

Table B: Summary of the cultural norms and behaviours observed in Chinese and Danish companies.

Chinese Organizations	Danish Organizations
1. Large power distance discourages employee participation.	1. Small power distance encourages employee participation.
2. Top-bottom approach where decisions are made by top management level.	2. Bottom-up approach, where decision making is sometimes done in collaborative groups.
3. Collectivistic and nationalistic. Put more focus on CSR projects that are aligned with government policies.	3. More individualistic in pursuit of profits but retains collectivistic behaviour such as seeking consensus in decision-making.
4. Trust in labour unions and government decisions.	4. Trust in participative democracy process of making decisions.
5. Companies are influenced strongly by government on the direction of companies in CSR.	5. Companies are not influenced strongly by government on the direction of companies in CSR.
6. Labour unions are extensions of government, thus is also a powerful influence in CSR development.	6. Labour unions are not influential at all.
7. Have a stronger sense of duty/responsibility to the government, by pursuing its goal towards harmonious society.	7. Have a stronger sense of duty/responsibility towards society, by improving the environment, not solely to achieve government aims.

Stakeholders

From the field-level analyses, it appears that from the environmentalism movement, that non-governmental organizations such as DN and NOAH played an important role in raising environmental awareness, and thus paving the way for CSR development within Denmark. However, apart from the organizations' internal motivation to contribute to society, the direction of CSR is generally more influenced by the pressures from the international market. The international organizations such as the UN Global Compact and GRI guidelines are also influential in that companies are pressured into joining these organizations since they are global, and also their guidelines are used by others for CSR reporting. The possible main reason for Danish companies to engage in CSR is to retain and attract employees, thus employees are also an important stakeholder. The government also contributed to CSR development by launching social partnership programs, however, their influence is not that large, mainly due to the fact that the decision-making in Danish companies are usually done in a democratic manner, without government intervention.

For China, the field-level analyses point to the dominant role that the government has. The government is involved in almost all aspects, even in environmental issues. The labour unions are considered extensions of the Chinese government's influence and some Chinese companies even regard labour unions as their main source of CSR proposals. In Denmark, the environmentalism movement was sparked by student and non-government groups, but in China, in conjunction with its open door policy, was made susceptible to international pressures from organizations such as the UN. With economic reforms, the Chinese government ventured overseas mainly to increase its competitiveness, thus international market demands is an important factor in shaping the direction of CSR. In summary, international organizations are deemed to be an important stakeholder, although it is an indirect influence to the organizations. Labour unions, as mentioned earlier are also influential.

Social Constructivism

For China, the influence of the government seems to be strong. The extent of their influence is most conspicuous in the globalization level, in which the Chinese corporations have the tendency to follow the directions of the government, by implementing policies. The environmentalism movement in China, is also largely due to government intervention. Therefore, the government is identified as the major actor in the social construction process; hence its directives are explored further. In line with the government's goal of building a harmonious society, the current CSR themes that are of utmost importance are labour issues and product quality. The Chinese government plays a crucial role in dictating and exerting pressures on corporations to abide by its laws. The fact that many of the large corporations in China are actually state-owned makes it even harder for Chinese corporations to act differently from the government's will. Another important point is that the Chinese corporations also do not have any reason to believe that the government's directives would be in any way harmful, due to their collectivistic behaviour in which they trust that the government's policies are for the good of the economy, and thus would

benefit the companies as well. CSR as a formalized way of social contribution is also relatively new in China, thus it is believed that Chinese companies are more inclined to follow guidelines laid out by the government, mainly for compliance and continuance of business. Therefore, there is a high chance that the social construction process from nation-institution actually gets translated quite well into organizations in China.

For the Danish case, the social construction process has evolved much faster and is considered more advanced. The field-level that has the most significant influence was found to be at the globalization level. This is largely due to the fact that Denmark practices a free-market economy, thus it would be dependent on market needs, rather than being controlled by the government. The most important stakeholder is thus the international market itself and through it, breeds the competition that drives the economy. Denmark would focus more on international environmental issues such as climate change, carbon reduction, renewable energy and sustainable development. Furthermore, its active participation in innovations and dialogue makes the process a two-way course, rather than simply reacting to it. Unlike in China, Danish corporations are given the freedom to focus on the CSR issues that are pertaining in the respective industries that they partake in. Although the government does in some ways provide incentives but it does not seem that they were influential as most companies seem to be more internally motivated to pursue CSR. Pruzan (2003) also stated that the focus of Danish corporations revolved around these five major themes; political consumer, ethical investing, corporate social responsibility, social and ethical accounting and values-based management. Danish companies are emphasizing on more specialised areas, with particular interest in employee relations, in improving the quality of its products and efficiency in production. Based on this, the authors conclude that the social construction in Danish companies does not necessarily get translated directly from nation-institution as Danish companies react more from internal motivations and largely based on international market needs.

CSR Performance & Conduct in Organizations

From the investigation on their CSR reports, it appears that the case companies in both China and Denmark seem to be showing a high level of commitment in sustainability reporting. Most companies are reporting their CSR or sustainable development activities according to at least one international guideline, GRI Initiative or the UN Global Compact. Once they commit themselves to either, they would most likely comply with the high standards of CSR reporting. Both the Danish and Chinese companies were found to be on equal footing when it comes to sustainability reporting, at least on paper.

Community involvements is believed to be most commonly practiced within Chinese companies, which started from a long tradition of philanthropy by the enterprises, though initially the donation is usually under the name of the entrepreneurs rather than that of the companies. At present, philanthropy is still the major CSR mode but the target areas vary. More environmentally-concerned issues are placed on the agenda typically for companies that have adverse effects to the environment in their

production processes or the interests of stakeholders are closely related to the environment, such as coal manufacture companies like Shenhua Group stressed on environmental improvement in mining areas and dairy companies such as Yili Group prefer to support conversions of cropland to grassland. However, at present time, the products and processes wave seemed to be more in focus and is considered best institutionalized, particularly in terms of the health and safety in production processes. The incentive of which is to ensure the quality of employees' working environment and to meet customers' expectations in social responsibility, mainly due to the influence of the international market demands.

In Denmark, while the onset of traditional interest in contributing back to society appears to have been culminated from the strong sense of duty to help those in need, as can be seen in some companies, the later development of CSR seem to be more in response to international market needs. In comparison to Chinese companies, most Danish companies make use of various CSR waves; mainly projects that are related to employee relations and for improving products and processes. In addition, they are also pioneers in research and development of CSR issues. All these CSR-projects and CSR-research activities take precedence over philanthropic contributions. Some companies even consider the act of donating money as a passive way of contributing to society and hence are not desirable for their organizations. It is then apparent that Danish companies are at a more advanced CSR wave when compared to Chinese companies. The comparison between the Danish and Chinese companies in terms of CSR modes shows that Chinese companies might be more diverse in their application of CSR modes. This is illustrated in figure 3.

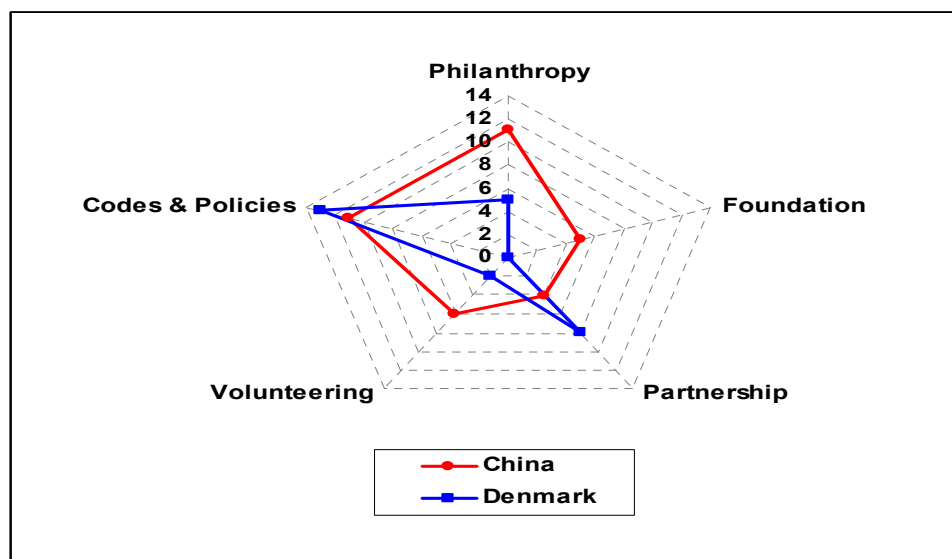


Figure 3: Comparison of CSR Modes between Danish and Chinese companies.

Conclusion

In comparison, the Chinese government's role is more significant than the Danish government in CSR matters. In Danish organizations, the international market was more influential in the direction of CSR whereby the Danish companies are given a free reign in the way they would like to manage CSR in their companies, the same could not really be said for Chinese companies.

There are some similarities in the collectivistic behaviour when looking at the societal or nation-institution level. However, when looking at the organizational level, individualism plays a bigger role in Danish companies since Danish capitalistic economy is based on free-market. Thus, the Danish collectivistic behaviour is reserved and demonstrated only in terms of its welfare state. In China, the collectivistic behaviour is still very much retained as it has just started its open-door policy. The Chinese display a stronger collectivistic behaviour as it practices a socialist market economy in which the government plays central role, especially in state-owned companies.

Chinese companies also appear to be more influenced by government policies as they appear to dutifully align their goals with government aims; this suggests a nationalistic-collectivistic behaviour that was not apparent in Danish companies. The Chinese government's power over economic matters in China is much more apparent; labour unions appear to be extensions of the Chinese Communist Party and are influential in the companies, especially state-owned ones. Danish labour unions are not influential in companies, partly due to Denmark being a welfare state. It is possible then to deduce that Chinese society and subsequently Chinese companies seem to place a lot of trust in government leadership, as opposed to the Danish companies who only seemed to consider government policies as merely helpful guidelines. With such loyalty and trust in leadership, it is no wonder that Chinese companies seem to project a large power distance, which is consistent in Chinese societal behaviour in terms of hierarchical structure. In contrast, Danish society which is egalitarian has a small power distance and this is shown in Danish companies. Hence, this behaviour is also translated in the way Danish and Chinese companies make decisions; Danish companies practise a bottom-up approach whilst Chinese companies, a top-down approach.

From the CSR conduct analyses coupled with social constructivism theory, it was established that Danish companies are at a more advanced CSR wave, with particular emphases on employee relations and products and processes. Chinese companies are still on the first wave with particular concern for education. The difference in development of CSR in China and Denmark differs due to the varying capacity-building in terms of socio-economic environment, political environment, environmentalism movement and the interplay with globalisation pressures. Denmark has a more advanced development in terms of CSR due to its conducive capacity-building. China's progress was disrupted due to political instability that affected the socio-economic environment. Both the Danish and the Chinese place high importance on acquiring knowledge but in terms of environmental consciousness, the Danish appear to be at a more advanced stage.

The wealth capacity-building in Denmark was much more conducive than that for China due to the differences in socio-economic and political environment. China has a relatively harder task in ensuring the welfare of its citizens compared to Denmark, as Chinese population is far greater than that of the Danish and China suffered economic failures during Mao's era. Furthermore, Denmark went through modernization much earlier than China thus Danish corporations were found to be specializing into specific areas and are considered front runners in CSR development, while Chinese corporations focused on labour and product quality issues in a broader sense.

Although Danish corporations have a longer history of reporting but the Chinese corporations were at par when it came to the level of reporting. This is due to the strong commitment of both Danish and Chinese corporations in ensuring their CSR actions are made known. Both the Danish and Chinese corporations are also following closely to either UN Global Compact or GRI guidelines or CSC9000 which provide good reporting information. Once committed to either of these initiatives, companies endeavour to abide by the reporting guidelines, thus there appear to be not much discrepancies between the two in terms of reporting.

Danish and Chinese corporations approach CSR from a different origin. For Danish companies, it appears that the intrinsic desire to contribute to society steered the development of CSR but it later developed further due to increased environmental awareness and knowledge it acquired from the international arena. For Chinese corporations, the informal CSR practices in the olden days was a way to improve the stature of merchants, while formal CSR practices was greatly influenced by government pressures. In turn, the Chinese government, with its open door policy, made itself more susceptible to international pressure. Thus, it seems that globalisation works in a different way in China and it plays an indirect role in shaping Chinese corporations but it is really the government which carries the brunt of these pressures. Globalization seemed to have influenced the development of CSR in Denmark, with Danish companies being aware of international market needs, but the environmentalism movement also helped steer the direction of CSR.

In order to fortify this research, the authors recommend that perhaps an investigation on a country with similar characteristics as Denmark, especially on the individualism shown in economic matters, would be helpful in determining if the same behaviours are projected. Other Nordic countries such as Sweden, Norway and Finland could be good candidates. Subsequently, the question on whether certain social behaviours in a society can get translated into organizations could then be discussed further.

References:

Andersen, M. S. (1997). eds. Jänicke, Weidner and Jörgens. Denmark. In *National environmental policies: A comparative study of capacity-building*. p. 157-174. Berlin, Heidelberg and New York: Springer Verlag.

Bjørn, C. (1988). Co-operation in Denmark, Danske Andelsselskaber. AiO Tryk, Odense.

Borish, S. M. (1991). *The Land of the Living: The Danish Folk High Schools and Denmark's Non-Violent Path to Modernization*. Nevada City, California: Blue Dolphin.

Buckingham, A. & Saunders, P. (2004). *The Survey Methods Workbook*. Polity Press, Cambridge.

Burke, P. (2004). *What is Cultural History?* Polity Press, UK.

Carroll, A. B. (2004). Managing ethically with global stakeholders: A present and future challenge. *Academy of Management Executive*, Vol. 18, No. 2.

Carroll, A. B. (2003). *Business and Society: Ethics and Stakeholder Management*. USA: South-Western College Publications.

Chappel, W. & Moon, J. (2005). Corporate Social Responsibility (CSR) in Asia: A Seven-Country Study of CSR Website Reporting. *Business Society* 2005; 44; 415. Sage Publications.

Chen, Y., Dutra, C. & Sanders, R. (2008). Institutional Constraints on China's Transition to Sustainability. *Int. J. Green Economics*, Vol.2, No. 2, p.135-152.

Ferris, R. J. Jr. & Zhang H. (2005). Environmental Law in the People's Republic of China: An Overview Describing Challenges and Providing Insights for Good Governance. ed. Day, K. A. In *China's Environment and the Challenge of Sustainable Development*. M.E. Sharpe, Inc.

Fewsmith, J. (2004). Promoting the Scientific Development Concept. *China Leadership Monitor*, No.11.

Friedman, T. L. (2005). *The World Is Flat: A Brief History of the Twenty-First Century*. Farrar, Straus and Giroux Publications.

Giversen, J. (2003). The World's First Ethical Accounting Statement. In *Corporate Values and Responsibility: The Case of Denmark*. eds. Morsing and Thyssen. Copenhagen: Samfundslitteratur.

Grant Thornton International. (2008). *Corporate Social Responsibility: a necessity not a choice*. International Business Report 2008.

Hannigan, J. A. (2006). Social construction of environmental issues and problems. In *Environmental Sociology*. 2nd edn. Routledge Publications, Inc.

Hansen, J. F. (1980). *We Are a Little Land: Cultural Assumptions in Danish Everyday Life*. Ayer Co. Publications.

Hoffman, A. J. & Ventresca, M. J. (2002). Chapter 1: Introduction. In *Organizations, Policy and the Natural Environment: Institutional and Strategic Perspectives*. USA: Stanford University Press.

Hofstede, G. (2000). *Culture's consequences: Comparing values, behaviours, institutions, and organizations across nations*. 2nd edn. Sage Publications, Inc.

Hofstede, G. (1991). *Cultures and organizations: software of the mind*. Intercultural Cooperation and its Importance for Survival. London: McGraw-Hill Book Company.

Hofstede, G. & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, Volume 16, Issue 4, Spring 1988, p.5-21.

Holgaard, J. E. & Jørgensen, T. H. (2007). From Selective to Integrated Sustainability Reporting. In *Tools for Sustainable Development*. eds. Kørnøv L., Thrane M., Remmen A. and Lund H. Denmark: Narayana Press.

Jamison, A., Eyerman, R., Cramer, J. & Læssøe, J. (1990). *The Making of the New Environmental Consciousness: A Comparative study of the Environmental Movements in Sweden, Denmark and the Netherlands*. UK: Edinburgh University Press.

Jänicke, M. (2002). The Political System's Capacity for Environmental Policy. In *National environmental policies: A comparative study of capacity-building*. eds. Jänicke, Weidner and Jörgens. Berlin, Heidelberg and New York: Springer Verlag. p.1-24.

Jespersen, K. J. V. ed. and trans. by Hill I. (2004). *A History of Denmark*. Palgrave Macmillan.

Jespersen, K. (2003). Social Partnerships – The Role of Government in Denmark. In *Corporate Values and Responsibility: The Case of Denmark*. eds. Morsing and Thyssen. Copenhagen: Samfundslitteratur.

Kristensen, P. H. (1992). Strategies against Structure: Institutions and Economic Organization in Denmark. In *European Business Systems*. ed. Whitley R. p. 117-136. London: Sage Publications.

Lary, D. (2006). *China's Republic*. New York: Cambridge University Press.

Liu, J. L. (2006). *An introduction to Chinese philosophy: from Ancient Philosophy to Chinese Buddhism*. Blackwell Publishing.

Ma, Q. (2002). *Farewell Sisyphus – an Analysis & Prospect of Chinese Political Culture*. pp. 78. Beijing, China: Social Science Press.

- Mao, Y. (1997). China. In *National environmental policies: A comparative study of capacity-building*. eds. Jänicke, Weidner and Jörgens. p.237-255. Berlin, Heidelberg and New York: Springer Verlag.
- Matthews, B. M. (2000). The Chinese Value Survey: An interpretation of value scales and consideration of some preliminary results. *International Education Journal*. Vol. 1, No 2.
- Morsing, M., Middtun, A. & Palmas, K. (2007). Corporate Social Responsibility in Scandinavia: *A Turn Toward the Business Case?* In *The Debate over Corporate Social Responsibility*. eds. Steven K. May, George Cheney and Juliet Roper. Oxford University Press.
- Morsing, M. & Thyssen, C. eds. (2003). *Conspicuous Responsibility: Communicating Responsibility - to Whom?* In *Corporate Values and Responsibility: The Case of Denmark*. Copenhagen: Samfundslitteratur.
- Myllyvainio, S. & Virkkala, N. (2006). *Corporate Social Responsibility: a Concept under Translation*. Sweden: Orebro University.
- O'Faircheallaigh, C. & Ali, S. (2008). *Earth Matters. Indigenous Peoples, the Extractive Industries and Corporate Social Responsibility*. UK: Greenleaf Publishing.
- ORSE & CSR Europe. (2006). *Corporate Social Responsibility in China*.
- Peng, L. (2001). *20th Century Environmental Warning*. Beijing: Huaxia Publisher.
- Pruzan, P. (2003). Theory and Practice of Business Ethics in Denmark: Is Something Still Rotten in the State of Denmark? In *Corporate Values and Responsibility: The Case of Denmark*. eds. Morsing and Thyssen. Copenhagen: Samfundslitteratur.
- Qian, Y. & Wu, J. (2000). *China's Transition to a Market Economy: How Far across the River?* The State Council of the People's Republic of China.
- Schlevogt, K. (2002). *The Art of Chinese Management: Theory, Evidence, and Applications*. Oxford University Press.
- Scott, R. W. (2001). *Institutions and Organizations*. 2nd edn. Thousand Oaks, CA: Sage Publications.
- Scott, R. W. & Meyer, J. W. (2002). *Institutional Environments and Organizations: Structural Complexity and Individualism*. Sage Publications, Inc.
- Slote, W. H. & De Vos, G. A. (1998). *Confucianism and the Family*. SUNY Press.
- Stohl, M., Stohl, C. & Townsley, N. C. (2007). A New Generation of Global Corporate Social Responsibility. In *The Debate Over Corporate Social Responsibility*. Oxford University Press.

Thelen, K. & Steinmo, S. (1992). Historical institutionalism in comparative politics. In *Structuring Politics: Historical institutionalism in comparative analysis*. chap. 1, p.1—32.

Cambridge University Press, Cambridge, UK.

USCBC. (2006). Best Practices Corporate Social Responsibility. The US- China Business Council.

Whelan, G. (2007). Corporate Social Responsibility in Asia: A Confucian Context. In *The Debate over Corporate Social Responsibility*. eds. Steven K. May, George Cheney and Juliet

Roper. UK: Oxford University Press.

Xu, H. (2005). Business Communication in China. In *Chinese and Western Business Cultures: A comparison and contrast*. p.87-98. Peter Lang Publishing.

Zhang, Y. (1998). The History of the Republic of China. Taipei: Lianjin Publishing.

CASE STUDY OF THE DEVELOPMENT OF CSR IN DANFOSS

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Abstract

This work-in-progress focuses on the CSR practice within the Danfoss Group, a leading global manufacturing company based in Denmark. Its mechanism in CSR policy making and its learning capacity in reaction to changes that may be caused by major events (climate change and the current financial crisis) and its global expansion to other countries (globalization), are central in our discussion. Based on the premises of Institutional and Stakeholder theories, a case study investigation was carried out. Information was gathered from the available reports and the accessible online materials, through questionnaire surveys with those at management level and also to the general employees. The outcome of the research shows that Danfoss is at an advanced stage of CSR development. It is engaging more in the second and third CSR waves (Products & Processes and Employee Relations), using “Foundation”, “Volunteering” as CSR Modes. Its positive learning capacity is a contributing factor to its conducive environment for CSR to flourish. The development of CSR in Danfoss was a gradual progression influenced by its concern for its employees, environmental and labour market issues, and its commitment to the UN Global Compact. The current financial crisis did not impede the implementation of existing CSR initiatives. Although there is a definite focus in employee relations, Danfoss did not consider formulating a CSR policy simply to attract talented personnel and in retaining staff. The CSR policy was in place because Danfoss felt it was the right thing to do.

Keywords: CSR, Climate Change, Financial Crisis, Globalization, Competitive Advantage, Learning Capacity

Introduction

Corporations have come a long way from the standard financial accounting that businesses of yesteryears are used to. They are now becoming increasingly aware of the need that they should also build strong public profiles and the common approach is to maintain a balance between maintaining financial stability and at the same time, participating actively in socially responsible activities (Carroll 2003).

The key point is that many corporations know they cannot simply disengage themselves from the community. As businesses become progressively more global, interactions with civil society also become increasingly broader in context. This is especially so for multi-national corporations whose activities, more often than not, transcends geographical boundaries and are thus inevitably under international scrutiny. Ultimately, however, corporations exist as a way to systematically organize its activities for the purpose of profit-making. While there should be no confusion that this is still the main objective of most corporations, at the same time, neither can they ignore the responsibility they bear to ensure that their activities are acceptable to the society at large.

Historically, Danish companies were amongst the firsts to have collaborated (for example with academia) in the experimentation of ethical accounting (Giversen 2003); Sparekassen Nordjylland published the first of such social reports in 1989. In the 2007 “Responsibility Competitiveness Index”, AccountAbility ranked Denmark overall second place (behind Sweden) and giving Denmark recognition for its efforts in responsible growth (The Danish Commerce and Companies Agency 2008). In fact, the Nordic countries have a strong presence in the top-5 rankings (refer to Table 1).

Table 1 Top-5 Ranking, AccountAbility's Responsible Competitiveness Index (RCI) from 2005-2009 (2009 will be included when data is available) (AccountAbility 2005, MacGillivray et al. 2007)

	2005	2007	2009
1	Finland	Sweden	?
2	Denmark	Denmark	?
3	Sweden	Finland	?
4	Norway	Iceland	?
5	Switzerland	United Kingdom	?

The high ranking of Denmark in the RCI stems of course from a multitude of factors. AccountAbility uses a total of 21 measures clustered into three primary domains: Public Policy, Business Action, and Social Enablers. Direct comparison between the 2005 and 2007 data is possible (MacGillivray et al. 2007). The 2007 report shows that for Denmark, the high ranking is obtained through a combination of Public Policy and Business Action, with the latter being the most distinguishing factor. Social Enablers – such as customer orientation, NGO membership and impact on clean air and water on business operations – is less of a factor in the sense that this domain seems not significantly different from other well-performing (top-10) countries.

With the financial crisis looming all over the world, as a direct effect from the global credit crunch, international corporations are now forced to make changes so as to ensure that they can maintain afloat and survive the economic recession. These changes and actions range from mild to drastic; massive cuts in salaries, freezing of employment, lay-offs, voluntary retirement or separation, slashing of production costs and the worst scenario is probably bankruptcy. The most shocking news would have been the collapse of the Iceland government which was initially sparked by the failure of its banking industry (BusinessWeek 2008). It was devastating for the citizens and for those who had in due faith kept their money in the Icelandic banks. Thus, the enormity of the impacts that the economic recession might have on the ordinary persons when companies (or governments) collapse makes it essential to know what elements will make or break an organization.

In a time of financial crisis, the question is then, will businesses continue acting responsibly (as measured by AccountAbility)? Does the fact the companies engage in

CSR practices help at all? And will there be any major differences between for example OECD countries? In July 2008, Denmark was the first European country to declare that it was stepping into economic recession in 2008 (Reuters UK 2008). Thus, the question now is whether or not the Danish corporations are handling and managing the credit crunch. If there are some Danish corporations that are more buffered by the effects of the recession than others, what then are the reasons for that?

We await the 2009 version of the Responsible Competitiveness Index with bated breath. Until then, we decided to take a closer look at both some Danish business actions and the new public policies that are to support the country in maintaining its top ranking in both theory and practice.

Outset and Methodology

This research focuses on the CSR practice within the Danfoss Group, a leading global manufacturing company based in Denmark. As a Denmark-based company, the Danfoss Group enjoys a comparatively more conducive socio-political environment for the development of ideas such as that of CSR, than most other countries (Chapple and Moon, 2005). The relatively strong political environment in Denmark further promotes stability for its economic and social environments. In addition to this, Danish corporations have always practised democracy even within the organization, in which consensus is usually sought in certain stages of decisionmaking (Morsing 2003). The Danish government exerts pressure as well on the corporations and has even made it mandatory for the top 1,100 largest enterprises to describe their CSR practices (Greenbiz News 2009). Many of the larger corporations are pressured into following international CSR reporting guidelines such as the UN Global Compact (Brown *et al.* 2007) and the Danfoss Group is no exception. These could be the reasons why Danish companies have always been the front runners in the development of exemplary CSR practices. Thus, an investigation on the integration of CSR and also how CSR is implemented in the Danfoss Group is of common interest. Its mechanism in CSR policy making and its capacity to react to changes that may be caused by major events and pressures from the international fields, and thereby framing Danfoss as a multi-standard organization (Røvik 1998), are central in this research.

The research is conducted in several stages. The objective of the first stage is to gain an understanding of the company's efforts in CSR. The annual reports and CSR reports of Danfoss A/S will be thoroughly examined. Information will also be gathered from its website, the company policies, current news and so forth.

The second stage is intended to measure the extent of penetration or the level of integration of CSR practices in the organization, based on the management's perspective. This has been done through a questionnaire mainly and follow-up communication with Danfoss at management level (Nordborg offices, Denmark).

In the third stage, a range of personnel is targeted and asked to participate in a written questionnaire on Corporate Social Responsibility Practices at Danfoss. The questionnaire was in multiple-choice-answer format with close-ended questions. The

survey was carried out by email correspondence which was distributed to a total of 47 employees from the Danfoss offices in Nordborg, Denmark. The respondents were to submit their surveys directly to the researchers and thus their responses would be afforded anonymity. A total of 28 employees responded to the questionnaire survey, which is a 60% response rate.

Based on the findings, the angle particularly explored in this paper is with respect to the development stage of CSR that the Danfoss Group is at. The CSR development of the Danfoss Group can be partially analyzed through its available online materials. Its CSR conduct is typified into two aspects: CSR Waves and CSR Modes. The research of Chapple and Moon (2005) show that developed countries are usually at a more advanced stage and thus their focus will mainly lie on the second or third CSR wave. Consequently, the Danfoss Group is expected to be more engaged with the last two Waves (Products & Processes and Employee Relations). This could then assist in the identification of the most significant theme of events, which could be climate change, economics, or any other events that may play the major role in shaping the development of CSR practices within the Danfoss Group.

Through this analysis, the researchers would also be able to find out how much weight the Danfoss Group places on the various dimensions of CSR (Environment, Labour issues, Product Quality, Health and Safety, and *etc.*) and an idea of the dimension or dimensions that are deemed more important to the organization. Based on the Grant Thornton International business report (2008), Danish companies are perceived to place more importance in labour issues, especially in retaining staff and in attracting desirable employees. Is this true in Danfoss and does it remain so despite the financial crisis? Furthermore, if the emphases have changed between these dimensions, what are the factors that supported the change that the Danfoss Group has gone through ever since the conception of CSR? What are the causes of this change? Why did these changes occur; is it due to local or global events? Both organisational and institutional theories would be beneficial in gaining an understanding as to why organizations behave and react to these changes and also to identify the factors that affords Danfoss the capacity to react.

CSR: Policies and Actions

The fact that Danish corporations are competing in the free-market economy may have some influence dictating the development of CSR (Hofstede 2000). The global market continuously exerts pressures on organizations to be socially responsible and to be accountable for their actions (Jørgensen 2003). Coulson (2008) contended that global issues such as climate change bring about both business risks and opportunities, thus making it of interest for stakeholders to be informed of how companies are responding to these developments. It is apparent then that stakeholders also expect some form of formal reporting so that information on the company is made available.

These forces that exert pressures on Danish organizations can be especially vital when comparing with corporations that thrive in economic environments that are not as conducive; for example the past centrally planned economies of Russia and

China's restricted market forces which would have had also discouraged the formation of innovative ideas that are basically the fundamentals of continuous development (Pettigrew and Whipp, 1991). Essentially, new age approaches such as that of social accounting and the notion that corporations need to act responsibly can be considered as culminations of creative thinking that revolves very much around moral values. For corporations, there is also generally a growing awareness of the possibility that engaging in social initiatives, specifically in strategic philanthropy, can increase its competitive context, that is the quality of the business environment in the location or locations they operate in (Porter and Kramer, 2002).

Indeed, in the Danish business environment, recent developments seem to point that companies are communicating their social actions to the public in a more conspicuous manner and at the same time they are spending increasingly more money on making their efforts known (Morsing 2003). This has also meant that international CSR guidelines such as the UN Global Compact or GRI Reporting Guidelines have become increasingly in the focus of corporations (Morsing 2003), although these developments in CSR communication are sometimes criticized as being nothing more than a public relations exercise.

The perception and understanding of corporations in the issue of CSR can be seen through their framing of the CSR concept which is often formalized through their Codes of Conduct or CSR Policies. In the context of this research, the topic of discussion is largely related to the economic viability and the inter-relationship of stakeholders with the issue of social conduct. The following examples of formalized CSR statements or intentions from corporations can be the point of departure:-

“We create value for the societies in which we operate by acting as a responsible neighbour, by integrating sustainability into our operations, and by being a good employer.” – *Danisco A/S*.

“We strive to deliver energy solutions that are economically, environmentally and socially responsible.” – *Dong Energy A/S*.

“In all our work, we strive to be economically viable, socially responsible, and environmentally sound.” – *Novo Nordisk A/S*.

From these and other corporate statements, there appears to be an emphasis on integrating social concerns into business operations. Danish companies appear to view social partnerships seriously as well. This can be seen in for example Danisco's definition in which it wants to be seen as a responsible neighbor and a good employer, which suggests an emphasis on the stakeholder element. Danish corporations appear to acknowledge the needs of its stakeholders and signify the understanding that their business activities would impact their stakeholders, whether positively or negatively. Nevertheless, in these definitions, there is also a definite focus on the products and services that these corporations provide, in that they would ensure that what their goods and services are also socially responsible and thus is acceptable to society.

Looking back at how CSR was initially framed in Denmark, the strong focus on social affairs is not really surprising. The Danish government played a significant

role, especially in the 1990s, by launching various campaigns and social partnership programs which are aimed at motivating corporations to participate more actively. The trade unions, which culminated from the establishment of public employment service (AF) and the set-up of regional and national tripartite councils in the late 1960s, also played a significant role during the 1990s, providing the platform for employees to negotiate in collective bargaining with public employers which subsequently also extended to private employers (Mailand and Andersen, 2001). These were also most likely the seeds of the concept of social partnership.

The Ministry of Social Affairs was active in fostering social partnerships between corporations and the communities. The government realising the need to garner the strengths from exemplary corporations, formed an advisory body to the Minister of Social Affairs, in 1996. This was named as the National Network of Company Leaders, which consisted of fifteen leaders from the most admired Danish companies, with the objective of limiting social exclusion and increasing integration on the labour market (Mahler *et al.* 2009). In 1997, the Danish government, under the direction of the then Minister of Social Affairs, Karen Jespersen, hosted an international corporate social responsibility conference in Copenhagen, which led to the establishment of The Copenhagen Centre in 1998, with the objective of developing social partnerships across Europe (Jespersen 2003). Under the same Ministry, The Social Council, a national multipartite body, was set up with the intention of advising the Minister and to guide municipalities and associated Social Co-ordination Committees in social policy issues (Mahler *et al.* 2009).

In contrast to the CSR policy as framed by the Ministry of Social Affairs, namely one focusing on social inclusion and adequate labour supply, the current government policy is more or less moved to the auspices of the Ministry of Economic and Business Affairs and focuses on competitiveness and economic growth (Ryberg, 2008). This change manifested itself in 2006 with the launch of the project People & Profit headed by the Danish Commerce and Companies Agency (DCCA).

The definition currently given by the DCCA, under the Danish Ministry of Economic and Business, is that “CSR is a concept whereby companies integrate social and environmental concerns in their business operations and in interaction with their stakeholders on a voluntary basis”. The World Business Council for Sustainable Development (WBCSD) gives a more thorough explanation, “Corporate social responsibility is the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large.” This includes a continuity element which is more agreeable to the authors’ interpretation of CSR, in that business should be consistent in their efforts to improve their performance in being socially responsible. Aside from this, businesses should also endeavour not only to ensure economic profitability but they should also improve the lives of the communities that they are in contact with.

In terms of international partnerships, the Danish government is also seen as an active advocate for the inclusion of the public and also access to information. The Danish government was the host for the Aarhus Convention, which is the UNECE1 Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. This was signed in 1998 and was

officially implemented in 2001. The convention has the objective of increasing transparencies in the governmental decision-making processes, where public rights regarding access to information, public participation and access to justice are encouraged for better communication between civil society and governmental authorities. About 40 countries and the European Community have signed this in agreement to the Convention's principles and additionally, it has also been ratified by another 41 countries (UNECE website). Following to this convention, Denmark, also signed the Kiev Protocol on Pollutant Release and Transfer Registers in 2003. This protocol serves as the first legally binding international agreement in which private enterprises are obligated to report to the national government on the releases and transfers of pollutants, relevant to their production emissions, on a yearly basis.

For environmental-related issues such as climate change, Denmark ratified the Kyoto Protocol in 2002. Denmark is part of the Annex 1 industrialized countries, which has the obligation of reducing greenhouse gas emissions by 5.2% from 2008 to 2012, using the 1990 levels as the base. However, as a collective decision, the European Economic Community agreed to reduce emission by 8% instead (The Danish Ministry of Climate and Energy 2). Following to the expiration of the Kyoto Protocol in 2012, the COP15 climate conference seeks to renegotiate the targets set on reducing greenhouse gas emissions. Denmark will be hosting this conference in December 2009, and it aspires to have all the countries in the world participate in this climate negotiation. As part of its efforts in mitigating climate change within Denmark, the Danish Ministry of Climate and Energy contended that it has reduced CO₂ emissions (adjusted for fluctuations in the weather and in cross border exchange in electricity) by more than 13% even though its economic activity has increased by 45%, from 1990 to 2007 (Ministry of Climate and Energy, 2009). It also expressed its long term vision for Denmark to be 100 percent independent of fossil fuels.

The importance that the Danish government places on CSR is evident from the fact that just recently, in December 2008, the Danish Parliament (Folketing) made it mandatory for 1,100 of Denmark's largest enterprises to commit to reporting their CSR actions and policies (Greenbiz News 2009). Although there is some debate as to why the small-medium enterprises are directly not included, the perception remains that the Danish government is viewing the issue of CSR in an increasingly serious manner, is increasingly relating it to business opportunities and therefore also encourages CSR to be business driven. The current action plan contains 30 initiatives that are concentrated in four key action areas:

- propagating business-driven social responsibility
- promoting business's social responsibility through government activities
- corporate sector climate responsibility
- marketing Denmark as a nation of responsible growth.

Nevertheless, it should not be an indication that Danish corporations are any less committed to conducting business in a socially responsible manner if government policies are positioned outside the economic and business driven domains. In fact, Danish corporations have been pioneering CSR-related research since the 1990s, with the earliest being the aforementioned Sparekassen Nordjylland who published the first ethical accounting. Further testament to this fact is the ranking obtained in the Responsible Competitiveness Index reports from 2003 and 2005; i.e. at a time

when CSR policies in Denmark were mainly focusing on social inclusion and adequate labour.

For some Danish corporations, it is their intrinsic desire to contribute back to society. Some companies claim that behaving responsibly towards civil society has always been a tradition they practise since it was established. An example is Grundfos, whose founder, Poul Due Jensen, had established a strong culture and long standing tradition of contributing to social causes since he had gone through difficult times himself. This desire to do good for society is also expressed in companies such as Carlsberg and Arla Foods. For other companies, incorporating the CSR element simply makes good business sense (Morsing 2003). Having good business sense in this context, could mean that incorporating CSR in business activities can improve a corporation's reputation in business and thus this could possibly influence its profitability in the financial market in a positive manner. In addition, there are also existing pressures from the employees in a company, who might be concerned of their direct association to the company and thus expect the company to act in a proper and socially acceptable way.

However, with the ongoing financial recession, the government is indeed taking more than just precautionary measures. Incorporating CSR makes good business sense and this sentiment is equally echoed by Haisler (in Morsing and Thyssen, 2003) who warns that economic rationality should be viewed with long-term considerations, taking into account especially the speed in which competition takes place today. In 2000, Danish corporations formed "Responsibility 2000" which consisted of five major organizations: Danfoss (industrial manufacturer), Danish National Police, Rambøll (engineering firm), Den Danske Bank, and the Danish Boy Scouts movement (Pruzan 2003). This further proves that Danish corporations are generally receptive to the concept of CSR, and being proactive and their willingness to participate have been beneficial for CSR to progress within these organizations.

In 2009, A.T. Kearney, a global management consulting firm, published its analyses on 99 global firms³ that during economic recessions, companies that commit to sustainability appear to outperform their industry peers in the financial markets (Mahler *et al.* 2009). This piece of report has certainly spurred not just the Danish corporations but other corporations as well to either take up the challenges of CSR matters and to continue with their efforts in engaging actively with society, in the right manner.

The Danfoss Group

Danfoss A/S was founded by Mads Clausen in 1933, which means that it has since been operating for over seventy years. The private company which started out from the attic of Mads Clausen's parents' house in Nordborg has expanded hundred-folds and it is now a global manufacturing company with over 70 factories, with locations in about 25 countries. It is also currently employing approximately 23,000 people worldwide. Additionally, the Danfoss Group's products are sold and serviced internationally by a network of 115 sales companies. The expansion of the Danfoss Group to other countries, as far as Asia and South America, provides an idea of the

magnitude of the number of communities that Danfoss may or may not affect. The extent of the widespread of the Danfoss Group's business, especially in terms of production, is illustrated below (refer to figure 1).



Figure 1 World map showing locations of Danfoss factories. (Source: Danfoss website)

The table below (refer to Table 2) provides a brief overview of the magnitude and operations of the company and also some basic facts in terms of its environmental and CSR activities.

Table 2 Overview of Danfoss A/S

Facts	Details
Headquarters:	Nordborg, Denmark
Property Rights:	Private (transnational company)
No. of employees:	More than 23,000 globally (approximately 16,000 in Europe and approximately 6,400 in Denmark alone).
Type of Industry:	Industrial Manufacturing
Activities:	Production: About 250,000 items per day at 70 factories in 25 countries. Sales and distribution: 115 sales companies and 115 agents and distributors all over the world.
No. of suppliers:	Approximately 3,000 globally.
Economic market:	Global
Certificates:	Environmental management: ISO 14001 (all factories with more than 20 production employees, except Bulgaria and factories acquired from the beginning of 2006). Labour practices: OHSAS 18001 (but only one-third of Danfoss manufacturing plants are certified).
CSR-Activities:	Sustainable Development: Joined the ICC Business Charter for Sustainable Development (1992). CSR Reporting: GRI Guidelines (1998) and UN Global Compact (2002). Co-founder of the Danish Council for Sustainable Business Development (2006). Joined Danish government's Business Panel on Climate Change (2007). Involved in ProjectZero Foundation to make Sønderborg the first large sustainable and CO ₂ neutral area in Europe, by 2029 (since 2007). Chemicals: Compliance to REACH (2007). Joined "Caring for Climate", part of UN Global Compact (2008). Energy: Joined Alliance to Save Energy (2009).

The business areas of the Danfoss Group are managed by three main divisions: Refrigeration & Air Conditioning (Blue), Heating (Red), and Motion Controls (Green). The eight business areas are distinguished in accordance to the divisions, with the exception of High-Pressure Systems which is considered a separate business area:-

Refrigeration & Air Conditioning

- Refrigeration and Air Conditioning
- Industrial Automation

Heating

- Heating
- Water Controls

Motion Controls

- VLT® Drives
- Solar Energy
- Bauer Geared Motors

For clarity, the researchers have decided to include the companies which are not fully owned by the Danfoss Group as well as those of which the Danfoss Group is not a

majority shareholder. The main reasoning is that the activities in all the companies that the Danfoss Group is associated with should have some influence on the reputation of the company as a whole, no matter how significant. As long as these companies bear the Danfoss brand, then the suppliers, the employees and the public would also associate the Danfoss Group with these companies.

Sauer-Danfoss Inc. which was a merger of the mobile hydraulics activities in Danfoss A/S and Sauer-Sundstrand Inc. is considered in the analyses as the Danfoss Group holds a majority of 55.4% shares. The Danfoss Group are also in partial ownership of companies such as Devi A/S, Danfoss Redan A/S, Gemina Termina A/S, Danfoss Ventures, Danfoss GmbH, AGH Warmte-units b.v., Danfoss Industri Service, Danfoss Heat Pumps, Global Services – Technology and Danfoss PolyPower A/S. On top of this, the Danfoss Group is involved in three joint ventures, forming the following companies: Proekspert, Danfoss Saginomiya and Danfoss Turbocor Compressors Inc. There are also associated companies in which the Danfoss Group is a significant investor and thus have influence in their financial and operational decision-making, they are namely; Danfoss Universe, Danfoss Tantalum Technologies and Danfoss Semco A/S Fire Protection. These companies are considered to have some association with the Danfoss Group.

In the annual reports, the social and environmental performances of each of the three main divisions are reported individually. However, in this research, the information gathered was not distinguished between the divisions. All the information was considered as pertaining to the Danfoss Group as a whole, and not specific to any of the associated companies or to any division, unless specified so.

CSR Modes and Waves

Chapple and Moon (2005) distinguishes three stages of CSR development which they termed as ‘CSR Waves’. CSR Waves refers to the areas of focus of the CSR activities, which also reflect on the alignment of CSR to the core business of the specific corporation. The waves of CSR development start with Community Involvement, progressing to Products & Processes and finally to Employee Relations, however overlaps of these waves may occur.

- **1st Wave:** Community-involved projects, activities such as building schools, improving child welfare
- **2nd Wave:** Socially responsible products and processes which include efforts such as reduction of energy use, improved production efficiency, product life cycle and etc., and lastly
- **3rd Wave:** Employee relations that describe the extent of the involvement of employees in CSR related initiatives such as the employee development program or the extent of the concern of the company on employee-related issues.

While looking at the CSR Waves, the methods with which the company employs to build their CSR activities are referred as CSR Modes. These modes would reflect on the behaviour of the company and how exactly it involves itself in CSR practices. These CSR Modes can provide an idea on the extent of institutionalisation of CSR in the company. The traditional way of making mere philanthropic contributions are considered the least institutionalised Mode, as compared to other Modes such as engaging in partnerships, sponsoring, adopting CSR codes and encouraging employee participation in CSR activities. Based on the authors' interpretation from Chapple and Moon (2005), the CSR modes are distinguished into these categories:-

- ❖ **Foundation:** These are usually non-profit organizations or legal set-ups with charitable purpose. It either donates funds or provides support to other organizations or communities. In this research, the foundations mainly refer to the Fabrikant Mads Clausen Foundation, the Bitten and the Mads Clausen Foundation, the Danfoss Foundation for Education and the Danfoss Employee's Foundation.
- ❖ **Partnership:** collaborating with other companies or the academia in CSR-related projects such as that of the carbon-neutral project in Sønderborg.
- ❖ **Codes and Policies:** CSR codes are formulated into formal policies and are considered to be embedded in the company's activities and decision.
- ❖ **Volunteering:** these are related to the volunteering activities of employees that are related to CSR matters.
- ❖ **Sponsorship:** provision to institutions in the form of monetary donations or funding by the company, but not through its foundations.

The CSR waves and corresponding modes are identified to illustrate the progression of CSR in the Danfoss Group, whilst gaining insights as to how it reacts to major events and the changes it goes through as well as its earning process. From the empirical findings obtained from the reports and questionnaires, it is possible to investigate and determine the CSR Wave at which the Danfoss Group is practising CSR.

In terms of the first CSR Wave, Community Involvement, the Danfoss Group makes a lot of charitable contributions to communities, starting out with local communities when Danfoss first began its operations in Denmark, and as the business expanded worldwide, so did the contributions. The contributions were also made in a timely manner, sometimes to coincide with catastrophic events when the donations are most needed. There are also a few examples in which the Danfoss Group had been in partnership with social communities, such as the academia, and with local organizations, for example with the Andares group in Mexico. Therefore, based on the findings from the available materials, the CSR Mode which it employs are mainly "Foundation", and in some cases, the Danfoss Group was in partnership with communities or was engaging in voluntary activities in CSR-related projects. This then makes "Foundation" the correspondingly most dominant CSR Mode for the Community Involvement Wave. This could be a consequence of the long history of

the establishment of the Fabrikant Mads Clausen Foundation, which dates back to 1960. The foundation has been so well developed and embedded in the Danfoss Group that other ways of charity are seldom considered. With respect to partnership, the activities are often in line with government supported or sponsored projects, and volunteering activities were mostly donations that are voluntarily proposed by employees to help victims in local disasters, for example. In conclusion, Danfoss has a long tradition of the foundation mode, which is still the dominant mode in Community Involvement Wave. However, as activities within this wave are handled locally, the corporate level may not be informed and thus the extent of its effort is not included in this research.

For the second CSR Wave, Products and Processes, the findings from the reports reflect positively on the Danfoss Group's efforts towards minimising the impact of its activities on the environment. The literature review shows a long tradition of environmental awareness in the Danfoss Group. Although the first environment statement was issued in 1994 and external audit scheme to verify the company's environmental reports was introduced two years later, the environmental consciousness in Danfoss is perceived to have begun in the 1950s, when it was realised that the use of chemicals caused environmental damage and were also harmful to its employees. In terms of its products, as a global leading manufacturer that has all its products built with clean energy conservation, 'efficient and clean energy' is what the Danfoss Group recognizes as their environmental obligation (Danfoss North America website). The EnVisioneering Symposium Series hosted by Danfoss clearly shows their ambitions in pursuit of this obligation. The word 'EnVisioneering', created by Danfoss, is a combination of 'Engineering', 'Energy efficiency', 'Environment', and 'Vision'. The Danfoss Group continually improves the quality of its products, to be energy-saving and to minimise the use of harmful substances as far as possible. There is a lot of effort as well in monitoring the levels of substances used and these are also subsequently reported as public data. Also apparent in its environmental policy, these measures to reduce environmental impact and to create energy-saving products are mentioned. Compared to the other two waves, the Products and Processes wave utilizes a relatively uniform CSR mode, mainly "Codes & Policies". However, this singular usage of CSR mode does not in any way indicate the weakness in CSR implementation, rather, it shows the advanced level of institutionalization that Danfoss possesses with regards to products and processes, as issues handled are all accomplished by following through with existing standards and regulations.

Referring to the third CSR Wave now, Employee Relations, there is substantial evidence that the Danfoss Group puts major effort into developing its employees. There are various development programs which are tailored for employees in terms of professional training and also in education, where opportunities are given for employees to continually upgrade themselves. There are also specific programs that are meant for grooming future leaders within the company. This priority that the company gives to the best talents works out in three-folds. One is that the company is able to provide the necessary skills and knowledge to its future leaders, and secondly, the company is then able to retain its best talents. Lastly, these development programs also serve as good incentives in attracting graduates, especially those that are deemed the cream of the crop. Aside from this, the company set up an advisory foundation that provides employees with counselling services such as advice on

marital affairs and on financial matters. This reflects that the company is not just concerned with the employees' proficiency at work, but it is also concerned with the well-being of its employees. The company recognises the fact that feedback from the employees is necessary in order to make improvements in the working environment or in the training courses provided, thus there are questionnaires or surveys that focuses on finding the employees' real and most important needs, and the CSR Survey that tries to measure the satisfaction of its employees and also to learn from them the ways to improve the workplace environment. Furthermore, even in financial difficulties, it seems that the Danfoss Group at the very least would endeavour to find alternatives for its employees, as exemplified in the case of Slovakia in 2007. Therefore, there is significant evidence that show that the Danfoss Group views its employees as assets and thus considers the matters of employee relations seriously.

The Modes employed within the Employee Relations wave are largely addressed with "Codes & Policies" and "Volunteering". The former one shows the high level of institutionalization of employee relations in the Danfoss Group while the latter one corresponds with the Danfoss Group's culture of encouraging participation of its employee in its initiatives. The "Foundation" mode is also an important means in this wave, as it goes beyond the employees' career needs and deals with their social life beyond work, in issues such as divorce, children's education and financial difficulties. With regards to partnership, the same as in the first wave, activities were mostly related to governmental projects. In order to provide a better overview of Danfoss' CSR practice, the following web charts summarize the frequency of different modes that are adopted by each wave in two time periods, 1999 to 2002 and 2003 to 2007 respectively. The year 2002 is chosen as the dividing point as it is in 2002 that Danfoss joined UN Global Compact (refer to figure 2).

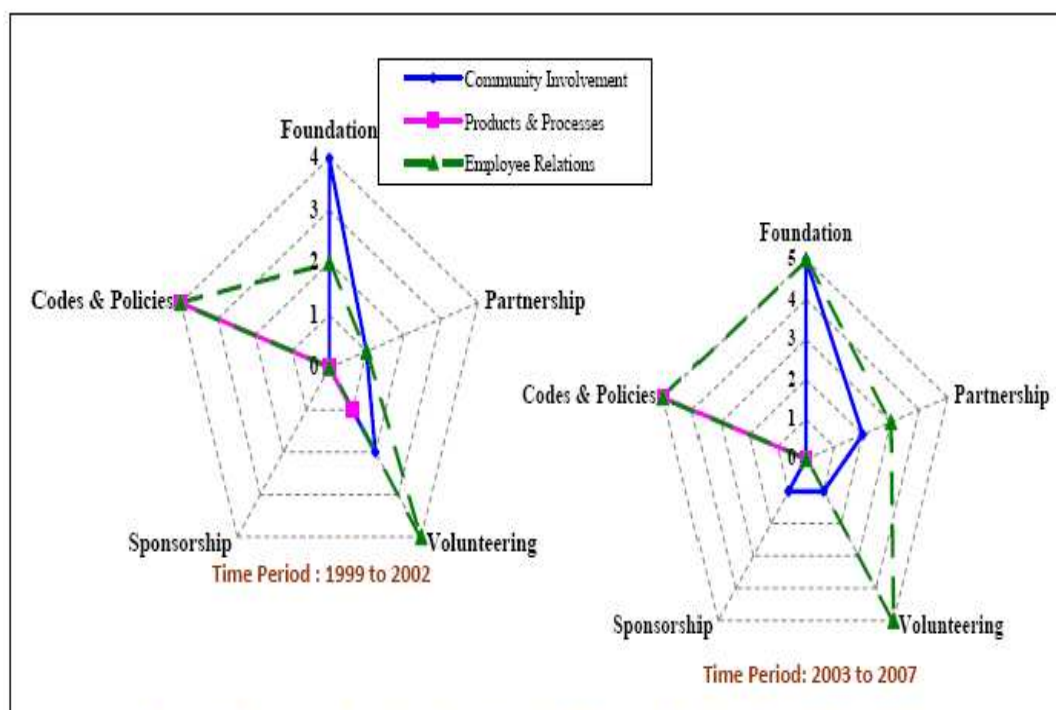


Figure 2: Frequency of modes adopted in each CSR wave in Danfoss (from 1999 to 2007).

Figure 2 reveals that the modes and waves adapted in each wave did not change dramatically in the two time periods. “Foundation” remains the main mode employed in Community Involvement, the Products and Processes wave maintains its focus on “Codes and Policies” and Employee Relations wave utilizes mostly “Codes and Policies” and “Volunteering” modes. Among all the three waves, only the Employee Relations wave shows a trend of increasing its usage of other modes, such as foundations and partnerships.

In conclusion, amongst all the CSR Waves, the Danfoss Group, at the corporate level, place more emphasis on Employee Relations and Products & Processes, compared to Community Involvement. Community Involvement is an important part of the Group’s CSR activities, but as these activities are handled locally, the corporate level does not report on it (and the data has thus not been part of this research).

The study by Chapple and Moon (2005) stated that the development stages within CSR, should progress from Community Involvement and then to Products and Processes and Employee Relations. In this case, there was no clear distinction that the progression from one wave to another occurred. Employee relations are the central focus for Danfoss when it came to CSR, although there were also substantial activities within the products and processes wave. The actions taken within the Products and Processes Wave, are found to be much more in tuned with globalisation pressures such as international environment-related agreements, when compared with the Employee Relations wave. This showed that Danfoss does not merely reserve its actions to within local settings but it considers global requirements as well.

Danfoss has developed relationship with a limited group of key stakeholders in terms of CSR. The four key stakeholders are the employees, international bodies, non-governmental organizations (NGOs) and its suppliers. Danfoss considers CSR as very much about taking care of its employees, thus the employees are the central focus in its CSR policy-making. The UN Global Compact was found to be the most influential in the direction of its CSR policies and also in CSR reporting. Substantial evidence of dialogues and collaborations were found between NGOs and Danfoss, thus indicating that NGOs are important stakeholders. However, it was clarified by the CSR and Environment Director that NGOs do not directly decide what Danfoss should do. It is important to Danfoss that its suppliers are concerned about CSR issues and thus Danfoss has even formulated a code of conduct for its suppliers.

CSR Learning

The analytical framework proposed by Arnold (2008) was developed for use in identifying the conditions for the emergence of learning processes in climate protection. This framework can help in the process of identifying the factors that influence the CSR capacity of Danfoss, and thus it can be used to understand whether the learning process exist in the company and if they have any bearings on corporate social actions. Based on the findings and the analyses done so far, it is possible to determine if Danfoss, as an organization, has learned from its experiences, and if this can be shown from the way it behaves. It is believed that the understanding from the development and the capacity of Danfoss to react to change provides the basis of

whether Danfoss is considered good at CSR because of its ability to learn and to be proactive in response to changes.

It was shown that the drivers for the environmental focus was mainly having to meet local environmental regulations, and due to health and safety concerns on the community living around the factory and the employees who were exposed to environmental hazards. In the beginning, it seemed that Danfoss must have been facing some pressures from the local authorities to meet with environmental standards, and thus Danfoss had to secure its first permission to discharge cleaned wastewater in 1965, which is essentially a “license to pollute” at controlled amounts. Subsequently, in the 1970s, Danfoss had set up its own environmental laboratory to monitor its own emissions rather than solely relying on government agencies, which was done amidst growing environmental awareness globally. To take this step further, the company also set up an internal team for toxic handling.

In this sense, this leap from just getting an environmental permit to establishing its own monitoring systems can be considered as a form of risk management whereby it learns to be proactive and is able to use this as a means to protect its interest. For example, if the local environmental agency made a mistake in measuring the discharge of a certain pollutant, this could be cross-checked with Danfoss’ environmental laboratory, so this affords both parties to have meaningful discourse in the event of a dispute. Furthermore, this step taken by Danfoss serves as an indication of positive reflex to the pressures that it must be facing, namely the community, its employees, local authorities, and environmental organizations. This makes it evident that Danfoss has learned the inadequacy of merely obtaining environmental permits and thus it took the initiative, despite it not being required by law, to monitor its environmental impact that also serves as a means for risk and reputation management.

Throughout 1980 to 1990s, apart from reducing environmental impacts to its surroundings, Danfoss also began to focus on improving the environmental quality of its products. There were more efforts in making products that are environmental-friendly and energy-efficient. This is particularly interesting as the general situation within Denmark was that there were more concerns about cleaner production efforts for environmental protection, whereas Danfoss was already thinking about making cleaner products. The company collaborated and engaged in dialogue with local authorities in green initiatives, thus increasing its knowledge in social and environmental matters. In 1992, Danfoss endorsed the ICC Charter for Sustainable Development which saw its first voluntary participation with an international NGO whereby Danfoss was required to improve its environmental performance. Danfoss was one of the first companies to formulate an environmental policy and had been making environmental reports since 1995, which later incorporated sustainability elements due to its participation in GRI in 1998. It is postulated that these developments are probably due to the increasing environmental awareness and the amounting pressures Danfoss must be facing, both locally and internationally. There is a definite change, particularly in the products and processes, in that the company had shifted from finding end-of-pipe solutions to a pollution-prevention approach. This decision could have been influenced by its prior experience in complying with environmental standards and in monitoring its environmental impacts. There is a great possibility that the organization had learned

from its experiences and dialogues that taking a mere reactive approach would simply not cut it in the long run. The technology based preventive approach on the other hand, would be more efficient in terms of resource consumption as well as in reducing its abatement costs.

In the last ten years, Danfoss has voluntarily engaged in initiatives such as the Danish Business Panel for Climate Change, the Danish Council for Sustainable Development, Alliance to Save Energy, Caring for Climate and so forth. With its participation in the UN Global Compact, in 2002, Danfoss increased its efforts in terms of publicizing and reporting on environmental and social issues, which is significant as it was only in 2009 that the Danish government made CSR reporting mandatory. The company has the intention as well as the motivation in keeping up with international developments such as climate change issues, where the company is already formulating its own climate change strategy. Generally it was found that Danfoss' advanced development state and its strong capacity are believed to have provided the company the ability to respond to pressures and expectations favourably. Being in the loop of these international developments would have given Danfoss the opportunities to learn what is expected of them and also of what other companies or its competitors are doing in CSR matters. For example, Danfoss might have learned that active engagements or partnerships and active dialogues may be deemed more favourable rather than passive contributions, in the public eye.

Within the context of learning, it was found that Danfoss has been proactive, particularly in its approach to products and processes. Firstly, Danfoss had gone from merely getting a permit to pollute to establishing its own environmental monitoring facility, even though this was uncommon during the 1970s. Danfoss then decided to change its approach towards environmental problems, from a reactive end-of-pipe approach to one that is more pollution-preventive. Although the general trend in the early 1990s, was more focused on cleaner production, Danfoss had the foresight to make cleaner products. Lastly, due to its global expansion, the increasing pressures forces the company to be more active in participation or dialogues internationally. Danfoss is engaged with various CSR-related international quarters such as the UN Global Compact and the "Caring for Climate" program. Dialogues between Danfoss and other stakeholders are established; as an example, the interactions with NGOs were specifically underlined by the CSR & Environment director. In communicating its activities and efforts, Danfoss had first started out with environmental reporting but it has now included CSR reporting as well, which covers mainly social actions. The analyses on its CSR reports showed that Danfoss is advanced in sustainability reporting.

As employees are considered the most significant stakeholders in terms of CSR, there is immense evidence showing Danfoss' efforts in communicating its activities to its employees through various mediums. Danfoss appeared also to have improved its conduct within the employee relations wave, from merely providing aid to increasing efforts in getting feedback from its employees. However, some weaknesses in the CSR implementation of Danfoss were identified. The employee survey revealed that the current engagement of employees with regard to CSR in Danfoss is not very high despite the majority of the respondents considered it important that the company practises CSR. However, it is noted that Danfoss has regular dialogue with the employee elected representatives who were influential in

the making of Danfoss' Ethics Handbook. Although improvements are required in areas such as employee participation, the evidence presented above is believed to sufficiently prove that Danfoss is at an advanced level of CSR engagement with its employees. The learning progression of Danfoss in terms of CSR is summarised in the figure below which compares the CSR practices in Danfoss with the theoretical outlook of what was happening in Denmark and globally, from the 1960s to present time (refer to figure 3).

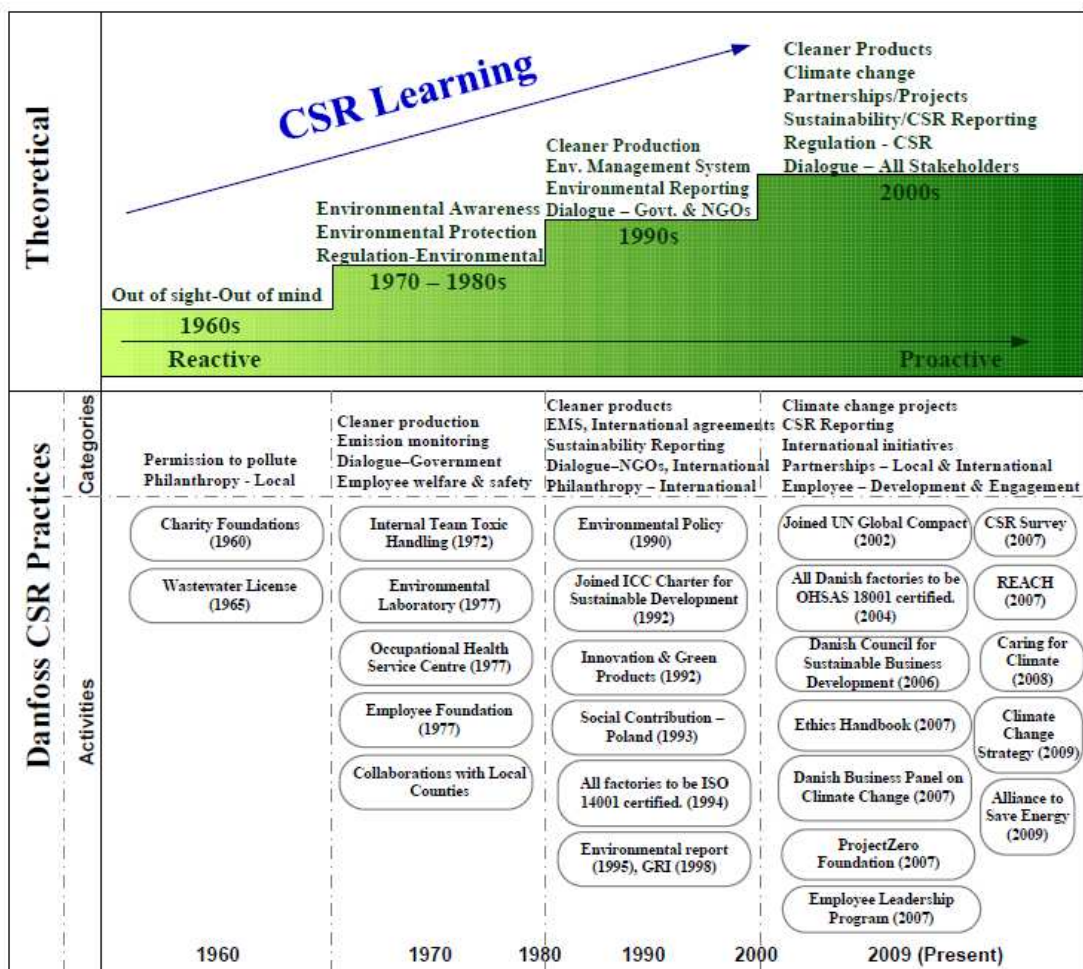


Figure 3: CSR Learning of Danfoss.

In conclusion, there are some evidences, which show that the company had been proactive, perhaps even agenda-setting. It is believed that its ability to learn and improve had contributed to its development and perhaps raising its competitive advantage in CSR. The learning process occurred in phases and was aided by Danfoss' build up of environmental awareness and social concerns, its focus and concern on employee welfare, the knowledge gained from engaging with others, and its commitment to improve coupled with its capacity to change. It is also maintained by Danfoss' CSR representative that the policies for CSR and the environment, are affected by external factors but it is its concern for employee welfare that plays the most important role in its strategy. The most significant evidence of learning was in its proactive approach in making cleaner products although it was not that common during the early 1990s. It was one of the first companies to formulate its own environmental policy and had long been making environmental and CSR reports

before it was made mandatory. It is also apparent that Danfoss has been quick in responding to government and international developments, which in part may have been due to Danfoss' support and commitment in the various initiatives in both environmental and social matters. This international exposure is believed to have helped Danfoss in the development of its CSR practices. What may have contributed to its competitive advantage could have been its salient ability to cope with the various sources of pressures (local governments or the international arena) at different points in time, and subsequently translating these pressures into actions. Throughout Danfoss' lifespan until present time, Danfoss has shown that it faces new challenges positively and is able to respond to different requirements, whether it is environmental, social or climate change issues. It makes changes to adapt and assimilates these changes into its organisation, all the while maintaining its focus on its employees.

Conclusions & Perspectives

Due to the fact that Denmark is a developed country, Danfoss as a large company located in Denmark, was found to be at an advanced level of CSR engagement, engaging more in the second and third waves (Products & Processes and Employee Relations) of CSR development, where more emphases were placed. The activities in these two waves are more involved in the Code & Policies mode, which indicates a higher level of institutionalization, compared to the Community Involvement wave. For Danfoss, the most important stakeholder is the employees as corporate social responsibility for Danfoss is 'very much about caring for their employees'. Issues related to employees such as the concerns on their safety and health can be found in the Products & Process wave. Similarly, this can also be seen in the Employee Relations wave whereby there are emphases on employees' welfare and engagement.

Further analyses showed that the development of CSR practices in Danfoss is largely propagated by Danfoss' commitment to pursue issues related to CSR, with employee relations and environmental issues being foremost in its focus. The analyses on the cultural, structural and external factors suggest that Danfoss possesses a strong CSR capacity that would enable an organization to react positively to changes and for improvements to be mobilized. Danfoss is able to continuously improve its CSR practices and this can be seen from the several revisions of its CSR policy to adapt to new developments. Its capacity to adapt and the willingness to change indicate that Danfoss can be resilient enough when facing adversity. This provides the company a strong foundation to learn, and to be proactive whereby problems are resolved so as to avoid a reoccurrence in the future, rather than only focusing on just solving problems as they happen. Its learning process is enhanced by its striking ability to absorb the requirements from various sources of pressures and translating them into actions appropriate for its organisation. Therefore, it was found that for CSR to progress, there needs to be a strong relationship between the CSR capacity and the learning process. The commitment and the CSR capacity to learn are believed to be the two most important aspects that have contributed favourably to the development of Danfoss' CSR practices. These aspects could be particularly important for less advanced companies that are looking at improving their CSR practices. Additionally, it is believed that companies stand to gain as much benefit as Danfoss appeared to

have, from participating in international activities as they can gain more exposure and be updated on the development of CSR practices in other companies.

The Danish government's 2008 Action Plan for CSR (The Danish Commerce and Companies Agency 2008) raises the question on the challenges ahead for Danfoss. The new initiatives include making CSR reporting mandatory and that climate responsibility should also be included, however, Danfoss has been making CSR reports since 2002 and within its environmental reporting, climate change concerns are considered. In terms of products, the action plan urges businesses for green innovation and for more socially responsible products, but Danfoss has been focussing on eco-friendly products since the 1990s and with the example of Andares in Mexico, it has incorporated social responsibility into its production. The action plan will also initiate a survey of consumer roles in CSR, whilst in the Danfoss case, the most important stakeholder in CSR was found to be its employees.

Danfoss is considered advanced in its CSR practices and thus have met most of the requirements in the Action Plan. However, these new initiatives could still potentially impact its competitive advantage in CSR, as it could bring other companies that were lagging behind to catch up very quickly with Danfoss, especially if Danfoss takes on a business-as-usual stance. If Danfoss would like to maintain its CSR strategy of being proactive and agenda-setting, it is recommended that Danfoss focuses on increasing its partnership activities to further engage and understand the needs of its stakeholders. We also recommend that Danfoss takes interest in new developments within global warming such as carbon footprint and water footprint, which would not only benefit its production activities, but it would also improve its image as a green company. Lastly, another area where Danfoss could consider is the base-of-the-pyramid (BOP) strategy which focuses on the poor. It might be the next wave of CSR development, given that production costs are comparatively lower in developing countries and the vast market potential of the "aspiring poor" (Prahalad and Hammond, 2002). In social actions, the growing market provides the opportunity for Danfoss to forge more meaningful partnerships that could possibly aid in poverty alleviation and at the same time improve its reputation as a socially responsible company that cares for the poor.

References

AccountAbility, (2005), *Responsible Competitiveness: Reshaping Global Markets through Responsible Business Practices*, AccountAbility, London.

AccountAbility. 2009. Use AA1000, contribute to its development. <http://www.accountability21.net> (accessed 3 March, 2009).

Arnold, Marlen. 2008. Responding to climate change: the role of organizational learning processes. In *Corporate Responses to Climate Change: Achieving Emissions Reductions through Regulation, Self-Regulation and Economic Incentives*. Ed. Rory Sullivan. p.262-278. UK: Greenleaf Publishing Ltd.

Brown, Halina Szejnwald, Martin de Jong, and Teodorina Lessidrenska. 2007. The Rise of the Global Reporting Initiative (GRI) as a Case of Institutional Entrepreneurship. Corporate Social Responsibility Initiative, Working Paper No. 36. Cambridge MA: John F. Kennedy School of Government, Harvard University.

BusinessWeek News. 2008. Iceland goes Bankrupt. http://www.businessweek.com/the_thread/economicsunbound/archives/2008/10/iceland_goes_ba.html (accessed 3 March, 2009).

BusinessWeek News. 2009. Sauer-Danfoss Inc. – Key Developments. <http://investing.businessweek.com/research/stocks/snapshot/snapshot.asp?symbol=SHS> (accessed 10 March, 2009).

Carroll, Archie B. 2003. *Business and Society: Ethics and Stakeholder Management*. USA: South-Western College Publications.

Chapple, Wendy and Moon, Jeremy. 2005. Corporate Social Responsibility (CSR) in Asia: A Seven-Country Study of CSR Website Reporting. *Business Society* 2005; 44; 415. Sage Publications.

Coulson, Andrea B. 2008. Reporting on climate change: the case of Lloyds TSB. In *Corporate Responses to Climate Change: Achieving Emissions Reductions through Regulation, Self-Regulation and Economic Incentives*. Ed. Rory Sullivan. UK: Greenleaf Publishing Ltd.

Danish Commerce and Companies Agency. 2008. Action Plan for Corporate Social Responsibility. http://www.eogs.dk/graphics/Samfundsansvar.dk/Dokumenter/Action_plan_CSR.pdf (accessed 19 May, 2009).

Giversen, Jørgen. 2003. The World's First Ethical Accounting Statement. In *Corporate Values and Responsibility: The Case of Denmark*, 1st ed., eds. Morsing and Thyssen. p.33–41. Copenhagen: Samfundslitteratur.

Global Reporting Initiative. <http://www.globalreporting.org/Home> (accessed 17 March, 2009).

Global Reporting Initiative. G3 Guidelines. 2000-2006, Sustainability Reporting Guidelines, Version 3.0.

Grant Thornton International. 2008. Corporate Social Responsibility: a necessity not a choice. International Business Report 2008.

Greenbiz News. 2009. Mandatory CSR Reporting for Denmark's Largest Companies. <http://www.greenbiz.com/news/2009/01/08/mandatory-csr-reporting-denmarks-large-st-companies> (accessed 11 March, 2009)

Haisler, Peter. 2003. Does Corporate Social Responsibility (CSR) Pay Off? In *Corporate Values and Responsibility: The Case of Denmark*, 1st ed., eds. Morsing and Thyssen. p.287–298. Copenhagen: Samfundslitteratur.

Hofstede, Geert. 2000. Culture's consequences: Comparing values, behaviours, institutions, and organizations across nations. 2nd edn. Sage Publications, Inc.

Jespersen, Karen. 2003. Social Partnerships – The Role of Government in Denmark. In *Corporate Values and Responsibility: The Case of Denmark*, 1st ed., eds. Morsing and Thyssen. p.25–33. Copenhagen: Samfundslitteratur.

Jørgensen, Helle. 2003. Corporate Competitiveness – How to Initiate the Process. In *Corporate Values and Responsibility: The Case of Denmark*, 1st ed., eds. Morsing and Thyssen. p.271–280. Copenhagen: Samfundslitteratur.

MacGillivray, A., Begley, P., and Zadek, S. (eds) (2007) "The State of Responsible Competitiveness 2007", AccountAbility, London.

Mahler, Daniel, Jeremy Barker, Louis Besland and Otto Schulz. 2009. "Green" Winners: The performance of sustainability-focused companies during the financial crisis. A.T. Kearney, Inc.

Mailand, Mikkel and Andersen Søren Kaj. 2001. Social Partnerships in Europe: The role of employers and trade unions. Report compiled for The Copenhagen Centre. Employee Relations Research Centre. Department of Sociology, University of Copenhagen.

Ministry of Climate and Energy of Denmark. 2009. The Danish example – the way to an energy efficient and energy friendly economy.

Morsing, Mette. 2003. Conspicuous Responsibility: Communicating Responsibility – to Whom? In *Corporate Values and Responsibility: The Case of Denmark*, 1st ed., eds. Morsing and Thyssen. p.145–154. Copenhagen: Samfundslitteratur.

Pettigrew, Andrew and Whipp, Richard. 1991. Managing Change for Competitive Success. Oxford: Blackwell Publishers.

Porter, Michael E. and Kramer, Mark R. 2002. The Competitive Advantage of Corporate Philanthropy. Harvard Business Review.

Prahalad, C.K. and Allen Hammond. 2002. Serving the World's Poor, Profitably. Harvard Business Review.

Pruzan P. 2003. Theory and Practice of Business Ethics in Denmark: Is Something Still Rotten in the State of Denmark? In Corporate Values and Responsibility: The Case of Denmark. eds. Morsing and Thyssen. Copenhagen: Samfundslitteratur.

Reuters UK. 2008. Timeline - World economies slide into recession.
<http://uk.reuters.com/article/marketsNewsUS/idUKSP8831720081223> (accessed 15 March, 2009).

Røvik, Kjell A. (1998), Moderne Organisasjoner: Trender i Organisasjonstenkningen ved Tusenårsskiftet, Oslo: Fakkbokforlaget.

Ryberg, Camilla G. (2008), Europeanization of Public Policies for Corporate Social Responsibility - A case-study of the Danish CSR policy. Master Thesis, University of Roskilde, Denmark.

Scott, Richard W. 2001. Institutions and Organizations. 2nd edn. Thousand Oaks, CA: Sage Publications. UNFCCC. Kyoto Protocol.
http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.ph (accessed 19 March, 2009).

UN. Millennium Development Goals.
<http://www.un.org/millenniumgoals/bkgd.shtml> (accessed 19 March, 2009).

List of Danfoss Group Reports and Reference Materials

Corporate Citizenship Report 2007

Annual Report 2007

Annual Report 2006

Annual Report 2005

Annual Report 2004

Annual Report 2003

Annual Report 2002

Annual Report 2001

Annual Report 2000

Annual Report 1999

Environmental Statement & Accounts 2002

Environmental Statement & Accounts 2001

Environmental Statement & Accounts 2000

Environmental Statement & Accounts 1999

People & Values 2002

People & Values 2001

People & Values 2000

People & Values 1999

Danfoss Corporate Environmental Policy

Danfoss Social Responsibility Policy

Danfoss Code of Conduct for Suppliers and Subcontractors

Negative List for Substances and Materials
Global Danfoss Magazine January 2009
Global Danfoss Magazine October 2008
Financial Statement 2008

PARTICIPATORY EVALUATION OF CSR – A CONCEPTUAL FRAMEWORK

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Abstract

This paper aims for providing a conceptual framework for participatory evaluation of CSR. CSR understood as a business contribution to sustainable development achieved through the interplay of societal actors. As a contextual fundament the concept of New Societal Governance is presented and a set of challenges and needs of CSR as a contribution to sustainable development is derived. ‘CSR-for-SD’ needs to tackle the complexity and contextuality of CSR and to facilitate the development of trust, collective action and mutual responsibility among all actors involved. With that in view, two commonly applied approaches of CSR – CSR reporting and stakeholder dialogue – are presented and analysed. Participatory evaluation of CSR is then proposed, which integrates CSR reporting as well as stakeholder dialogue into a learning oriented formative evaluation process. It is designed as an ongoing, accompanying research process which comprises defining, planning, implementing and evaluating CSR activities.

Keywords: CSR, sustainable development, CSR reporting, stakeholder dialogue, participatory evaluation New Societal Governance

Introduction

CSR is often understood as a business contribution to sustainable development (SD). In fact both concepts – CSR and SD – bear similar challenges with regards to their implementation as well as research conducted. Therefore, in the first section of the paper definitions of both concepts as well as their similarities and differences are outlined. In order to pave the way for CSR being a matter of evaluation and participatory processes, the societal relations between a state, companies and the civil society are re-defined presenting the concept of New Societal Governance. Deregulation and privatisation leaves states less powerful in the societal arena, companies take over domains formerly administered by states and civil society actors claim their stakes regarding transparency, participation and co-decision-making in relation to both other societal actors. Concluding in section one, a set of challenges and needs of CSR as a contribution to sustainable development (‘CSR-for-SD’) is derived. Tackling the inherent complexity and contextuality of CSR as well as facilitating the development of trust, collective action and mutual responsibility among all actors involved are at the heart of the concept CSR-for-SD.

With that in view, two commonly applied approaches of CSR – CSR reporting and stakeholder dialogue – are presented and analysed in the subsequent chapters two

and three. In both approaches known development paths targeting ‘CSR-for-SD’ are identified and put in relation to the challenges and needs outlined above. Chapter four offers an integrative approach of CSR-for-SD in order to overcome nowadays fragmented and low impact CSR implementation: participatory evaluation of CSR. It is shown why evaluation is a suitable approach to assess CSR-for-SD efforts, why especially participatory evaluation is needed to be applied and finally, on which cornerstones such a participatory evaluation of CSR needs to be built on. Participatory evaluation of CSR integrating CSR reporting as well as stakeholder dialogue into a learning oriented formative evaluation process is described. It is concluded that through focusing on mutual learning and joint actions of companies and their stakeholders, defining, implementing and evaluating CSR activities, the resulting practical evaluation approach also leads to new challenges and needs for responsible leadership. Finally, in the conclusions issues for further research are presented.

Background – CSR as business contribution to SD

Nowadays CSR and sustainable development are both defined as to integrate economic, environmental and social/societal⁵ aspects. Sustainable development approach this task from a macro-level, as CSR deals with it at the micro-level (Steurer 2002). Historically seen, both concepts emerged from independently from each other and with a focus on different areas. Sustainable development was more concerned with environmental issues from a macro-level perspective being viewed as a guiding vision for overall societal development. CSR on the other hand was originally dealing with social/societal issues such as human rights and working conditions and was always defined as a voluntary management approach (Loew et al., 2004; van Marrewijk, 2003, Steurer et al., 2005). Moreover it is closely connected to transparency, stakeholder dialogue and sustainability reporting.

Differences and similarities of CSR and SD

Before outlining similarities of CSR and sustainable development, the differences can be cited as follows: First, sustainable development and CSR are primarily concerned with different levels they address: sustainable development at the macro- and global level (Steurer 2002); CSR at the micro- and company level. Second, they are different from their historical roots: sustainable development is clearly emerging from the environmental side, whereas CSR developed from considering social/societal issues (van Marrewijk, 2003, Steurer et al., 2005). Third, the two concepts vary in their main addressees: sustainable development depends largely on society’s interpretation being primarily related to the overall societal context; whereas CSR is seen as a voluntary management approach primarily related to the business context in which company stakeholders play a prominent role (Wood and

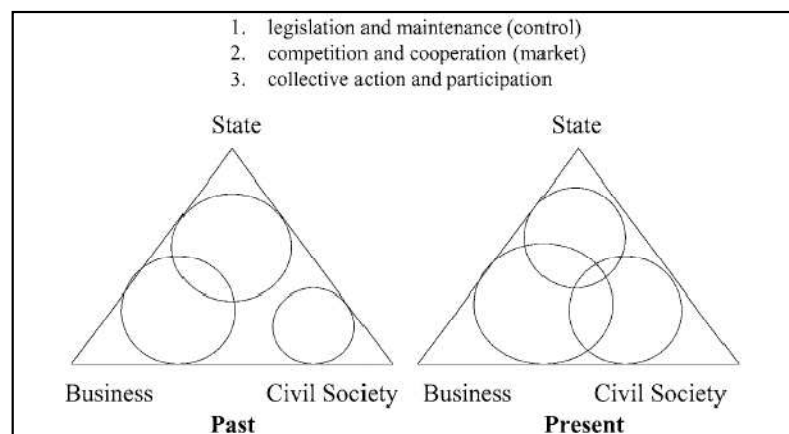
⁵ The double term social/societal will be used in this paper in order to allow for the best understanding of the term “social” in CSR, which is interpreted differently in different regional settings.

Jones, 1995; Clarkson, 1995, p. 244; Holme and Watts, 2000; Dawkins and Lewis, 2003; ISO, 2004).

On the other hand, and as indicated above, nowadays many consider sustainable development and CSR mutually reinforcing in regards to the topics both are dealing with in their attempt of integrating economic, environmental and social/societal issues in cooperation with relevant stakeholders. In fact both concepts are part of a hierarchy in which sustainable development – developed at macro level – demands a relevant corporate contribution in form of CSR (Garriga, Mele 2004). Or, as in 2002 the European Commission put it CSR is the “business contribution to sustainable development” (European Commission 2002). Not surprisingly, societal actors as well as managers are confronted with the same challenges when trying to implement sustainable development or CSR (Steurer et al 2005, Moon 2007). As inherent characteristics of both concepts are seen, (i) both bear a great number and diversity of topics to be dealt with and are therefore internally complex; (ii) for both concepts it is difficult to generalise across countries or industry sectors with different cultural, economic, environmental and social/societal contexts; thus, they are “highly contextual in terms of their temporal and societal setting” (Moon 2007). This social construction of CSR and SD takes place in society as such which can be displayed by the triangle and interplay of the state, businesses and the civil society.

New Societal Governance

Business forms an important triangular relationship with the state and the civil society (van Marrewijk 2003) which is also changing over time as vividly displayed by Van Marrewijk (2003).



Two major shifts in societal power relations directly affect the sustainable development and CSR agenda: Firstly, parallel to the emergence of globalisation and the peak of neo-liberal policies, civil society and especially its most encouraged actors, NGOs gained visibility and power in relation to the other two macro-societal actors. Businesses and governments are more and more pressured to respond to collective actions of civil society actors (van Marrewijk 2003). Secondly, companies take responsibility and action regarding societal issues formerly cared about by governments, inter alia health care systems, corporate pension funds, sustainable production and consumption, climate change and energy, natural resource

protection/environmental enhancement, gender equality, or supporting the education system (van Marrewijk 2003, Moon 2007). According to Moon (2007) governments have three major reasons to engage in this form of ‘New Societal Governance’ (Moon 2007): First, governments do not know how to meet the high societal expectations and try to encourage companies’ CSR activities to assist them in their tasks of governing. Second, in several countries, especially but not only developing and transition countries, a considerable gap between Western standards according for example environmental and employee regulation exists. Under such circumstances internationally operation companies “export” such institutions (e.g. labour rights, education and health services for workers and their families) to the countries they operate in. Third, global political governance (e.g. globally coordinated environmental regulation) cannot keep pace with the rapid spread of economic globalisation through corporations. Therefore, corporations are much better suited to spread standards through collective or individual self-regulation (Moon 2007). Those two shifts in societal power relations also bear changes in the behaviour of each actor in relation to each ones contribution to sustainable development. Since the mid 1990s until today, under the drafted circumstances of new societal governance, networks, cooperation and collaboration as well as formal alongside with informal agreements are the fundamentals of societal interaction (societal network oriented) (Steurer 2007). Trust, as a third need, is the ‘glue’ for social and human relations – this is also applicable for state-business-civil society relations.

CSR-for-SD

The outlined characteristics of CSR and sustainable development (complexity and contextuality) as well as the necessities for the functioning of the new societal power divide between state, businesses and civil society (trust, collective action, shared responsibility) call for two principles: participation and evaluation. Participatory forms of implementation and evaluation of CSR could be an approach serving both ends (the challenging characteristics of CSR/SD as well as the prerequisites of new societal governance) thus, finally, contributing to sustainable development – CSR-for-SD:

- The **challenge of complexity** - enable to better understand the interlinkages between economic, environmental and societal concerns through continuous contributions of complementary resources and competencies (Jonker, Nijhof 2006) and exchange of knowledge (Burchell and Cook 2008) and experiences between a wide array of stakeholders.
- The **challenge of contextuality** - enable the mutual construction of reality and joint understanding of the relevant context of CSR (Cheney and Christensen 2001, Winn 2001) and what can be seen as an accurate contribution to sustainable development based on stakeholders views.
- The **need for collective action** - enable collective action in favour of the overarching shared goal of sustainable development and thus channelling energies towards cooperation instead of confrontation between companies and their stakeholders, especially civil society actors. As Gao and Zhang put it “sustainability is “working together” of the three dimensions of sustainability for the purpose of attaining a holistic integration of

environmental, social and economic goals, processes and performances” (Gao,Zhang 2006). Collaboration also offers better solutions to the complex challenges than individual decisions (Albareda et al 2008). There are clear collective action problems for business in many areas of sustainable development, i.e. CSR, (Moon 2007)

- The **need for trust** - enable the creation of relationships based on mutual trust which will be necessary to collaborate on the basis of informal agreements (Ribeiro and Zwirner forthcoming) and regarding issues which are a matter of subjective valuation and will always contain controversies.
- The **need for mutual responsibility** - enable participants to feel equally responsible for the outcomes of collective actions, approaching sustainability issues with an attitude of continuous learning, recognising the interlinkages and complexities at hand and that everybody carries his/her own responsibility to contribute for a development in the deserved direction (Aguilera et al 2007, Muthuri et al 2009).

As Steurer et al put it, “since the meaning of sustainable development is supposed to be determined through societal consensus finding processes, the concept strongly relies on participation” (Steurer et al 2005) – in CSR practice often applied as stakeholder dialogue. Overall that means that businesses need to establish a corporate culture “consistent with the concept of sustainable development through developing and sustaining relationships with key stakeholders” (Welford, 1995). Furthermore it is stated that “these challenges demand new approaches to decision-making and action and therefore also for responsible leadership. (Bass, Clayton 2005) and that “sustainable development can only be given real meaning and achieved through a multi-stakeholder approach (Rotheroe et al. 2003, Gao and Zhang 2006). In front of this context, this paper investigates two of the most important corporate activities in the field of CSR: CSR reporting and stakeholder dialogue.

Technical approach to CSR – CSR reporting

Interest in CSR Reports and expectations of stakeholders

CSR Reporting, sustainability reporting, triple-bottom-line reporting or non-financial reporting is considerably growing in numbers over recent years (as for example documented by CorporateRegister.com over a period of the last 17 years (www.corporateregister.com 2009)). The higher interest in CSR and non-financial reports is related to two developments: Firstly, as outlined above, societal power constellations shift and civil society gains more influence and power over the other societal actors the state and businesses. Thus, higher expectations and pressure from civil society are put on businesses for more transparency (Pallenberg et al 2006). As stated, this development went hand in hand with the rise of the stakeholder theory of the firm which views businesses responsible not only for their shareholders, but for a wider array of internal and external stakeholders (Freeman 1984). Secondly, also the shareholders, owners and investors got interested in more long-term and non-financial information for their investment decisions as they do not anymore feel

sufficiently informed only by backward looking or short-term oriented financial information (Atkinson et al. 1997). Thus, CSR reporting is primarily concerned with increasing transparency of corporate actions concerning social and environmental issues (Nielsen, Thomson 2007).

Due to non-existent standards the content of CSR reports varies greatly (KPMG 2008) but is often structured according to the tripartite of economic, environmental and social/societal issues. Additionally, often several reporting principles are applied to guide decisions on the content of the report (e.g. materiality, stakeholder inclusiveness, sustainability context, completeness (GRI 2006)), and the quality of the report (e.g. balance, clarity, accuracy, timeliness, comparability, reliability (GRI 2006)). Although being one of the most influential pressure groups for more transparency and CSR reporting, civil society stakeholders still act reserved in regards of CSR reports, for several reasons (Pallenberg et al 2006, Brown et al 2009):

- lack of trust in company issued information which presents companies in a good light
- low quality of the reports, due to uneven data quality and selective reporting
- selective choosing of reporting frameworks
- lack of specificity as CSR reports are general in nature, covering relevant issues superficially
- too much focus on the reporting process than on the performance and impacts of CSR activities
- lack of experience to properly assess the information provided in CSR reports (NGOs are interested “in the strategies and plans behind the numbers” (Brown et al 2009)).

These caveats materialize in companies having problems in recruiting NGOs for their stakeholder engagement process (Pallenberg et al 2006). Furthermore, a survey of CorporateRegister shows that primarily students, consultants and corporate CSR professionals are interested in CSR reports (CorporateRegister 2008). In order to meet those challenges and needs, “corporations need to develop an effective mechanism for linking dialogue and control in practice by empowering the stakeholders in a dialogue way that facilitates decision-making and auditing of both sustainability processes and performance” (Gao, Zhang 2006). Looking ahead and in order to show that the future developments needed in the field of CSR reporting are already addressed in the scientific community the work of Morsing and Schultz on CSR communication strategies (Morsing and Schultz 2006) as well as Isenmann in regards of internet-based sustainability reporting (Isenmann 2005, 2004) are presented.

Future trajectories for CSR reporting

Morsing and Schultz present a suitable CSR communication strategies table which underpins typical CSR reporting activities (Morsing, Schultz 2006):

	The stakeholder information strategy	The stakeholder response strategy	The stakeholder involvement strategy
Communication ideal: (Grunig & Hunt 1984)	Public information, one-way communication	Two-way asymmetric communication	Two-way symmetric communication
Communication ideal: sense-making and sensegiving:	Sensegiving	Sensemaking ↓ Sensegiving	Sensemaking ↕ Sensegiving – in iterative progressive processes
Stakeholders:	Request more information on corporate CSR efforts	Must be reassured that the company is ethical and socially responsible	Co-construct corporate CSR efforts
Stakeholder role:	Stakeholder influence: support or oppose	Stakeholders respond to corporate actions	Stakeholders are involved, participate and suggest corporate actions
Identification of CSR focus:	Decided by top management	Decided by top management. Investigated in feedback via opinion polls, dialogue, networks and partnerships	Negotiated concurrently in interaction with stakeholders
Strategic communication task:	Inform stakeholders about favourable corporate CSR decisions and actions	Demonstrate to stakeholders how the company integrates their concerns	Invite and establish frequent, systematic and pro-active dialogue with stakeholders, i.e. opinion makers, corporate critics, the media, etc.
Corporate communication department's task:	Design appealing concept message	Identify relevant stakeholders	Build relationships
Third-party endorsement of CSR initiatives:	Unnecessary	Integrated element of surveys, rankings and opinion polls	Stakeholders are themselves involved in corporate CSR messages

Table 2: Three CSR communication strategies (Morsing, Schultz 2006)

The strive for assurance of CSR reports can be seen as evidence of the dominance of the “stakeholder information strategy” and the “instrumental CSR approach” (Gond et al 2007) of companies. Under this strategy companies decide in their one-way communication what is reported and what stakeholders are informed about and reduce social responsibility to an instrument for profit maximization. “The risk of adopting such an approach lies in an emphasis on the means of achieving CSR reputation rather than the end of social welfare” Gond et al 2007. Also in internet-based CSR reporting (the prevailing means of CSR reporting) a similar shift from traditional to interactive reporting with substantial stakeholder involvement and the general idea of collective action and learning is outlined in the literature (Isenmann 2007):

Traditional reporting approach	Sophisticated reporting approach
Managerial closed shop procedure	Quasi-public effort
One-way company controlled exercise	Stakeholder involvement
Monologue	Dialogue
One-way communication	Two-way communication
One size fits all reports	Customized reports
Ad-hoc distribution of information	Continual exchange of ideas
Few opportunities for response	Many mechanisms for feedback and criticism
Hard copies	Computer-based media
Print media fixation	Cross-media availability

Table 3: Traditional versus sophisticated reporting approach (Isenmann 2007)

Isenmann cites DiPiazza and Eccles stating that ‘corporate information, in all its growing quantity and complexity can be – and in reality must be – communicated more effectively with the use of new technology’ (Isenmann 2007). CSR reporting that would meet the stakeholder involvement strategy as outlined by Morsing and Schultz and the interactive approach outlined by Isenmann would be a dialogic process between a company and its stakeholders aiming for a collective contribution to sustainable development. As Gao and Zhang put it, “it is no longer sufficient to simply promote and propound the development of triple-bottom line performances [and reporting], at least not without a clear understanding of how stakeholders can be engaged (Gao and Zhang 2006).

Stakeholder-based approach to CSR– stakeholder dialogue

Levels and forms of stakeholder participation

The principle of participation is nowadays common in a variety of contexts: ‘public participation’ in the field of public policy research, ‘community involvement’ in the field of development research, ‘participatory evaluation’ in the field of evaluation research, and ‘stakeholder management/engagement/involvement’ in the field of management research. Despite different terminologies being developed in the different contexts, certain similarities can be found, e.g. in regards of the level of participation. Common point of reference in this regards is Arnstein with her “ladder of citizen participation” (Arnstein 1969). Based on her model a basic graduation starting at a level of information, via consultation to decisional was developed by several authors in different contexts. With regards to stakeholder participation in the CSR context Green, Hunton-Clarke defined the following three levels (Green and Hunton-Clarke 2003):

Informative participation is a one-way communication approach of companies where stakeholders are passive actors receiving information, not intended to feed back. The company has complete control of which information is disseminated and how this is done. Stakeholders’ understanding of company related issues and CSR, values and attitudes are not explored. Bluntly said, stakeholders are supposed to listen gratefully.

Consultative participation is characterised by a deeper level of involvement and the aim of the company to better understand stakeholders' views, values and attitudes. Therefore, it is a two-way communication and stakeholders are seen as active counterparts who can contribute to any given question. Nevertheless, decisions are taken by the company management. This level of participation is also valued for its potential to increase commitment of stakeholders.

The third level, *decisional participation* is characterised by actual participation of stakeholders in decision-making processes of companies, e.g. regarding CSR activities. Involving stakeholders is considered to happen at an early stage of a project or process.

Similarities in this terminology can easily be observed regarding the three communication strategies as defined by Morsing and Schultz outlined above. Hence, it has to be stated that communication definitely is a major part of stakeholder participation, yet not the only one, although it is recognised that terms such as stakeholder dialogue, communication or participation are used to label a whole set of processes and activities carried out for a number of different purposes (Pretty & Shah, 1994).

Stakeholder Dialogue

Some authors see stakeholder dialogue as a fourth level of participation in between consultative and decisional participation (Gao, Zhang 2006). Although not rejected, the author sees stakeholder dialogue as a communicative management instrument which is included in both participation levels and starts somewhere in consultative participatory processes and is part of decisional participative processes. This view also fits to Crane and Livesey who distinguish between stakeholder dialogue designed for a) "asymmetrical persuasive and instrumental purposes" (that would be the ones being regarded under consultative participation), and b) "genuine or "true" two-way symmetric practice" (Crane and Livesey 2003) aiming for win-wins.

As stakeholder perspectives are dynamic and, as outlined above, CSR can only be co-constructed by various stakeholders it is important to monitor and understand stakeholders' views, concerns, opinions and attitudes. This enables companies to address relevant and important issues and meet stakeholder expectations (Green, Hunton-Clarke 2003). Ongoing stakeholder dialogue can be seen as a logical conclusion of this understanding. Furthermore, nowadays companies are more and more pressured by civil society actors for more transparency (see section above on CSR reporting) as well as the consideration of their views and involvement in companies decision-making. From a company's view, stakeholder dialogue "helps to address the question of responsiveness to the generally unclear signals received from the environment" (Garriga, Mele 2004).

Outcomes of the CRADLE project reveals the following insights into stakeholder dialogues (Burchell, Cook 2006):

- Dialogue needs to go beyond dissemination of information
- Tangible outcomes of stakeholder dialogues would be necessary but are scarce
- NGOs are carefully selecting which companies to engage with
- Stakeholder expectations towards companies increase through stakeholder dialogue
- CSR issues are often dominated by the economic bottom line
- Companies found dialogue to increase mutual trust, whereas NGOs saw increased trust to individuals but not necessarily to companies
- Stakeholder dialogue needs to aim for changes in business practices otherwise NGOs apply their ordinary forms of business-relations (e.g. campaigning)

Future trajectories for stakeholder dialogue

Lately, for example since climate change is a “hot” issue, participation seems to focus on the resolution of specific conflicts or issues on an ad hoc basis (Green, Hunton-Clarke 2003). In order to fulfil the outlined challenges and needs of CSR to contribute to sustainable development a more decisional and ongoing type of stakeholder dialogue is necessary. Green, Hunton-Clarke offer a model which shows the levels of participation as outlined above (informative, consultative, decisional) in combination with ad-hoc and ongoing ways of stakeholder dialogue. One outcome of their conceptualisation is that greater stakeholder involvement within decision-making would mean carrying out a form of decisional participation. “This could result in arguably more sustainable decisions” (Acland 2000, cited in Green, Hunton-Clarke 2003, p. 297)



Figure 1: Matrix with types of stakeholder dialogue (Green, Hunton-Clarke 2003)

Solely stakeholder dialogue at low stages of involvement and participation will not utilise the full potential of this instrument. Currently, stakeholder involvement in CSR activities of firms is (often) weak and lacks decisional stakeholder involvement and dialogic participation. Ongoing stakeholder dialogue with stakeholder committees could be a fruitful process in order to really contribute to sustainable development. Participatory processes with stakeholder committees have proven to work fine in other contexts e.g. the development of national sustainable development strategies in Finland⁶. Currently, the institutional framework is insufficient (how to finance the time needed of the stakeholders in the participatory process; who to be invited anyway in such a CSR committee). The proposed approach as outlined in the subsequent chapter presents one possibility of institutionalised framework for a strong stakeholder-based definition, planning, implementation and evaluation of CSR.

Evaluation of CSR-for-SD of current CSR practices

This section investigates the potential utilised of two of the most often applied CSR practices (CSR Reporting and Stakeholder dialogue) with regards to the challenges

⁶ The Finnish National Commission on Sustainable Development (FNCSD)
<http://www.ymparisto.fi/default.asp?node=4412&lan=en>

and needs of CSR-for-SD as outlined above. In conclusion the way is paved for the introduction of participatory evaluation of CSR.

The challenge of complexity: In some cases CSR reporting relies on meticulous and comprehensive lists of indicators which often contribute to more confusion than clarity and also do often not show interlinkages between the three pillars of sustainability. Specific, and often, critical information about the negative effects of business activity which would be crucial for an appropriate understanding of the situation are missing in the reports. Stakeholder dialogue is at the heart of meeting this challenge through the meeting of various stakeholders and the exchange of knowledge, ideas and experiences. Nevertheless, the details of the type of stakeholder dialogue are the crucial factor. Solely short-term oriented and ad-hoc types of stakeholder dialogue that might not be much more than disseminating information do not address this issue accordingly.

The challenge of contextuality: Yet, the uptake and content of CSR reports varies greatly and are in general issued as one-size-fits-all conglomerates. Moreover, stakeholders are rarely and selectively involved in defining the grounds for later performance evaluation in regards of CSR and sustainable development. Stakeholder dialogue has the potential to lead to a mutual construction of the CSR relevant context, but it has to be executed in a way that allows utilising that potential. As CSR are issues are dynamic an ongoing stakeholder dialogue process needs to be established in order to regularly redefine a company's relevant CSR context and also to be timely informed of relevant developments in its environment.

The need for collective action: CSR reports are normally the end of a data collecting, assessment and presentation journey of companies which can trigger collective action inside of companies. Nevertheless, chances for taking CSR reports as a starting point for continuous learning to approach sustainable development are not systematically utilised. Stakeholder dialogues are an appropriate tool to tackle specific issues of concern to a company (e.g. special dialogue in regards of climate change). Nevertheless, the companies getting active in this regards have to make sure that they are prepared for transparency and open to the outcomes of such a process which will be co-shaped by stakeholders. Genuine, intrinsic collective action can only be expected if value is added to all participating parties which inevitably will lead to compromise.

The need for trust: As companies' motivation to issue CSR reports is still dominated by an instrumental approach of adding value to the financial bottom line, often seem to selectively focus only on the good sides of business, civil society prefers to consult company-external sources and the general public is not very keen on reading the reports anyway, trust creation is very unlikely to happen. If the stakeholder dialogue is implemented in a way that it is open to the contributions of all participating stakeholders, is aiming for mutual objectives and expectations are clear from the beginning, trust can be achieved. Dialogue leads stakeholders to co-create shared realities and values (Cheney and Christensen 2001, Winn 2001).

The need for mutual responsibility: As mentioned above, current CSR reports are clearly reflecting business perspectives aiming to show how the sustainability responsibilities are met in order to obtain a license to operate rather than to report

about collectively reached goals for sustainable development. Out of an environment of collective action and trust mutual responsibility can develop. In order to feel equally responsible for outcomes which are also influenced by others, equal opportunities and an equal stake in the stakeholder dialogue will be necessary.

Summing up, CSR-for-SD needs to be shaped in a way that deep, ongoing collaboration with stakeholders is facilitated and the evaluation of mutual efforts leads to continuous learning for better reaching the goal of sustainable development. The model of ‘participatory evaluation of CSR’ could be the framework for such an approach and is presented in the following chapter.

Participatory Evaluation of CSR – A Conceptual Proposal

Evaluation as an Appropriate Approach to CSR

Although the term ‘evaluation’ is commonly used in the evaluation of political programmes, policies or strategies, it is perfectly suited to be applied for a far wider array of evaluands, i.e. the objects of the evaluation, CSR strategies, policies, programmes or activities. Evaluation is here understood as the systematic determination of the merit (intrinsic value or quality) and worth (value to so somebody) of something (Scriven 1991). As several times outlined above, companies take over issues of social welfare formerly taken care of by the state and corporations nowadays have more influence on environmental and social issues than states. If evaluation is ‘client driven’ than ‘the client’ in these cases is society as such and the evaluated programmes are companies CSR programmes, policies or activities. Following the foundations of normative stakeholder theory (Post et al 2002) it is recognised and fully supported that various stakeholders do have a decisional stake in company’s activities and therefore have to be seen as relevant actors in CSR implementation as well as learning oriented evaluation. This approach is also in line with seeing sustainable development (towards which CSR is supposed to be contributing) as a social/societal learning process. Sustainable development/CSR are seen as evolutionary processes whose direction is given within an evolutionary corridor, principally open but unknown ex ante (Busch-Lüty 1996 in Schubert and Strömer 2006). Furthermore, in evaluation an extensive body of theoretical and practical knowledge in participatory forms of evaluation has been built. Especially in development research participatory research is commonly applied and builds on principles like knowledge exchange, social learning, equality and collective action (Muthuri 2009). The reasons why evaluation can be considered an appropriate approach to deal with CSR can be summarised as follows:

- evaluation serve as a systematic approach to find out about the merit (quality) and worth (value) of CSR in relation to its contribution to sustainable development
- evaluation supports social learning of the participants/stakeholders involved
- evaluation has an established body of knowledge in participatory engagement of stakeholders

- evaluations are externally facilitated by researchers/practitioners

Moreover, considering what has been said so far in this article, evaluation of CSR has to be participatory: (1) sustainable development is closely related to participatory involvement of stakeholders; (2) as shown in chapter 3 of this paper, CSR is closely related to stakeholder theory, management and dialogue (Freeman 1984, Post et al 2002); (3) a key concept of sustainability research is social learning (Blackstock et al 2007) which is inseparably linked to participation due to normative (the right thing to do), substantive (increased knowledge through participation), and instrumental (better uptake of solutions) reasons (ibid). By applying a ‘participatory’ approach we still need to expand the term to a number of key principles, such as those identified by Egger and Majeres 1998 in Duraiappah et al 2005):

- ***Inclusion*** – of all people, or representatives of all groups who will be affected by the results of a decision or a process, such as a development project.
- ***Equal Partnership*** – recognizing that every person has skill, ability and initiative and has equal right to participate in the process regardless of their status.
- ***Transparency*** – all participants must help to create a climate conducive to open communication and building dialogue.
- ***Sharing Power*** – authority and power must be balanced evenly between all stakeholders to avoid the domination of one party.
- ***Sharing responsibility*** – similarly, all stakeholders have equal responsibility for decisions that are made, and each should have clear responsibilities within each process.
- ***Empowerment*** – participants with special skills should be encouraged to take responsibility for tasks within their specialty, but should also encourage others to also be involved to promote mutual learning and empowerment.
- ***Cooperation*** – cooperation is very important; sharing everybody’s strength reduces everybody’s weaknesses.

Therefore, the following cornerstones regarding the approach, scope and type of evaluation are suggested to be applied when evaluating CSR:

Evaluand: CSR strategies, policies, programmes or activities

Purpose of the evaluation: learning and collective action (instead of legitimacy seeking or accountability)

Evaluation method: Participatory evaluation, qualitative approach based on constructivist epistemology

Involved parties/clients: companies and all relevant stakeholders and stakeholder groups through stakeholder councils

Timing of the evaluation: accompanying, formative evaluation (instead of ex-post auditing)

The proposed approach follows a combination of practical as well as transformative participatory evaluation (Cousins, Whitmore 1998) by supporting solution oriented decision-making (practical PE) as well as facilitating social/societal change through a) empowering people through participation and that popular knowledge is as valid and useful as scientific knowledge; b) initiating and sustaining genuine dialog among stakeholders; and c) a process of critical (self-)reflection of participants (transformative PE). Participatory evaluation of that kind is an "educational process through which social groups produce action-oriented knowledge about their reality, clarify and articulate their norms and values, and reach consensus about further action" (Brunner, Guzman 1989).

The Process of Participatory Evaluation of CSR

The process of participatory evaluation of CSR is intended to be an evaluation process with the purpose of learning how a company can effectively contribute to sustainable development. The process is designed as an ongoing dialogue process of a company with its key stakeholders organised in stakeholder councils aiming at a) defining what are relevant CSR issues that need to be addressed; b) gathering knowledge that is scattered among all participants of such a process; c) establishing trust among participants as well as their organisations/institutions; d) sparking collective action; and e) creating a mutual sense of responsibility. CSR strategies, policies, programmes, projects and activities will be a result of such a participatory management of a company which will also lead to concrete action plans as well as the definition of evaluation criteria to be met in the regular assessment of the actions undertaken. Stakeholders will not fight against each other but collectively define, plan, implement and evaluate their mutual efforts towards sustainable development. Participation will not be an "exercise" to be conducted but a constituting, institutionalised and ongoing form of company-stakeholder relations based on principles like equality, mutual respect, trust, transparency, cooperation and openness to change. Therefore, the challenges (complexity and contextuality) and needs of CSR-for-SD (enable collective action, trust, and mutual responsibility) are considered to be addressed appropriately with such an approach.

Challenges and Barriers of Participatory Approaches – The Responsible Leadership quest of participatory CSR Evaluation

Nevertheless certain challenges and potential barriers to such an approach can be envisaged and are stated in literature in regards of participatory processes (e.g. stakeholder involvement, stakeholder dialogue) or evaluations (Green, Hunton-Clarke 2003, Greenwood 2007, Morsing, Schultz 2006):

- Resources and capacities – e.g. costs of communication and providing access to information and negotiation; costs of specialist skills for facilitating the process comprising conflicting interests and opinions; costs of participating in such a process (especially civil society actors, local communities, individuals); time spent in meetings, costs for food and accommodation

- Values and cultural factors – e.g. behavioural norms or cultural traditions as well as traditional authority structures; or legal institutional or established systems for example regarding employees' participation
- Business commitment – e.g. confidentiality of provided company information in competitive economic environments; openness to participative way of management: willingness and company-structures prepared to accept decisions taken in such an dialogic co-decision process
- Stakeholder commitment – e.g. civil society actors being prepared to being involved (organisation level, willingness, available financial and personnel resources);
- Contextual/special factors – e.g. difficult to involve stakeholders due to nomadic lifestyles or illiteracy; languages (in global supply chains and multicultural settings); spatial distance (e.g. need to involve stakeholders of remote and rural areas)

What is described above is an ideal process of participatory evaluation of CSR. The just outlined challenges and potential barriers need to be addressed by anybody aiming for implementing such a process. A participatory evaluation process of CSR needs to establish a trustful environment and professionally facilitated by experienced researchers or practitioners as poor implementation of such a process (raising unrealistic expectations, lack of involvement of the relevant stakeholders, unbalance of powers in the process and regarding outcomes, lack of company commitment,...) will destroy trust which is the basic ingredient for all human relations, thus also for company-stakeholder relations. A substantial and effective contribution of companies through their CSR activities to sustainable development would then be impossible.

Conclusions

This paper aimed for providing a conceptual framework for participatory evaluation of CSR. CSR was introduced as a business contribution to sustainable development. Moreover the societal relations between states, companies and civil society were introduced under the concept of New Societal Governance whereby the traditional boundaries of the three societal actors are newly defined. States are less commanding and powerful through legislation, companies take over domains formerly administered by states and civil society claims its stakes regarding transparency, participation and co-decision-making in relation to both other societal actors. Given that situation a set of challenges and needs of CSR being able to contribute to sustainable development is derived. CSR-for-SD needs to tackle the complexity and contextuality of CSR as well as to facilitate the development of trust, collective action and mutual responsibility among all actors involved.

The current dominant forms of CSR – CSR reporting and stakeholder dialogue – were then presented and analysed regarding their capability to address the challenges and needs of CSR-for-SD. Current dominant forms CSR reporting were found to be too technical and instrumental, and current forms of stakeholder dialogue were found

to be too little decisional as well as often only applied on an ad-hoc basis. In both fields models and concepts were outlined leading the way for CSR reporting and stakeholder dialogue to contribute to CSR-for-SD. In the last section the proposed approach for participatory evaluation of CSR was presented, showing why evaluation is a suitable approach to assess CSR-for-SD efforts, why especially participatory evaluation is needed to be applied and finally, on which cornerstones such a participatory evaluation of CSR is built on. Participatory evaluation of CSR integrates CSR reporting as well as stakeholder dialogue into a learning oriented formative evaluation process. It is designed as an ongoing, accompanying research process which comprises defining, planning, implementing and evaluating CSR activities. It successfully deals with the complexity and contextuality of CSR and facilitates the development of trust, collective action and mutual responsibility among all actors, and – thus – is a clear task of responsible leadership.

However, the proposed approach is exploratory and still needs empirical and applied research to be conducted to investigate its challenges and opportunities in practical implementation. Of the potential barriers and challenges already outlined two of the most crucial factors to be studied probably are under which conditions companies would be willing to join such a process and how ongoing stakeholder participation can be maintained.

References

- ACCA The Association of Chartered Certified Accountants (ACCA) and Next Step Consulting Ltd. . 2001. Environmental, Social and Sustainability Reporting on the World Wide Web – A Guide to Best Practice, London: ACCA, The Certified Accountants Educational Trust (CAET).
- Aguilera R., Rupp, D. E., Williams, C. A., Ganapathi, J. 2007. Putting the S back in corporate social responsibility: A multi-level theory of social change in organizations. *Academy of Management Review*, 32(3): 836-863.
- Albareda, L., Lozano, J. M., Tencati, A., Midttun, A., Perrini, F. 2008. The changing role of governments in corporate social responsibility: Drivers and responses, Chichester, England: Business ethics. *European Review* (), 17, 347–363.
- Arnstein, A. 1969. A ladder of citizen participation. *Journal of the American Institute of Planners* 26 (4), 216–233.
- Atkinson, G., Dubourg, R., Hamilton, K., Munasinghe, M., Pearce, D., Young, C. 1997. *Measuring sustainable development: macroeconomics and the environment*, Cheltenham: Edward Elgar Publishing, 252 pp.
- Banerjee, S.B. 2002. Contesting Corporate Citizenship, Sustainability and Stakeholder Theory: Holy Trinity or Praxis of Evil?, http://business.unisa.edu.au/cae/TBL/tbldownload-ables_banerjeecorporateresponsibility.pdf.
- Bass, St., Dalal-Clayton, B., Pretty, J. 1995. Participation in strategies for sustainable development. Environmental Planning Group IIED (International Institute for Environment and Development). *Environmental Planning Issues*. No.7.
- Blackstock et al.,. 2007. Developing and applying a framework to evaluate participatory research for sustainability. *Ecological Economics* 60, p. 726-742.
- Brown, H.S., de Jong, M., Levy, D.L. 2009. Building institutions based on information disclosure: lessons from GRI's sustainability reporting. *Journal of Cleaner Production*. 17, 571–580.
- Brunner, I., Guzman, A. 1989. Participatory Evaluation: A Tool to Assess Projects and Empower People. In R. F. Conner and M. Hendricks (eds.), *International Innovations in Evaluation Methodology*. New Directions for Evaluation, no. 42, San Francisco: Jossey-Bass.
- Burchell J., Cook J. 2006. It's good to talk? Examining attitudes towards corporate social responsibility dialogue and engagement processes. *Business Ethics: A European Review* 15(2): 154–170.

Burchell, J., Cook, J. 2008. Stakeholder dialogue and organisational learning: changing relationships between companies and NGOs. *Business Ethics: A European Review*, 17, 35r46.

Cheney, G., Christensen, L.T. 2001. Organizational communication: linkages between internal and external communication In Jablin, F.M. and Putnam, L. (Eds.), *The New Handbook of Organizational Communication: Advances in Theory, Research, and Methods*, Thousand Oaks, CA: Sage.

Clarkson, M. B. E. 1995. A stakeholder framework for analysing and evaluating corporate social performance. *Academy of Management Review*, 20: 92-117.

CorporateRegister. 2008. The CSR Assurance Statement Report. CorporateRegister.com Limited, www.corporateregister.com, [astudy](#)

Cousins, J. B., Whitmore, E. 1998. Framing Participatory Evaluation. *New Directions for Evaluation*, no 80 (5-23).

Crane, A., Livesey, S. 2003. Are you talking to me? Stakeholder communication and the risks and rewards of dialogue, in Andriof, J., Waddock, S., Husted, B. and Rahman, S. (Eds). *Unfolding Stakeholder Thinking 2*, Sheffield: Greenleaf Publishing, pp. 39-52.

Dahlsrud, A. 2006. How corporate social responsibility is defined: an analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*. Published online in Wiley InterScience, DOI: 10.1002, csr.132.

Davidson, E.J. 2005. *Evaluation methodology basics. The nuts and bolts of sound evaluation*, Thousand Oaks, London, New Delhi: SAGE publications.

Dawkins, J., Lewis, S. 2003. CSR in Stakeholder Expectations and their Implication for Company Strategy. *Journal of Business Ethics* 44(2-3), 185-193.

Doane, D. 2004. Good intentions-bad outcomes? The broken promise of corporate social responsibility. Chapter 8 in A. Henriques & J. Richardson (eds) *The Triple Bottom Line: Does it all add up?* , London: Earthscan Publishers.

Donaldson, T., Preston, L.E. 1995. The stakeholder theory of the corporation: concepts, evidence and implications. *Academy of Management Review*, 29:1, 65-91.

Duraiappah, A.K. et al. 2005. Have participatory approaches increased capabilities?, Winnipeg: IISD. URL: http://www.iisd.org/pdf/2005/economics_participatory_approaches.pdf .

European Commission, Directorate-General for Employment and Social Affairs, Unit D.1: Corporate Social Responsibility. 2002. A business contribution to sustainable development. Communication from the Commission, COM(2002) 347 final. URL, http://ec.europa.eu/employment_social/soc-dial/csr/csr2002_col_en.pdf

- Freeman, R.E. 1984. *Strategic Management: A Stakeholder Approach*, Englewood Cliffs, NJ.: Prentice-Hall.
- Gao, S., Zhang, J. 2006. Stakeholder engagement, social auditing and corporate sustainability. *Business Process Management Journal* Vol. 12 No. 6, 2006 pp. 722-740.
- Garriga, E., Mele' D. 2004. Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics* 53(1-2), 51-71.
- Gond, J.P., Palazzo, G., Basu, K. 2007. Investigating Instrumental Corporate Social Responsibility through the Mafia Metaphor. ICCSR Research Paper Series – ISSN 1479-5124. No. 48-2007.
- Green, A. O., Hunton-Clarke L. 2003. A Typology of Stakeholder Participation for Company Environmental Decision-Making. *Business Strategy and the Environment* 12, 292-299.
- Greenwood, M. 2007. Stakeholder Engagement: Beyond the Myth of Corporate Responsibility. *Journal of Business Ethics*, 74:315-327
- GRI, Global Reporting Initiative. 2006. Sustainability reporting guidelines G3. Amsterdam, <http://www.globalreporting.org/ReportingFramework/ReportingFrameworkDownloads/#1>
- Holme, R., Watts P. 2000. Corporate Social Responsibility: Making Good Business Sense. WBCSD, http://www.wbcd.org/newscenter/reports/2000_csr2000.pdf.
- Hummels, H., Timmer, D. 2004. Investors in Need of Social, Ethical, and Environmental Information. *Journal of Business Ethics*. 52 (1. :p.73-84. ABI, INFORM Global.
- Husted, B. W., Allen, D. B. 2007. Strategic Corporate Social Responsibility and Value Creation among Large Firms: Lessons from the Spanish Experience. *Long Range Planning* (40), pp. 594 – 610.
- Isenmann R., Kim K-C. 2005. Progression in sustainability reporting: moving towards a more interactive, tailored, and dialogue oriented stage. *Sustainability Reporting – Concepts and Experiences*, Reddy S (eds), Hyderabad: ICFAI University Press, 68-91.
- Isenmann, R. 2004. Internet-based sustainability reporting. *Int. J. Environment and Sustainable Development*, Vol. 3, No. 2, 145-167
- Isenmann, R. 2007. Online Reporting for Sustainability Issues. *Business Strategy and the Environment*. 16, 487-501.
- ISO Advisory Group on Social Responsibility. 2004. Working Report on Social Responsibility, [www.iso.org/iso/en/info/Conferences/SRConferences/pdf/Working%20Report%20SR\(Apr30\).pdf](http://www.iso.org/iso/en/info/Conferences/SRConferences/pdf/Working%20Report%20SR(Apr30).pdf).

- Jabareen, Y. 2005. A New Conceptual Framework for Sustainable Development. *Environment. Development and Sustainability*, 179-192, Netherlands: Springer.
- Jonker, J., Nijhof, A. 2006. *Corporate Governance: An International Review*, Vol. 14, No. 5, pp. 456-466.
- Kim, Ki-Ch. 2005. *Interaktive Nachhaltigkeitsberichterstattung von Unternehmen*, Lüneburg: Peter Lang Verlag.
- Kirkpatrick C., George C. 2007. *Impact Assessment and Sustainable Development – European Practice and Experience*. Book series edited by Hardi P. And Martinuzzi A. *Evaluating Sustainable Development*, Cheltenham, UK: Edward Elgar Publishing.
- Loew, T., Ankele, K., Braun, S., Clausen, J. 2004. *Bedeutung der CSR Diskussion für Nachhaltigkeit und die Anforderungen an Unternehmen*, Berlin, Münster: www.ioew.de.
- Margolis, J. D., Walsh, J. P. 2001. *People and profits? The search for a link between a company's social and financial performance*, Mahwah, NJ.: Erlbaum.
- Marrewijk, M.van. 2003. Concepts and Definitions of CSR and Corporate Sustainability: between Agency and Communion. *Journal of Business Ethics* 44(2), 95–105.
- Moon, J. 2007. The Contribution of Corporate Social Responsibility to Sustainable Development. *Sustainable Development*, 15, 296-306.
- Morsing, M., Schultz, M. 2006. Corporate social responsibility communication: stakeholder information, response and involvement strategies. *Business Ethics: A European Review* 15 (4), S. 323–338.
- Muthuri, J.N., Chapple, W., Moon, J. 2009. An Integrated Approach to Implementing ‘Community Participation’ in Corporate Community Involvement: Lessons from Magadi Soda Company in Kenya. *Journal of Business Ethics* (2009) 85:431–444.
- Nielsen, A. E., Thomsen, C. . 2007. Reporting CSR – what and how to say it?. *Corporate Communications*, 12 (1): 25r40. Emerald.
- Pallenberg, M., Reinicke, W., Witte JM. 2006. Trends in non-financial reporting. Paper prepared for the United Nations Environment Programmes, Division of Technology, Industry and Economics (DTIE), November 2006. Berlin, Germany: Global Public Policy Institute.
- Porter, M., Kramer, M. 2002. The competitive advantage of corporate philanthropy. *Harvard Business Review*, 80(12), 57– 68.
- Post, J.E., Preston, L.E., Sachs, S. 2002. *Redefining the Corporation: Stakeholder Management and Organizational Wealth*, Stanford: Stanford University Press.

- Pretty, J., Shah, P. 1994. Soil and Water Conservation in the Twentieth Century: a History of Coercion and Control, University of Reading Rural History Centre Research Series 1. Tomorrow. 1999. 3(IX): May–June.
- Ribeiro, M.M., Zwirner, W. (forthcoming) Participatory supply chain analysis: a way to understand the commercialisation of paper mulberry bark in Laos. *Systemic Practice and Action Research (SPAR)*.
- Rotheroe, N., Keenlyside, K., Coates, L. 2003. Local agenda 21: articulating the meaning of sustainable development at the level of the individual enterprise. *Journal of Cleaner Production*, Vol. 11, pp. 537-48.
- Rowley, T., Berman, S. 2000. A New Brand of Corporate Social Performance. *Business and Society*, 39(4): 397-418.
- Schubert U., Strömer E. 2005. Sustainable Development in Europe – Concepts, evaluation and applications. Book series edited by Hardi P. And Martinuzzi A. *Evaluating Sustainable Development*, Cheltenham, UK: Edward Elgar Publishing.
- Scriven, M. 1991. *Evaluation thesaurus*, Newbury Park, CA: Sage.
- Solomon, JF., Darby, L. 2005. Is private social, ethical and environmental reporting mythicizing or demythologizing reality? *Accounting Forum* 29: 27–47.
- Stern, T. 2007. *The Economics of Climate Change: the Stern Review*, Cambridge: Cambridge University Press.
- Steurer, R. 2006. Mapping Stakeholder Theory Anew: From a ‘Theory of the Firm’ to Three Perspectives on Business-Society Relations. *Business Strategy and the Environment*, 15, 1, 55-69.
- Steurer, R. 2007. From Government Strategies to Strategic Public Management: an Exploratory Outlook on the Pursuit of Cross-Sectoral Policy Integration. *European Environment*. 17, 201–214.
- Steurer, R. 2002. *Der Wachstumsdiskurs in Wissenschaft und Politik: Von der Wachstumseuphorie über ‘Grenzen des Wachstums’ zur Nachhaltigkeit* (Verlag für Wissenschaft und Forschung, Berlin).
- Steurer, R., Langer, M.E., Konrad, A., Martinuzzi, A. 2005. Corporations, Stakeholders and Sustainable Development I: A Theoretical Exploration of Business-Society Relations. *Journal of Business Ethics*, 61, 3, 263-281.
- Stiller, Y., Daub, C.H. 2007. Paving the Way for Sustainability Communication: Evidence from a Swiss Study. *Business Strategy and the Environment*. 16, 474–486.
- Thomson, I., Bebbington, J. 2005. Social and environmental reporting in the UK: a pedagogic evaluation. *Critical Perspectives on Accounting* 16: 507–533.

WCED. 1987. Our common future, Oxford: Oxford University Press

Weaver, L., Cousins, J.B. 2004. Unpacking the Participatory Process. Journal of MultiDisciplinary Evaluation, JMDE:1. <http://evaluation.wmich.edu/jmde>,

Welford, R. 1995. Environmental Strategy and Sustainable Development: The Corporate Challenge for the Twenty-first Century, London: Routledge.

Winn, M.I. 2001. Building stakeholder theory with a decision modelling methodology. Business and Society, Vol. 40 No. 2, pp. 133-66

Wood, D. J., Jones, R. E. 1995. Stakeholder mismatching: A theoretical problem in empirical research in corporate social performance. International Journal of Organizational Analysis, 3: 229-267.

WSSD – World Summit on Sustainable Development. 2002. Report of the World Summit on Sustainable Development, Johannesburg, South Africa. <http://www.un.org/events/wssd>,

Zwirner, W. 2009. Internetbasiertes CSR-Reporting österreichischer Banken - eine empirische Analyse mit dem CSR Reporting-Cube. ISBN-13: 978-3639133233, Saarbrücken: VDM Verlag Dr. Müller.

**PART THREE: CORPORATE RESPONSIBILITY IN
DEVELOPING COUNTRIES**

WEAVING SOCIAL RESPONSIBILITY WITH BUSINESS STRATEGY: A CASE STUDY OF SIPM

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Abstract

South India Paper Mills (SIPM), a medium sized family business manufacturing recycled paper integrated CSR activities early in its business strategy like providing free treated water for agriculture to the local farmers while finding a way of disposing waste water. The company voluntarily increased compensation and guaranteed employment to the children of retired employees, which ensured better living and educational standards, provided employment opportunities and reversed the migration trend to the city. The acute power shortage led the management to generate its own power with the locally available biomass to ensure a steady supply of power and income, by supplying the excess power to the State and a regular source of income to the villagers.

Key words: CSR, Business strategy, Leadership style.

Sir Adrian Cadbury in his speech in Global Corporate Governance Forum, World Bank 2000 said ‘Corporate governance is concerned with holding the balances between economic and social goals and between individual and communal goals. The governance framework is there to encourage the efficient use of resources and equally to require accountability for the stewardship of these resources. The aim is to align as nearly as possible the interests of individual, corporation and society.’
[\[1\]](#)

Companies need to make profits, and that is a foregone conclusion. But what is new is that: At what cost can it make profits? To what extent can a company go to make profits? And is profit the only motive? CSR is about how an organization can use its core competency to achieve its financial and non-financial goals.

The former U.N. Secretary-General Kofi Annan, a strong advocate of CSR terms it ‘the human face of corporations’ and calls it ‘a license to operate as a business in the short term, a necessary condition for sustainability and competitiveness in the long term’.

CSR is a term which has undergone a sea change and has evolved from mercantile charity to corporate citizenship. The term is new but the concept is not. In India it has its roots in religion along with a tradition set by royalty. It was natural that

business houses should follow this for a variety of reasons like education or religious activities through foundations or trusts. The difference between then and now is that the donations, monetary or otherwise were from the personal wealth of the promoters and did not belong to the shareholders as it does now. Over time, philanthropy took the shape of adoption of a village, providing basic infrastructure or education but such activities were kept at an arm's length and did not constitute an integral part of the business. Many activities in the guise of CSR have had absolutely no connection with the core business operations and were mostly done with a selfish motive of buying peace with the surrounding community. They did not have a strategy nor a well laid out plan for long-term implementation and were and still are dependent on the annual budget allocations. The responsibility of the corporation ended with the disbursement of the budgeted funds and no measure was taken to check the success of the program. What most companies failed to understand is that CSR is not an unrelated activity but is one which leads to a win-win situation both for the organization and the beneficiary. When this is the attitude, the first to feel the axe during a downturn or recession is the CSR.

The changing business philosophy is the result of businesses being more competitive. Liberalization has opened doors to new competition and business houses felt the need for being innovative. Contrary to the perception of most people and organizations, CSR now is not only restricted to larger organizations or cash rich MNCs but is adopted by medium concerns too and there exists a difference between the 'do good' activities' which are often passed off as CSR and reported in the glossy annual reports and those which have been integrated into the business strategy. Those organizations which did *walk the talk* of CSR did so as their promoter family believed in it. Where the Board of Directors is silent or indifferent in this matter, it is the CEO or the top management which shapes the CSR policy. True cases have been witnessed about the conviction of the leaders both in India and the rest of the world.

India in the old economic system was no better than any other developing nation. In a country of a teeming billion population, unequal wealth distribution, the shareholders of a company, being widely scattered were recognized as the only stakeholders even that to the extent of the receipt of dividend only. But in the present market economy with competition from every quarter, the companies are judged not only by their financial performance but also by the level of their corporate citizenship. We find different models of CSR which have become the central theme in business strategies. One such case of a pure business model is that of **South India Paper Mills (SIPM)**.

"Kaveri Valley Paper Mills' as it was known then was started in 1947-48 on a small scale, manufacturing paper, five ton a day with the second hand Japanese machinery imported from Malaysia after World War II. The recession in early 1950s forced its closure and it remained closed till 1959 until A. Patel from East Africa decided to invest a portion of his wealth back in his home country. Patel apart from being a barrister with a flourishing practice was Her Majesty the Queen's Counsel and was decorated with CBE. He was also the Minister for Industries in independent Uganda under Obote's regime. Patel was acquainted with the then Prime Minister Nehru and Sardar Patel and on one of his visits to India learnt that a paper mill was up for sale in Southern India. Visits to this remote corner of the country, discussions with the

former employees who were closely associated with the closed plant convinced him to purchase it and restart the operations. The paper mill now renamed **South India Paper Mills (SIPM)** was restarted with an amount of Rs. 1.25 million. With the first four years resulting in losses and pumping in more capital saw the exit of some family members from the business. With the consolidation of the ownership, the economy at a turning point, things did look up for SIPM with the former employees back in business.

The entire apple cart was toppled by the dictator Idi Amin in Uganda who mercilessly drove out all Asians of the country in early 1970s. The 80,000 or so Asian community had a very strong hold in all major sectors be it banking, trade or industry. Since most of them were British citizens, Britain did its best to accommodate these displaced Asians either within Britain or with any of its common wealth nations.

Patel having given up his British citizenship while being a minister chose to return to India with his entire family. His son Mahendra Patel, a criminal lawyer by profession after contemplating to settle in New Zealand was put in charge of SIPM. Though formally heading the unit, the day-to-day management was done by the extended family and the locally appointed managers.

Now, this plant was situated in the lush green agricultural belt on the banks of river Kabini in Southern India. The paper industry needs a lot of clear water for processing and in the early days, the factory would discharge the effluents in the surrounding barren fields. But as time went by, the production increased from 20 tons per day to 45 tons per day, and so did the number of industries in the area. The company could no longer discharge its effluents indiscriminately in the fields and the Pollution Control Board prohibits the discharge back into the river. The management struck a novel idea. After consultation with the villagers, they constructed a ½ acre hold tank to treat the chemical water and laid a two km pipe line to the villagers where poor farmers were able to grow paddy in a semi arid region instead of the dry crops grown earlier which were dependent on the rains too. This was considered not as an expense for the year but as an investment in the long term. This project brought a tremendous change in the living standards of the community and a rare bonding between the company and the people.

A perpetual problem in the State is the availability of hydel power especially during the summer with the rivers drying up. With power cuts up to 14 hours per day, the plant faced huge losses and was on the verge of closure. So, another strategy was planned. With a loan from the Karnataka State Financial Corporation, the unit set up a plant for power generation. What was unique about it, was the fuel for the generation of steam was the local biomass available in plenty in the form of coconut husk. The plan was a runaway success as the villagers supplying the husk could earn a regular income from its sale to the factory and the factory too was assured of a regular supply of raw material. This win-win situation led to more power being generated than required. The excess power generated was supplied to the State grid which in turn became a revenue earner for the company.

Even at present with better power position, the company continues to employ the same strategy of power generation to help the villagers.

One other problem faced in India by many manufacturing units situated in rural areas is that of high turnover of workers due to migration to the city. The company devised a solution to minimize both turnover and migration both as a CSR activity as well as a business strategy. The management identified many school-going children of the workers some of whom were on the verge of retirement and sponsored their technical education in the areas required by the company like electrical engineering or paper technology. The deal with the trade union was that those children would work for the company after their completion of training or when their parent retired. This not only ensured the workers' family of a regular job and income but their higher education would enhance the organizational culture.

The ultimate benefit resulting from these beliefs and actions of the company was a strong employer-employee stakeholder model and the care exerted by the company resulted in a greater bonding between them which has ensured a cushioning effect even during adverse situations. The case of SIPM is not an exception. The Indian tobacco giant ITC is only different in its methods. For long, it has had to live with a tag of being a cigarette company and being looked down by people. Liberalization in the form of the Structural Adjustment Program gave it ample opportunity to diversify into agri-business of edible oil and other food products. With the assistance of Information & Communication Technology, ITC set up a platform called 'e-Choupal' to provide the farmers with the essential information about the crops to be grown, the seed money, and assured a market for their products at a better price. The existence of middlemen in the market chain was eliminated. ITC by sourcing their supply straight from the farmers also assured themselves about the quality and quantity of raw materials. This has been live example of CSR in the country and a model for many others.

Yet another model of CSR found in India is TVS Motors in the two wheeler manufacturing sector, which is a family controlled business unlike ITC. The unit in the southern State of Karnataka which manufactures scooters employs labor from outside the state in order to avoid any trade-union related problems. But in order to provide gainful employment to families of the workers, the company trains and employs the family members in the preparation of food in the office cafeteria. This is to ensure that the workers' family members get a decent living while ensuring the employees get wholesome food at workplace.

India still being still attached with a 'developing nation' tag has to achieve a lot in the economic scene before it can pat itself on its back to compare itself globally with many other competitors. Till such time, sustainable development agenda being in the forefront, it has to ask for and accept help given to it from every quarter. The Non Governmental Organizations with a proven history in the developed countries have a potential for growth in the developing nations too. India or any developing economy would benefit from a mutual Government-Industry-NGO partnership where the government approved schemes could be funded by the industry partially and coordinated by the NGOs but the best would still be hands-on experience by the corporations in terms of monitoring, strategizing or scaling the program.

With India competing globally, we find a welcome change in the concept of a stakeholder after liberalization where leadership quality appears to be a decisive

factor in the effectiveness with which CSR is pursued. AND most importantly the size of the firm has not been a deterrent to CSR investment.

Note:

The study was conducted with the help of interviews with Mr. Manish Patel, the Chairman and Managing Director of South India Paper Mills (SIPM) in November 2008 and correspondence through mail and visits to the factory and other sites in December 2008. The data about the production capacity was made available through the annual reports of the company.

[1] <http://www.corpgov.net>

CORPORATE SOCIAL RESPONSIBILITY INITIATIVES IN DEVELOPING COUNTRIES: THE ROLE OF OIL AND GAS COMPANIES

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Abstract

Corporate social responsibility (CSR) occupies center stage of the current debate on the operations of oil and gas companies in host countries. Since the 1990s CSR has encouraged these companies to rethink their responsibilities and self-interest in the developing world. Furthermore, CSR initiatives have shown a powerful potential for positive contributions to address the needs of disadvantaged communities.

The aim of this study is to analyze the different CSR initiatives undertaken by oil and gas companies in developing countries and to find out the various areas of intervention. For this purpose a benchmark analysis of the information available on web-sites and of sustainability reports of major international oil and gas companies was carried out.

As a final step, the paper investigates the problems that have characterized the evaluation of the effective impacts of CSR actions on development and investigates future potential developments and improvements of CSR initiatives in host countries.

Keywords: corporate social responsibility, developing countries, local community, stakeholder engagement, human rights.

Introduction

Preoccupation with corporate ethics and the social dimension to business activity is not new. The modern precursors of CSR can be traced back to the 19th century boycotts of foodstuffs produced with slave labor” (Frynas 2008: 275). Since that period the discourse about CSR became increasingly prominent within companies, governments and civil society (Michael 2003; Jenkins 2005). This interest may be seen as the latest manifestation of a longstanding debate over the relationship between business and society. Since the rise of the corporation in its modern form in the late 19th century, this debate has ebbed and flowed, “through periods when corporations extend their control and period in which society attempts to regulate the growth of corporate power and corporations attempt to re-establish their legitimacy in the face of public criticism” (Jenkins 2005: 526).

While the origins of CSR can be traced back to the early 1900s, the focus on international development, or rather on the private sector contribution to international

development goals, is a relatively recent phenomenon that can be seen as a consequence of the expansion of the list of corporate responsibilities throughout the second half of the 20th century (Frynas 2008).

In the developing world, in the late 1960s and 1970s there were efforts to regulate activities of foreign investors. As a consequence, for the first time the regulation of corporate activities became an international issue, with numerous attempts within the UN to establish codes of conduct for the activity of transnational/multinational companies.

The 1980s signaled a significant shift away from state intervention in both developed and developing countries. These trends reflected in developing countries' policies which shifted dramatically from regulation of transnational/multinational corporations activities to intense competition to attract direct foreign investments (Jenkins 2005).

By the 1990s the *heyday* of neo-liberal policies had passed in the North, and corporations started to attract criticism for their global environmental and labor practices (Jenkins 2005). Furthermore, the developments in global communications have facilitated the international transmission of information about working conditions and environmental impacts in developing countries, contributing to increased public awareness and facilitating campaigning activities. Companies responded to all these new issues by espousing CSR.

It is important to underline that, while in the late 1960s and 1970s southern governments called for international codes of conducts for corporations, the 1990s CSR initiatives came largely from the North, where international trade unions, development NGOs, human rights organizations and environmental groups have contributed to the demand for greater social responsibility (Jenkins 2005; Frynas 2008).

In general in the last twenty years, there has been a change in the nature of the triangular relationship between companies, the state and society (UNIDO 2002; Krishnan & Balachandran 2004; Jamali 2007; Rwabizambuga 2007). The evolution of the relationship between companies and society has moved from paternalistic philanthropy to a re-examination of the roles, rights and responsibilities of business in society, where the mutual interest of all stakeholders is gaining paramount importance (UNIDO 2002; Krishnan & Balachandran 2004). Furthermore the call for greater involvement of private firms in human development reflects the growing importance of foreign direct investments. In fact, as a consequence of liberalization and deregulation, firms are now being called upon to go beyond their traditional role of generating economic growth toward playing a more direct role in alleviating poverty and other development goals (Boele et al. 2007; Frynas 2008; Frynas 2009).

In order to gain strategic initiative and to ensure continued existence, companies have started to manage their business practices avoiding the normal practice of solely focusing on profits and pursuing public goodwill and responsible business etiquettes (UNIDO 2002). Companies have embraced a new approach to CSR, recognizing that improving their own impact and addressing wider social and environmental problems will be crucial in securing long-term success (UNIDO 2002).

In spite of the increasing importance and diffusion of CSR practices, however, some questions arise: What is the relationship between business and development? What has been the role of CSR with respect to promoting development during the past decades? What are the real benefits of CSR initiatives for developing countries? This paper aims at analyzing the complex and controversial relationship between business and development; it then examines CSR initiatives undertaken by the oil and gas industry in developing countries and discusses the main problems with respect to their impact.

Business and Development Issues: Which role for CSR Initiatives?

Nowadays many policy makers look at business as an important element in meeting development goals (Blowfield & Frynas 2005). Nevertheless, the relationship between business and development is extremely complex and controversial.

Business was for a long time left out of development thinking. “Although western companies operated in developing countries, they were either ignored by development professionals or seen as problematic. [...] There was tacit acceptance that the private sector would generate employment and contribute to government revenues, but it was rarely thought of as having a central role” (Blowfield 2005: 516).

In the 1980s there was a significant change and private companies started to be seen as the liberator of underdeveloped economies. “Although the optimism of this *economic rights* view of business was subsequently tarnished because of exploitation of workers, communities and the natural environment, many basic features of the business-development relationship were defined at that time” (Blowfield 2005: 516).

International trade and investments are crucial for the development of Southern countries and the success or failure of CSR is often judged according to its role in terms of creating an environment aimed at facilitating flow of goods, services and knowledge (Ite 2004; Blowfield 2005). It is common to use financial arguments for promoting CSR both to business and development audiences; nevertheless, it is impossible to base a discussion about social and environmental justice solely on economic arguments. For example, if on the one hand CSR guarantees basic workers rights in developing countries, on the other it accepts the rights of companies to lay off workers and close down facilities without compensation and shields them from any responsibility for the consequences of disinvestment (Blowfield 2005; Christian Aid 2007).

Another way of looking at the business-development relationship is to see developing countries’ populations as a market opportunity and to think about companies in terms of providing goods and services to the poor. Unfortunately it is not possible to assess the consequences of multinationals entering markets previously served by local small and medium-sized operations yet, and for this reason it is useful to consider these initiatives with caution (Blowfield 2005).

The role of CSR in the relationship between business and development is to link these two issues: CSR may be described as a bridge connecting the arenas of business and development. CSR is proposed as benefiting both companies and the societies in which they operate and it is recommended as a positive factor to both the North and the South, contributing simultaneously to universal human rights, equity, environmental protection and economic growth (Blowfield & Frynas 2005). Nevertheless it is important not to forget that even though the presence or absence of international companies in a country can affect its development, such companies engage with developing economies for commercial reasons, not for developmental ones. “Although there may be areas of overlap between development and business goals, it is important to understand where there are gaps and contradictions.” (Blowfield 2005: 518). For this reason important long-terms tests for CSR are (I) whether it can help companies redefine the meaning of good business practice in the interests of the poor and marginalized; and (II) whether it helps development practitioners manage the possibilities and consequences of global capitalism for poor countries more effectively.

From the corporate perspective, over the past decade CSR in developing countries has come to encompass not only what companies do with their profits, but also how they make them. In other words, with respect to development promotion, CSR has moved from a defensive to a proactive approach. At a minimum, in fact, effective CSR calls for a defensive *do not harm* approach, or, in other words, is aimed at protecting existing market and social value by calling for compliance with regulations and voluntary norms, principles and codes, as well as adopting a risk management mindset focused on controlling risks, negative impacts, liabilities and costs that may arise from company’s activities. More ambitiously, and where leading companies are increasingly focusing attention, CSR aims to *do positive good* through a proactive approach, creating new value for the company and for the society. This may be achieved by harnessing the resources, competencies and networks of the company’s core business operations or through strategic social investments, that aim to create direct or indirect value for the business, while also directly addressing economic, social or environmental challenges (UNIDO 2007).

The UNIDO (2007) address four strategies that firms may pursue in order to contribute to development (see Figure 1.):

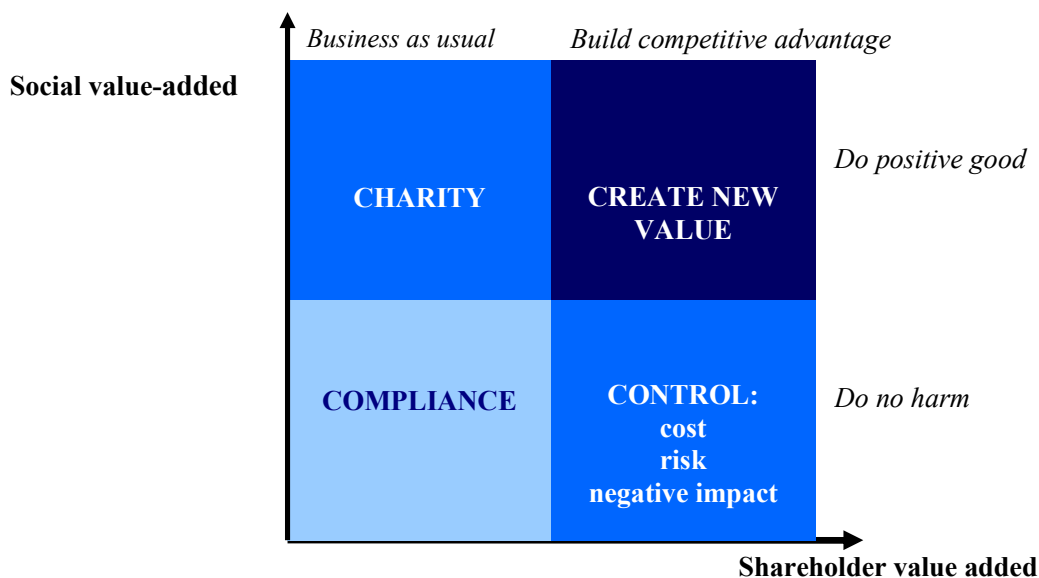
- i. *Compliance*. In addition to ensuring compliance with national laws, a growing number of companies are signing up to voluntary international or sector-specific principles, norms and standards.
- ii. *Control of risks, liabilities and negative impacts*. Going beyond compliance, companies can also implement systems to ensure that they identify, manage, and where necessary ameliorate, social and environmental risks, in addition to more familiar market, financial, operational and political risks.
- iii. *Charity and community investment*. Moving from value protection to value creation, companies can create social

value, while either protecting or enhancing their market value, through effective philanthropy.

- iv. *Creating new market and social value.* The most strategic approach for strengthening the company's contribution to development comes through its core business activities. Through innovation, for example, in new products, services, processes, and even business models that directly aligns development needs with profit-making business opportunities.

The shift of CSR from a defensive to a proactive approach reflects the increasing role of business in meeting development goals.

Figure 1. CSR strategies at the level of the individual firm



Source: UNIDO (2007). *Building linkages for competitive and responsible entrepreneurship*:

The Oil and Gas Sector: A Benchmark Analysis of CSR Practices

The oil and gas sector has been among the leading industries in championing CSR. Oil companies seem to attach greater importance to their social and environmental impact and they engage more with local communities than they used to in the past. This is confirmed by the companies' current communication strategies and reports, which have begun to consider all the dimensions of sustainability: economic sustainability as the capacity to produce income, profits and work; social sustainability as the capacity to warrant well-being and equally distributed growth

opportunities; environmental sustainability as the capacity to preserve quality and reproducibility of natural resources (Bevacqua & Casciani 1999).

This shift is demonstrated, among other indicators, by the remarkable growth in corporate codes of conduct and social reporting. “Oil companies have also embraced major international CSR initiatives such as Kofi Annan’s Global Compact and the Global Reporting Initiative” (Frynas 2005: 581).

Furthermore, oil companies have initiated, funded and implemented significant community development schemes. According to one estimate, global spending by oil, gas and mining companies on community development programs in 2001 was over US\$500 million. The biggest world oil and gas companies spend well over US\$100 million on community investments every year (Frynas 2009). Nowadays oil and gas companies help to build schools and hospitals, launch micro-credit schemes for local people and assist youth employment programs in developing countries. They participate in partnerships with established development agencies such as the US Agency for International Development (USAID) and the United Nations Development Program (UNDP), while using NGOs to implement development projects on the ground (Frynas 2005; Frynas 2009).

It is often assumed that the rise of CSR within oil and gas companies can be traced directly back to globalization and a concomitant expectation that firms would fill gaps left behind by global governance failures, while at the same time it became easier for NGOs to expose corporate behavior in *far-flung* corners of the planet. In this way oil and gas companies have been pressurized to *do something* about the environment, community development or global warming. However, it is possible to assert that the oil and gas firms’ motives for social engagement are much more complex than simply a response to external pressure. These motives greatly limit the positive developmental potential of corporate social engagement. Frynas (2005) identifies four important factors impelling firms to embark on community development projects:

- obtaining competitive advantage;
- maintaining a stable working environment;
- managing external perceptions;
- keeping employees happy.

In order to analyze current trends in corporate social responsibility practices carried out by the nine major international oil and gas companies in developing countries, this study presents a benchmark analysis⁷ based on the sustainability reports the companies involved published during the last reporting year (2007). By means of the benchmarking it is possible to identify the common CSR practices carried out in local communities by companies, the most innovative approaches and tools applied and used, and the best practices undertaken. The benchmark analysis may be used as an effective tool to improve company performances (IPIECA & API 2005) and to

⁷ FEEM has gained a solid knowledge on sustainability dynamics and corporate social responsibility practices within the oil and gas sector during the last five years. Since 2004 FEEM has been actively supporting the Eni Sustainability Department working on the analysis and development of sustainability communication and reporting tools and strategies, with particular attention to CSR issues.

identify the main trends of the CSR in local community issues within the oil and gas sector.

A synthesis of the benchmarking results is presented (see Table 1. and 2.) using the CSR dimensions described in the Green Paper developed by the Commission of the European Communities (EC) in 2001. The EC (2001) identifies two main dimensions of corporate social responsibility, an *internal dimension* relating to practices internal to the company and an *external dimension* involving the external stakeholders.

According to the *internal dimension*, within the company, socially responsible practices primarily involve employees and relate to issues such as investing in human capital, health and safety, and managing change, while environmentally responsible practices relate mainly to the management of natural resources used in production. The various components of the internal dimension of CSR are: Work Safety and Health Measures; Adaptation to Change; Management of Environmental Impacts; Human Resource Management (EC 2001). With regard to the *external dimension*, it must be said that CSR extends beyond the doors of the company into the local community and involves a wide range of stakeholders in addition to employees and shareholders: business partners and suppliers, customers, public authorities and NGOs representing local communities, as well as the environment (EC 2001). The *external dimension* consists of:

a. Local Communities

CSR is also about the integration of companies in their local setting. Companies contribute to their communities, especially to local communities, by providing jobs, wages and benefits, and tax revenues. On the other hand, companies depend on the health, stability, and prosperity of the communities in which they operate. The development of positive relations with the local community and thereby the accumulation of social capital is particularly relevant for non-local companies (EC 2001). These relations are being increasingly used by multinational companies to support the integration of their subsidiaries into various markets in which they are present. Deeper understanding of the local community and social customs is an asset which can be utilized by the companies to gain strategic advantage (Krishnan & Balachandran 2004).

b. Business Partners

By working closely with business partners, companies can reduce complexity and costs and increase quality. The effect of CSR activities will not remain limited to the company itself, but will also touch upon its economic partners (EC 2001). Companies in emerging markets actually take on additional CSR responsibilities because of the existence of outsourcing opportunities in the form of suppliers and outsourcing agents. Also as part of their social responsibility companies are expected to provide high quality products and services, which meet customer expectations in a manner reflecting the company's concern for the environment and the local conditions (Krishnan & Balachandran 2004).

c. Human Rights

CSR has a strong human rights dimension, particularly in relation to international operations and global supply chains. Companies face challenging questions, including how to identify where their areas of responsibility lie as distinct from those of governments, how to monitor whether their business partners are complying with their core values, and how to approach and operate in countries where human rights violations are widespread (EC 2001). In fact companies have a direct responsibility to ensure the protection of human rights in their own operations. They also have a responsibility to use their influence to mitigate the violation of human rights by governments, the forces of law and order or opposition groups in the countries in which they operate (Krishnan & Balachandran 2004). Since the present research focuses on the actions carried out by companies in favor of local communities, only the *external dimension* was considered. To report the main results of the benchmarking data are summarized in the tables below (see Table 1. and 2.) in order to make them easier to read. The first table reports the common practices for each of the three categories, while the second spotlights the most interesting topics and the best practices found in the companies' reports.

Table 1. CSR common practices

	LOCAL COMMUNITIES	BUSINESS PARTNERS	HUMAN RIGHTS
OIL AND GAS COMPANIES	<p>Enunciation of the adhesion to EITI</p> <p>Adoption of an evaluation approach of the direct and indirect effect of companies' activities that allows for identification of actions to undertake to guarantee local economic development.</p> <p>Development of guidelines/tools to manage the interventions in favor of local communities.</p> <p>Adoption of specific, recognized criteria for investment selection (such as Millennium Development Goals).</p> <p>Development of projects in favor of the health of the communities: identification of endemic diseases for each area -such as malaria- and developing of specific plans to fight them. Companies that operate in African countries focus particularly on HIV virus, although this relevant topic is dealt by the entire sample.</p> <p>Support to promote the access to energy sources.</p> <p>Development of dialogue tools with the communities, such as engagement processes and complaint management systems.</p>	<p>Development of management systems and tools to administrate and evaluate local content practices.</p> <p>Promotion of investments for local content.</p> <p>Support to small local/female owned businesses.</p> <p>Promotion of training activities in favor of local businesses.</p>	<p>Enunciation of the adhesion to the Universal Declaration for Human Rights.</p> <p>Development of Policies on Human Rights.</p> <p>Promotion of training activities on human rights for employees, suppliers and security personnel.</p>

Table 2. CSR best practices

	LOCAL COMMUNITIES	BUSINESS PARTNERS	HUMAN RIGHTS
BG	Partnership with governments and communities to increase employment and economic growth. Engagement in a wide range of voluntary social investments for community and regional development. Identification of community stakeholders and of their key priorities and concerns.		Inclusion in the key contracts of the expectation that contractors will comply to BG's Business Principles or their equivalent, including those relating to human rights.
BP	Educational projects - early childhood learning to advanced research - and capabilities development of local companies, contributing to local economic development. Help to improve access to energy.	Screening of potential suppliers to examine their human rights practices: questionnaire with self-declaration of not using forced and child labor and details about environment, health, safety, minimum salaries and overtime payments. If the first step is passed, an on-site audit will follow to check the environment and social compliance practices.	
CHEVRON	Social programs promoting health care (helping eradicate AIDS, tuberculosis and malaria), nutrition, water, agriculture and disaster response. Training programs for children and adults.	Support to suppliers: capabilities development, sharing knowledge and skills with engineering services contractors, developing innovative, cost-effective solutions working with small, minority/women-owned businesses.	Education and computer-based training for employees on human rights issues. Security forces and private security reinforced by host governments. Support to Voluntary Principles in accordance with local laws and conditions by Business Units.

ENI	<p>Evaluation of local impacts with specific tools (Social Impact Assessment and Health Impact Assessment), carried out with local committees. Stakeholder engagement activities for local communities. Infrastructure building, social intervention and training programs.</p>	<p>Local content programs aimed at buying local goods and services and at training local suppliers.</p>	<p>Specific policies integrated by consultation programs.</p>
EXXON	<p>Partnerships with local community leaders to develop economic and social capacity. Public active consultations during Environmental, Socio-economic and Health Impact Assessment (ESHIA) process, providing input about potential impacts to local communities.</p>	<p>Focus on creating economic opportunities for local businesses and on investing in developing local contractors, suppliers and vendors' capabilities, complying them with global industry standards.</p>	<p>Implementation of the Voluntary Principles on Security and Human Rights. Constructive engagement among governments, NGOs and companies useful for providing practical guidance for human rights issues.</p>
PETROBRAS	<p>Analysis of strong and weak points of each area, helping to strengthen neighboring communities with poor social inclusion. Projects and operations designed to minimize interference in the natural and ethno-cultural processes and to promote social inclusion.</p>	<p>Regulations imposed on suppliers and actions in order to align the supply of procured goods and services with the corporate guidelines. Hiring of local workforce, providing technical assistance and capacity building.</p>	<p>Projects in different regions to promote the rights of indigenous people.</p>

REPSOL	<p>Social commitment initiatives aimed at endowing local communities with the capacity for self-development: focus on educational and capacity building projects (training programs to incorporate the local population into the different areas of the business). Selection of projects with numerous beneficiaries and which may be sustained over time.</p>		<p>Respect and sensitivity towards customs, traditions and rights of indigenous communities. Action protocols relating to indigenous communities clearly defined in order to reduce risks associated with operations and provide opportunities to lay foundations for the social license to operate.</p>
SHELL	<p>Focus on contributions from community panels, open days, surveys and local government's engagement to understand company's impacts on local community and communities' concerns. Collaboration with communities to reduce negative impact from its operations and to produce local economic benefits through its business activities and social investment.</p>	<p>Employment of local suppliers and contractors. Training for local companies to help them meeting environmental and social standards, so they can compete successfully for contracts. Hiring local staff.</p>	<p>Assessment of the human rights risks faced by projects and operations using tools developed by the Danish Institute for Human Rights. Where risks are identified, action plans are developed to avoid violating rights in these areas. Another tool checks that company's procedures comply with local laws and regulations.</p>
STATOIL	<p>Focus on identifying needs, expectations, development opportunities and mitigating actions based on stakeholder dialogue processes and risk and impact assessments.</p>		<p>A human rights risk assessment tool has been piloted in five countries.</p>

TOTAL	Promotion of several initiatives to enhance local communities' dialogue and involvement. Support to small businesses and training of local people.	Systematic integration of local content policies into large projects; projects designed on a case-by-case basis, supported by a survey on local industry and human resources. Employment of local contractors, hiring of local workforce and training of local technicians and managers. Support for the creation of small businesses.	Risk assessment - whose criteria include security, human rights and political risks – before every investment decision. Focus on monitoring situations to anticipate crises. Responsibility of local managers for the implementation of group's policy.
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Discussion

From society's point of view, it is important to assess the contribution that oil and gas companies and, more generally, multinational companies give to development, in order to understand if such companies are effectively able to promote it and if CSR may be reasonably seen as an alternative route for the delivery of development (Frynas 2005; Jenkins 2005). The effectiveness of oil and gas as well as multinational companies' CSR initiatives has been increasingly questioned, since "there is mounting evidence of a gap between the stated intentions of business leaders and their actual behavior and impact in the real world" (Frynas 2005: 581).

Even though oil and gas companies' sustainability reports describe a large number of successful CSR projects undertaken in order to promote sustainable development in Southern countries, it is difficult to evaluate the effective impacts of these initiatives. Furthermore, the benchmark analysis shows some important limitations and problems related to these CSR projects.

a. Values of Capitalist Enterprise

The clearest limitation relates to the fundamental values of the capitalist enterprises. Blowfield (2005) asserts that "when we talk about values in relation to capitalist enterprise, there is a difference between the values that are negotiable and those that are not" (520). Non-negotiable values are: the right to make a profit, the universal good of free trade, the freedom of capital, the supremacy of private property, the commoditization of things including labor, the superiority of markets in determining price and value, and the privileging of companies as citizens and moral entities. CSR has no impact on these. Furthermore Blowfield (2005) underlines that "CSR has fostered change in areas that business has been willing to negotiate over. Some of

these are relevant to the poor and marginalized, but that is not the major determinant of what is addressed” (521).

b. Binding International Legislation and Voluntary Aspects

Another crucial question is how CSR relates to changing models of national and international governance. CSR is frequently advocated as a mean of filling gaps in governance that have arisen with the acceleration of liberal economic globalization and is often presented as a tool of exercising control over the behavior of business without resorting to formal jurisprudence (Blowfield & Frynas 2005; UNEP 2006). The relationship between binding international legislation and voluntary aspects of CSR is complex; the real implications of voluntarism for the developing world are not known and it is difficult to find out the optimal balance of voluntary and mandatory, national and international, prescriptive and enabling regulation.

c. Specific Context

A further problem related to CSR initiatives in developing countries is that specific contests or countries may make it difficult for firms to implement even very valuable CSR activities. In many countries conflicts, corruption, bureaucracy may render companies’ CSR initiatives particularly challenging (Frynas 2005).

d. Stakeholder Involvement

The fourth key issue is stakeholder participation. The success of CSR initiatives is often linked to stakeholder dialogue and stakeholder engagement (IPIECA 2002; Tencati et al. 2004; Foo 2007; IPIECA 2008) and the World Bank asserts that participation and self-help are the best routes for development assistance. Nevertheless, CSR initiatives have often been conceived by the *helpers*, with an approach that follows the logic of CSR serving corporate objectives. Furthermore, oil companies usually fail to consult beyond local chief and community leaders (Frynas 2005; Newell 2005). With respect to this point it is important to remember that some stakeholders are often missing from the list of stakeholders, or physically absent from stakeholders’ meetings and forums. They are usually those in developing countries who do not normally have a voice in society: farmers, children, workers – especially home-based workers and female workers (Prieto et al. 2006: 984). Even if these groups occasionally have a voice in multi-stakeholder initiatives, power relations between stakeholders continue to shape the issues that are raised, the alliances that are formed and the successes that are identified (Blowfield & Frynas 2005). It is also important to underline that the lack of stakeholder engagement in CSR initiatives has fostered the *dependency mentality* (Frynas 2005). In other words, since the development of CSR projects does not involve local people, these initiatives are seen as *gifts* and local people do not feel that they *own* the project. This may cause the failure of these initiatives.

e. Lack of Human Resources

The fifth problem is the lack of human resources to plan and execute genuine developmental schemes within multinational companies in general and oil and gas companies in particular. The question is whether corporations are sufficiently equipped to take on community development roles that require soft social science skills of the kind normally used in aid management. Corporations such as mining and oil companies are often dominated by hard science specialists such as engineers and have just a few people with development expertise (Prieto et al. 2006). Furthermore, the internal workings of oil and gas companies render long-term development initiatives more difficult. In fact manager *rotation* may influence in a negative way the long-term development of projects because of the lack of long-term commitment (Frynas 2005).

f. Scale

The last issue regards the scale of CSR initiatives. With the exception of some projects (for example those regarding reduction of carbon dioxide emissions), CSR initiatives focus on the micro-level effects of the oil and gas industry on specific local communities and fail to address the macro-level effect. Several projects do not pay much attention to the socio-economic-environmental and political effects on nation-states (Frynas 2005).

Conclusion

Looking at CSR initiatives in developing countries, it is possible to see a significant evolution with respect to oil and gas companies' corporate approach. International companies' CSR drive actions have shifted from simple resources exploitation without any concern for local communities to philanthropy, where CSR initiatives were planned without previous consultation with local communities, to citizen participation where CSR projects were developed together with local communities.

This evolution has led oil and gas companies to embrace a proactive CSR approach, creating new value for the company and for the society. This new way of addressing economic, social and environmental challenges in order to promote development in Southern countries seems to have generated positive results. Nevertheless, as underlined above, it is not possible to effectively quantify oil and gas CSR initiatives impacts on development. As Frynas (2008) underlines, "while private sector development initiatives can perhaps be beneficial for specific firms in terms of reputational effects or new product development, we know relatively little about their developmental benefits" (275). A lot of qualitative case studies have examined CSR initiatives in developing countries but only a few studies have tried to assess CSR impacts in a whole country or in several different countries (Prieto et al. 2006). The majority of these studies fail to use any systematic methodologies from development

studies to investigate the real world impacts of CSR projects. Furthermore the problem with current studies is that they focus on the micro-level, looking at specific case studies of firms or corporate initiatives (Frynas 2008).

Another crucial issue is that there is a lack of methodologies that allow quantitative comparisons of the impact of CSR initiatives within a country or in different countries (Prieto et al. 2006). A critical research agenda needs to be concerned with the creation of new means and tools for systematically assessing the impact of CSR on development, taking into account both positive and negative effects and gauging the full developmental contributions of firms to society (Blowfield & Frynas 2005; Prieto et al. 2006; Frynas 2008; Frynas 2009).

A further element to consider in order to better assess CSR impacts is the development of new stakeholder engagement methodologies and tools in order to plan, implement and evaluate CSR initiatives through participatory processes. The empirical evidence shows that the involvement of the public offers many advantages for both international companies and local communities with respect to the promotion of development: increase of public awareness of development and sustainability issues; improvement of the quality of CSR initiatives, actions and projects through the use of knowledge, experience and initiatives of different stakeholders; increase of public acceptance, commitment and support with regard to decision taking processes; more transparent and more creative decision-making; less litigation, misunderstandings, fewer delays and more effective implementation of initiatives, actions and projects; creation of a trust building and a social learning process. For these reasons public participation may be seen as a fundamental element in order to help CSR initiatives have a positive impact on development.

References

- Bevacqua, S. & Cascinai, M. (1999). *Comunicazione ambientale d'impresa*. Milano: Ipa Servizi.
- Blowfield, M. (2005). Corporate Social Responsibility: Reinventing the meaning of development? *International Affairs* 81:3, 515-524.
- Blowfield, M. & Frynas, J.G. (2005). Setting agendas: critical perspectives on Corporate Social Responsibility in the developing world. *International Affairs* 81:3, 499-513.
- Boele, R. et al. (2001). Shell, Nigeria and the Ogoni. A study in unsustainable development: II. Corporate Social Responsibility and "Stakeholder Management" versus a right-based approach to sustainable development. *Sustainable Development* 9, 121-135.
- Christian Aid (2007). *Behind the mask. The real face of corporate social responsibility* [Online]. Available: <http://baierle.files.wordpress.com/2007/11/behind-mask.pdf>
- Commission of the European Communities (2001). *Promoting a European framework for corporate social responsibility – Green paper*. COM (2001) 366 final [Online]. Available: http://eurlex.europa.eu/LexUriServ/site/en/com/2001/com2001_0366en01.pdf
- Foo, L.M. (2007). Stakeholder engagement in emerging economies: considering the strategic benefits of stakeholder management in a cross cultural and geopolitical context. *Corporate Governance* 7:4, 379-387.
- Frynas, J.G. (2005). The false development promise of Corporate Social Responsibility: evidence from multinational oil companies. *International Affairs* 81:3, 581-598.
- Frynas, J.G. (2008). Corporate Social Responsibility and International Development: Critical Assessment. *Corporate Governance* 16:4, 274-281.
- Frynas J.G. (2009). *Beyond Corporate Social Responsibility? Oil Multinationals and Social Challenges*. Cambridge: Cambridge University Press.
- IPIECA (2002). Key Questions in Managing Social Issues in Oil & Gas Projects [Online]. Available: http://www.ipieca.org/activities/social/downloads/publications/key_questions.pdf
- IPIECA (2008). *Creating Successful, Sustainable Social Investments. Guidance document for the oil and gas industry* [Online] Available: <http://www.ipieca.org/activities/social/downloads/publications/SocialInvestmentGuide.pdf>

IPIECA & API (2005). *Oil and Gas Industry Guidance on Voluntary Sustainability Reporting*[Online]. Available: http://www.iecea.org/activities/reporting/downloads/publications/reporting_guide.pdf

Ite, U.E. (2004). Multinationals and Corporate Social Responsibility in Developing Countries: A case study in Nigeria. *Corporate Social Responsibility and Environmental Management* 11, 1-11.

Jamali, D. (2007). The Case for Strategic Corporate Social Responsibility in Developing Countries. *Business and Society Review* 112:1, 1-27.

Jenkins, R. (2005). Globalization, Corporate Social Responsibility and poverty. *International Affairs* 81:3, 525-540.

Krishnan, S.K. & Balachandran, R. (2004). Corporate Social Responsibility as a determinant of market success: An exploratory analysis with special reference to MNCs in emerging markets. Paper presented at IIM K- NASMEI International Conference, 2004.

Michael, B. (2003). Corporate Responsibility in International Development: an Overview and Critique. *Corporate Social Responsibility and Environmental Management* 10, 115-128.

Newell, P. (2005). Citizenship, accountability and community: the limits of the CSR agenda. *International Affairs* 81:3, 541-557.

Prieto-Carron, M. et al. (2006). Critical perspectives on CSR and development: what we know, what we don't know, and what we need to know. *International Affairs* 82:5, 977-987.

Rwabizambuga, A. (2007). Negotiating Corporate Social Responsibility Policies and Practices in Developing Countries: An Examination of the Experiences from the Nigerian Oil Sector. *Business and Society Review* 112:3, 407-430.

Tencati, A., Perrini, F. and Pogutz, S. (2004). New Tools to Foster Corporate Socially Responsible Behavior. *Journal of Business Ethics* 53:1-2, 173-190.

UNEP (2006). *Class of 2006: Industry Report Cards on environment and social responsibility*[Online]. Available: <http://www.unep.fr/shared/publications/pdf/DTIx0827xPA-Class2006.pdf>

UNIDO (2002). *Corporate Social Responsibility. Implications for Small and Medium Enterprises in Developing Countries*[Online]. Available: http://www.unido.org/fileadmin/user_media/Publications/Pub_free/Corporate_social_responsibility.pdf

UNIDO (2007). *Building linkages for competitive and responsible entrepreneurship* [Online]. Available: http://www.unido.org/fileadmin/user_media/Publications/Pub_free/Building_linkages_for_competitive_and_responsible_entrepreneurship.pdf

**PART FOUR: CORPORATE RESPONSIBILITY
INOVATIONS**

AN INNOVATION MODEL TO PROMOTE CSR AMONG SMEs, OPERATING IN INDUSTRIAL CLUSTERS: EVIDENCE FROM AN EU PROJECT

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Abstract

This paper presents the findings of an EU co-funded Project, an idea developed with the aim of this study is to progress understanding the opportunities to formalize CSR practices in SMEs in clustered systems. Often small size companies have to compete with a global market; for this reason, the cooperation between SMEs, and from these to the stakeholders and intermediary institutions might be facilitated by a collective answer to the new market requests. The local cooperation and the social capital, priority element to facilitate the trust between all the involved actors, can play a key role in the formalization of the CSR policies and practices, also for small companies. In the project we proceed identifying and understanding the role of the “intermediary institutions” (such as trade unions, Local Authorities, business consortia) in the clusters. Throughout the paper, we focus on the analysis of three industrial clusters in Tuscany (Italy).

Key – words: SMEs, CSR tools, industrial cluster, intermediary institutions

CSR and SMEs: Theory and Literature

The aim of this paper is to focus the importance of Corporate Social Responsibility (CSR) topics for Small and Medium Enterprises (SMEs) operating in industrial clusters. Efficiency and effectiveness of business activity are influenced by society and societal problems, in a SME as in any other business organizations (Spence and Schmindpeter 2003). Furthermore, a SME has a strict connection with the context in which it is located. This context induces a stronger development of CSR actions. Using the European Commission definition, we can say that: "CSR is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (European Commission, 2001). As well as in other definitions of CSR, this definition emphasises the close relationship between the organization behavior and social/environmental issues. On the other hand, if it is true that in recent years CSR has become relevant in business studies, it is still necessary to better explain the way in which SMEs apply CSR (Thompson and Smith 1991; Spence 1999, 2007; Observatory of European SMEs, 2002; Perrini, 2006).

During the past decades, literature and research have identified some common characteristics of SMEs, although they have very heterogeneous sizes and organisational structures. Some examples are: owner managed; bureaucratic thinness and necessity to solve day-to-day problems; financial turnover; informal relations and communication; importance of interpersonal relationships; high interrelation with local community and local environment; often operating in a local network of SMEs and/or in a local supply chain or a large enterprise's network of suppliers (Spence, 1999; Curran and Blackburn, 2001; Murillo and Lozano, 2006; Lepoutre and Heene, 2006). These characteristics show a significant difference between large and small/medium firms, as to their organizational structure, relations with the stakeholders and orientation to a not formalized approach to CSR, and it's possible to talk about "implicit CSR" (Matten and Moon, 2004), or "silent CSR" (Jenkins, 2004).

Informal CSR policies adopted by SMEs are favored by the presence of the so called "social capital" (Chiesi, 2005): as Perrini (2006) emphasizes, whilst large enterprises focus their approach to CSR by a multistakeholder approach, in SMEs the CSR practices are based on synergies and relationship among different subjects (owner and employees, customers and suppliers, and so on). Vice versa, social responsible behavior is often able to originate and endorse trust links, that are the basis of social capital. Stocks of social capital (trust, network) tend to be self-reinforcing and cumulative (Putnam, 1993). The concept of social capital is generally associated with the intangible assets of reputation, trust, legitimacy, and consensus (Habisch et al., 2001; Putnam, 1993, 2000; Spence et al., 2003, 2004), the basis of the long-term performance of SMEs, and especially of SMEs embedded into the local community in which they operate.

Moreover, SMEs meet with a lot of barriers in implementing formalized CSR strategies and tools; these barriers prevent SMEs to develop systematic CSR initiatives because of the perceived costs and complexity of the operation in respect to their lack of human, technical and organizational resources (i.a.: European Commission, 2002; European Multistakeholder Forum on CSR, 2004; Luetkenhorst, 2004; Fox, 2005; Jenkins 2006; Lepoutre, Heene, 2006). On the one hand, SMEs do approach to social responsibility as a difficult and uncertain investment: "difficult" since the enterprises need to find new (economic and human) resources for CSR development; "uncertain" since there are not enough empirical cases showing the benefits connected to social responsibility strategies. On the other hand, enterprises perceive CSR commitment and initiatives as a complex adventure requiring a specific know-how they do not have.⁸

This paper proposes, on the basis of results of a EU project, a way to overcome the above mentioned barriers to the adoption of CSR – related tools by implementing a network-based approach involving SMEs operating in clusters (i.e.: local productive systems). The approach is based on the conviction that the barriers faced by SMEs can be overcome in a "networking system" of a cluster, where companies tend to operate as a meta-organization (Spence, 1999). In a cluster, the local "social capital" is strengthened by the proximity between firms, the availability of local resources (economical, material and human), and the close relationship with the local institutions. "Industrial cluster" in fact, can be defined as a geographically proximate

⁸ Italian context has similar problems as shown by some recent researches: Sancassiani, 2005; and Bertolini et al., 2006

group of interconnected enterprises and associated institutions (Porter, 2000). As literature poses (Becattini, 1979 and 1999, Piore e Sabel, 1987, Piore, 1991) the cluster organizational structure and culture is characterized by the presence of a relational environment made up of systematic business and non-business relations among the local actors, sharing, in addition, a collective identity based on common values also with respect to the way business is run. In clusters, SMEs have similar social and environmental impacts; they have similar interactions with the local stakeholders and often they face common social and environmental pressures by stakeholders. Addressing these issues collectively can reduce the cost of action and result in improvements that an individual SME acting alone cannot achieve (European Commission, 2007). Therefore, on the one hand, in these productive areas, the high concentration of SMEs with similar production processes and their interactions with firms in the local supply chain often cause significant social and environmental problems which need an integrated management in order to prevent negative “cumulative” externalities on CSR-related issues. On the other hand, a network approach to CSR can be facilitated and enhanced within clusters because local enterprises can benefit from the synergy and positive externalities that operate at the cluster level: the possibility of defining common policies and strategies relying on the similarity of their productive activities, their relations with the same local stakeholders (community, institutions, control bodies, etc.) and, consequently, their need to deal with the same needs and requests regarding CSR.

From this point of view, an active role in this process could be played really by the so-called “intermediate institutions”; they include: sector and trade associations, consortia, chambers of commerce, development agencies, business clubs and SME associations at local/regional/national level; business advisors (private and public funded); business incubators (European Commission 2007; Frey and Iraldo, 2008). They are defined as “intermediate” since they operate between firms and local community, local economics and local politics. These institutions have a promoter role in industrial clusters, with regard to the integration of social values (Trigilia, 1991) and facilitating the development of the firms of the network. They stimulate the innovation processes on cluster scale; they influence the promotion of shared strategies among firms; they tackle cluster’s problems, at normative and practical levels. These intermediate institutions can play a key-role also for the implementation and diffusion of CSR policies among cluster’s firms.

Research Design

Our research is based on the experience of the *COOPERATE Project (COmpanies OPERating in a Responsible Area and with Transparent Ethics)*⁹, co-financed by the European Commission (DG Enterprise&Industry) within the *Mainstreaming CSR among SMEs* EU Programme. The aim of the research was to promote and spread CSR concepts, practices and tools among SMEs operating in industrial clusters in Tuscany Region (Italy), in particular by relying on strong, consolidated and trusted information channels and knowledge-sharing networks and by emphasizing the CSR-oriented business strategies as a relevant competitive opportunity for SMEs. The

⁹ www.cooperateproject.sssup.it

research involved three Tuscan industrial clusters: the Capannori (LU) paper cluster, the Santa Croce s/Arno (PI) tanning cluster and the Empolese-Valdelsa (FI) clothing cluster. In each cluster, an innovative approach for co-operative CSR management was proposed, based on the role of local “intermediary institutions and organisations”. A number of industrial (SMEs) and non-industrial organizations (i.e., trade associations, local authorities, service providers) selected, adapted and developed a series of CSR “formalized” practices and tools, relying on some co-operative and collective actions, with the aim of defining a new method for mainstreaming CSR among SMEs. As a first step a working group was created in each cluster with the aim of designing and implementing a territorial cooperative approach to CSR:

- in the *tannery cluster* five actors participated (three local business associations, the representatives of the main local trade union and the provincial local authority),
- in the *clothing cluster* the participants were seven (the local development agency, the local public authority representative of the Municipalities, three local business associations, the local office of Regional Environmental Protection Agency and a local sectorial trade union),
- and finally, in the *paper producing cluster* four members (Lucca Province, the main local business association, the local paper Cluster Committee and the local Chamber of Commerce).

In each working group, the Sant’Anna School had the role of scientific expert. As shown, in each cluster the constitution of the working groups was different, according to the differences of the three productive sectors. Tanning and clothing clusters are mostly composed of small and micro enterprises operating in fragmented supply-chains (i.a.: Dunford, 2003; Nordas, 2004; IFM, 2007), whose representatives are the artisans associations (and not only industrial ones); differently, the paper cluster is made up of medium size enterprises, represented only by industrial association.

Many activities were carried out in the project; among these the most important in terms of research results were the following three: the drafting of the Sustainability Report of the Cluster, the identification and dissemination of CSR tools for individual SMEs, and finally the carrying out of a focus group.

The Sustainability Report is a cluster representative document concerning social, economic and environmental performances, measured by establishing and sharing a special panel of indicators. The utility of Sustainability Report has been multifaceted and related to both the overall size of the cluster and that of individual SMEs. In particular:

- in terms of the overall cluster: the Report allowed to define a set of indicators for each territory to measure economic, social and local environmental performances^[3], highlighting the “strategic position” of that area compared to the three pillars of sustainability. In the second place, this was a first opportunity to study and focus the relationships between public and private actors of the cluster on sustainability-related issues. Thirdly, the Report has

been an important experience of cluster communication outward, oriented to provide third parties with information about the cluster dynamics. Finally, the collected information (with particular reference to the results of questionnaires to the sample of SMEs) provided opportunities for local working groups to determine the needs of businesses in respect to the tools of CSR: in other words, the results of the questionnaires have been the main input to define the actions to be implemented in the later phases of project

- in terms of individual SMEs: cluster Reports provided a framework for the aggregated overview of the social and environmental performances. This represented a benchmark for each firm in the cluster within its path of adoption of CSR tools (a sort of local “average value performance”).

The companies directly involved in the interviews were a total of 92. The questionnaires for the firms concerned the level of awareness on the CSR issues, the presence of ethical/environmental certifications (and possible interest in these tools), identification of key stakeholders, information on organizational structure and the presence of "atypical" workers (trainees, workers at home), and finally information on training of personnel.

From the results of the interviews it was possible to draw some interesting clues:

- in all clusters, employees were identified as a system of carriers of privileged interests for the firms, underlining not only their importance from a commercial point of view, but also the recognition of their relevance as a factor to stimulate the increasing of productivity
- in the fashion system (tanneries and clothing) less importance was expressed by SMEs in respect to the role of communities and local government institutions; on the contrary they were identified by paper enterprises as relevant stakeholders
- the findings mentioned above were confirmed as part of the answers concerning the corporate value system, in which the majority of respondents focused on health and safety of the workers, production and, for tanneries and paper mills, on environmental protection
- very different in the three clusters is the knowledge and the level of diffusion of CSR tools, as well as how their utility is perceived. In the industrial cluster of clothing ,a rather low number of firms hold a certification, and there is a lack of knowledge of these tools, except for the standard INAIL on safety, the Ecolabel and ISO14001. On the opposite, in the paper cluster, with a pre-existing dissemination of CSR tools, the level of knowledge of management standard and reporting tools was particularly high. Finally, in the tanning cluster, the level of knowledge of CSR tools is much higher in the tanneries with respect to third party contractors

- in terms of preferences on CSR tools we can identify a prevalence of management tools with respect of reporting tools, and a general orientation of firms belonging to the fashion industry in favour of management systems complying with SA8000/EMAS. The paper producers, on the other hand, prefer the issue of safety at work, with particular reference to the development of OHSAS18001 management systems.
- in the fashion industry weak concerns emerged in relation to the perception of the benefits associated with these instruments (short-term view)
- with regard to the firms that already adopted CSR processes, the external pressures are identified as one of the main reasons for their decision in both the clothing and paper cluster.

On the basis of the Sustainability Reports, the working groups identified and implemented a series of actions aimed at encouraging the spread of the CSR tools among SMEs. First of all, the working groups organized training and information activities for the SMEs on the social/environmental reporting system and about the benefits linked to the adoption of standards internationally recognized (with particular attention on managerial standards ISO14001/EMAS and SA8000). On the whole, 26 firms participated in the training initiatives. In the clusters of Santa Croce and Empoli the working groups identified the need to draft a document (a guideline), which could be disseminated among businesses outlining the requirements of environmental certification schemes (ISO14001/EMAS) and patterns of ethical certification (SA8000), and the possible ways of their implementation within the apparel and leather sectors. In the cluster of Capannori the interest for the issue of health and safety of workers has led to the establishment of procedural schemes to assist the integration of environmental management and security management in companies.

From the research perspective, the initiatives aforementioned demonstrated the feasibility of collective action at the cluster level and have shown the existence of a local relational system that can support the implementation. To these initiatives, which have operational and informative value, we can add a third type, which was also tested under the project, particularly interesting in terms of research perspectives: the direct activities carried out in ten sample companies located in the three clusters and oriented to experience directly the adoptability of CSR tools.

The companies involved were four in the apparel sector, three for paper mills and three in leather (with one third party contract). In every company a series of visits were made with the dual purpose of providing the information on an existing gap between full compliance with a given standard and detect weaknesses and perceived barriers to the adoption of these tools. With reference to the latter, some of the evidences emerged during the compilation of the questionnaires were repeated. In particular, SMEs (especially from tanning and clothing clusters) have pointed out two critical aspects related to the adoption of these tools: one is the excessive cost (also in terms of bureaucracy) for the adoption of a standard international, indicating that these instruments are still poorly adapted to the needs of small businesses; and

secondly it was stressed that, in view of these efforts, the perceived short term benefits are still very few, due to end market too little selective and a price competition globally louder. An approach that aims to simplify the adoption of formalized instruments of CSR by SMEs would seem, therefore, able to meet the needs of local firms, making them feel so minor costs associated with those routes.

Latest initiative deserves attention from the Project was the organization of a thematic focus group. The purpose was to detect the point of view of a series of stakeholder (internal and external to the clusters involved in the Project) with respect to a cluster approach to CSR (utility and added value)

Thirty-eight persons participated at the event of thematic focus group. The participants were classified in three categories:

1. eight trade associations representatives of firms operating in the three clusters
2. twelve subjects representing banks/insurances and market actors operating in the characterizing sectors involved in the project
3. eighteen external (not local) stakeholders (institutions, associations, trade unions, NGOs, etc.)

Each participant was asked to express his preferences in ten closed questions with predefined answers; we report following a series of findings and considerations that emerged from this consultation, to be considered particularly interesting:

- the importance of developing CSR practices within the policies and strategies of cluster clusters was unanimously highlighted. Maintaining competitive positions in the market and the need to ensure regulatory compliance are two key-reasons for the adoption of CSR practices (with more than 50% of consensus), as recognized first by the representatives of SMEs themselves (they concede to these factors 80% about of their preferences). Easy access to finance is also an important stimulus, but more in the perception of stakeholders from which this work should or could start (banks / insurance companies and institutions) than by SMEs. This is to highlight the need to promote effectively these tools from the operative point of view, rather than only through co-financing form.
- with reference to the reasons for which SMEs perceive the CSR tools not necessary, the indications from the stakeholders have focused on the excessive complexity and costs (34%) of the tools
- on the in-house difficulties facing by SMEs for the development and implementation of CSR practices has emerged the lack of top management on cultural CSR maturation (40%). This indication seems to highlight an important problem related to the cultural and knowledge growth of organizational leadership as the first obstacle,

followed by lack of resources and expertise (27%) and scarce knowledge of the instruments (25%), elements always closely linked to educational and informational factors. From these indications, therefore, emerge the need of developing methods capable of supporting SMEs to overcome these difficulties, with a commitment to the spread of a new managerial culture among the SMEs themselves.

- On different ways to support the adoption of CSR tools for SMEs operating in clusters that could be developed, there has been a particular focus on the issue of administrative and/or normative simplifying (24%), and towards the development of "cluster" tools (27%) in support of corporate actions and interventions, in a framework of cooperation and sharing of experiences and approaches. Again, therefore, the definition of collective instruments seems to be a major road, alongside of initiatives to public decision makers that enable SMEs to receive short-term benefits related to the development of certain instruments. Just local institutions (with 34% of the vote) are identified by the stakeholders who participated in the initiative as those who should do more to support SMEs at the cluster level in the development of CSR practices, followed by associations (20%). The firm representatives gave these strong indications.

Moving Towards a "Formalised Cluster Approach to CSR"?

This paper, relying on the experience of the aforementioned research, aims at showing that the proposed *cluster approach* enables to achieve sustainability objectives and CSR-related tools adoption by SMEs, thanks to the set up of specific "collective" tools such as: local multi-stakeholder working groups, communication tools to disseminate know-how and best practices, operational models (procedures, for instance) and guidelines to support organizations towards CSR, audits at the local level, etc. This approach is based on a methodology according to which the CSR tools are developed by a local productive system as a whole and not simply by the enterprises it is made up of; in other terms, we can say that the traditional approach to CSR at the local level among SMEs proposes the promotion of sustainability management "within" the productive system, while our "cluster" approach promotes CSR "by" the productive system.

The experience of the COOPERATE project showed that the results of the proposed *cluster approach* are strictly connected with the above described characteristics of the cluster "relational environment", and first of all with a number of synergies that can be obtained at the management and technological level to promote the inclusion and diffusion of innovative elements based on the partnership between the different firms operating within a cluster. More in detail, some results of a "cluster approach" can be identified with reference to different levels of analysis: the macro one, connected with the relations outside the cluster; the meso one, referred to the

relations inside the cluster; and, finally, the micro one, that is the point of view of the organisations operating in the cluster.

From the macro level, one has to notice that the benefits connected with CSR management reckoned at the individual firm level can be strengthened and amplified if CSR is applied at the territorial level to a whole industrial cluster, producing multiplying effects in terms of diffusion and adoption of innovative managerial tools. This aspect could positively reflect on the opportunities related to a global ethical and green supply chain management (i.a. Walton, Handfield, Melnyk, 1998; Carter, 2000; Theyel, 2001). The industrial clusters of traditional sectors (such as clothing and tanning ones) are today competing on the national and international markets; in this global competitive arena the diversification emerged in the COOPERATE experience as a potential strategic variable (as shown in the focus groups, or in the opinion of leader SMEs) and the territorial characterization a new strategic opportunity (something like a “territorial brand”). In such a way the promotion of CSR policies and actions at the cluster level – as proposed in the paper - can improve the image of the cluster “brand” and, consequently, the competitive capability of many SMEs located in the same territory.

From the point of view of the cluster internal relations (meso level), the application of a “cluster approach” to CSR can improve the management of social and environmental cumulative impacts caused by the concentration of a large number of SMEs operating in the same sector/territory (Iraldo, 2002; Frey, Iraldo, 2008). The co-operative nature of the approach proposed in the paper, in fact, avoids that these impacts are undermined or not managed at all (it is evident in the risks emerged in the unfair competition described by some weavers in respect to tanneries in the Santa Croce cluster) or, on the contrary, there is a waste of resources in the territory (since the different actors implement by themselves actions to manage the “cumulative” effects). At the meso level, we can also underline that the co-operation promoted by the “cluster approach” and the consequent use of common resources (in many cases developed with the contribution of all the cluster’s organisations, as the *Cluster Sustainability Report*), can also generate an improvement of the awareness on social and environmental topics, not only by the organisations operating in the cluster but also by the local community and the local public and private actors in the territory (public bodies, trade unions, trade associations, etc.), as shown by the results of the focus groups.

Finally, from the point of view of the organisations operating in the local productive system (micro level), the application of the “cluster approach” resulted a fundamental instrument to overcome the barriers that prevent them to develop systematic CSR initiatives because of the perceived costs and complexity of the operation. This need has been clearly expressed by the met SMEs, and the opportunity of a coordinated approach has been identified as interesting with potential positive effects perceived from both economic and organizational points of view.

The co-operative approach proposed in the COOPERATE project can help in exploiting the opportunities for sharing, within the cluster, the burden of innovation and development, interacting with the same public authorities and social stakeholders, co-ordinating the management of specific CSR-related issues (diversity management,

health and safety of the workers, guarantees on child labour or illegal subcontracting, waste separate collection and recovery, water sewage collection and purification, etc.) and of specific production phases (supply-chain management, investment planning, common audits, etc.). As already stated, the barriers perceived by SMEs in relation to CSR have been expressed not only to the related costs but also to the uncertainty of the results of CSR commitment and related actions. From this point of view, the application of a “cluster” approach can be useful since, being it applicable to the whole cluster, the organisations can have some more guarantees about the fact that at least the supply chain and the local environment can appreciate and evaluate the social and environmental “responsiveness”.

The experience of the COOPERATE project showed also some elements that have to be carefully considered in order to guarantee the effectiveness of the approach. First of all, strong and legitimised leadership at the local level is needed while proposing and managing the co-operative approach to CSR: the setting up of policies and instruments at the cluster level has to be guided by a group of local intermediary institutions whose actions and promotions can be really considered innovative by the local enterprises. Another relevant aspect is the one connected to the existence of common social and environmental problems to be managed at the cluster level. This aspect has been clear, for example, in the paper cluster in Lucca, where the interest in a common approach to safety management represented the basis for a large participation in the common initiatives promoted at the local level. The proposed approach, in fact, strongly relies on the hypothesis that a set of organisations located in the same local context, operating in the same sector or supply chain and having the same stakeholders, face a large number of common social and environmental problems. In some cases this cannot be completely true (for example when the number of common impacts are the less important ones, while the most relevant ones are firm-specific) so the identification of common resources (models of procedures, training initiatives, etc.) can be extremely hard and, consequently, the “cluster” approach would result poorer.

Finally, and it has emerged above all in the clusters characterized by small enterprises, the benefits for firms from a *cluster approach* are evident, but not those deriving from CSR. They have showed to perceive the opportunities of a cooperative approach and they demonstrated their integration with local communities, but they expressed the need of receiving benefits from a formalized CSR approach in a short time.

Therefore, against a series of benefits that seem to emerge from the experience of COOPERATE, we also note a number of critical factors that should be considered at the level of the working group in order to limit its extent and effectiveness of the approach. From this point of view it is considered that the definition of a formal model of *cluster approach* could reasonably afford to maximize benefits and respond as possible to the real needs of local businesses. This formalization, based on what emerged in our research and on previous developed specifically in the environmental field (Frey, Iraldo, 2008), could see a joint in 5 main phases of the approach.

The first phase (with preparatory character, different from all the other which have a continuing nature) should be the constitution of local working group, representative of public, private and sector interests and be able to guide the entire process. The

drafting of an initial declaration of intent (CSR Policy), which may take the form of voluntary agreement between the parties is desirable in order to outline a course of work draws by the group for the coming years.

The second step of the approach should be the study of the local cluster and its internal relationships between business and with respect to the outside, from the economic, social and environmental standpoint. At this stage the following aspects are important: the definition of a set of performance indicators; and the direct and indirect recognition of the needs of local SMEs with respect to CSR. The information collected should constitute a document of analysis and social/environmental reporting, that could be made or not public.

The third step would be the definition of a formalized program of initiatives geared to implementation and dissemination to SMEs in the cluster of CSR tools, (collective training, documentation management support, conduct internal audits, identification of possible simplifications and economic benefits for businesses, etc.); moreover, the construction of an external communication plan to enhance the social - economic performance of the cluster.

The fourth step is to implement the previous phases. At this stage, a series of cluster indicators relating to the overall performance of CSR should be monitored. These indicators represent the basic element for the fifth and final phase, the follow up, in which the working group should monitor the effectiveness of initiatives implemented redefining new ones.

This approach, which outlines a circular path PDCA - Plan, Do, Check, Act to the management, whether structured could reasonably assure the continuity of local initiatives and ensure a good spread of CSR tools among SMEs cluster. For the future, the capability of the three clusters to continue the promotion of CSR initiatives at the local level is considered essential in order to fully assess the effectiveness of the approach.

In terms of prospects, the research finally opened the possibility to investigate an important aspect of the relationship between CSR and SMEs (particularly those operating in traditional manufacturing sectors most affected by competition from third countries): the relationship between competitiveness and the adoption of CSR tools. Does CSR really allow to SMEs in the global market to obtain a competitive advantage? This element is central to the Commission's new program "Responsible competitiveness: fostering corporate social responsibility in European industrial sectors" from which it will be interesting to assess what results may emerge.

References

- Adler, P. and S.-W. Kwon 2002, Social Capital: Prospects for a New Concept, *Academy of Management Review*, 27(1): 17–40
- Becattini, G. 1989, *Modelli locali di sviluppo*, Il Mulino, Bologna
- Becattini G. 1990, “The Marshallian District as a Socio – Economic notion”, in Pyke F., Becattini G. and Sengenberger W., *Industrial Sectors and Inter – Firm Co – operation in Italy*, ILO, Geneva.
- BITC 2002, *Engaging SMEs in Community and Social Issues*, Business in the Community, London.
- Bertolini S., Molteni M. e Pedrini M., 2006, “La responsabilità sociale nelle aziende familiari italiane”, AIdAF, ISVI.
- Carter C.R. 2000, “Ethical issues in international buyer-supplier relationships: a dyadic examination”, *Journal of Operations Management*, 18(2):191-208.
- Dunford M. 2003, *The changing profile and map of the EU textile and clothing industry* .
- EMSF (European Multistakeholder Forum on CSR) 2004, *Report of the Round Table on “Fostering CSR among SMEs”* .
- European Commission 2001, Green Paper: Promoting a European Framework for Corporate Social Responsibility (European Commission, Brussels, Belgium) .
- European Commission 2002, European SMEs and Social and Environmental Responsibility (Enterprise Publications, Belgium) .
- European Multistakeholder Forum on CSR, 2004, *Report of the round table on ‘fostering CSR among SMEs’* .
- European Commission 2007, Opportunity and Responsibility. How to Help More Small Businesses to Integrate Social and Environmental Issues into What They Do (European Commission, Brussels, Belgium) .
- European Commission 2008, Communication from the Commission Towards world-class clusters in the European Union: Implementing the broad-based innovation strategy COM(2008) 652 .
- European Commission 2008, Communication from the Commission on the European Competitiveness Report 2008 COM(2008) 774 final
- Ferrucci L. and Varaldo R. (editori) 1997, *Il distretto industriale tra logiche di impresa e logiche di sistema*, Franco Angeli, Milano
- Fox T., 2005, *Small and Medium-Sized Enterprises (SMEs) and Corporate Social Responsibility: a Discussion Paper*, International Institute for Environment and Development, IIED

Frey M. and Iraldo F.(a cura di) 2008, *Il management dell'ambiente e della sostenibilità oltre i confini aziendali*, FrancoAngeli, Milano

IFM (Institute Francaise de la Mode) 2007, Study on the competitiveness, economic situation and location of production in the textiles and clothing, footwear, leather and furniture industries - Final Report

Iraldo F. 2002, *Ambiente, impresa e distretti industriali*, FrancoAngeli, Milano

Jenkins H. M. 2004, "A Critique of Conventional CSR Theory: An SME Perspective", *Journal of General Management*, Summer 29(4): 37-57

Jenkins H. M. 2006, "Small Business Champions for Corporate Social Responsibility", *Journal of Business Ethics*, Springer 2006; 242-256

Lepoutre J. and Heene A. 2006, "Investigating the Impact of Firm Size on Small Business Social Responsibility: A Critical Review", *Journal of Business Ethics*, September 67(3): 257-273

Lipparini A. 2002, *La gestione strategica del capitale intellettuale e del capitale sociale*, Il Mulino, Bologna

Luetkenhorst W., 2004, "Corporate social responsibility and development agenda: the case of actively involving small and medium enterprises", in *Intereconomics*, may/june.

Murillo D. and Lozano J. F. 2006, "SMEs and CSR: An Approach to CSR in their Own Words", *Journal of Business Ethics*, September 67(3): 227-240

Nordas H. K. 2004, *The Global Textile and Clothing Industry post the Agreement on Textile and Clothing*, WTO, Geneva

Observatory of European SMEs 2002, European SMEs and social and environmental responsibility, 2002/n°4 European Commission

Observatory of European SMEs 2007, Analytical Report - Fieldwork: November 2006 – January 2007, Flash EB N° 196

Perrini F. 2006, "SMEs and CSR Theory: Evidence and Implications from an Italian Perspective", *Journal of Business Ethics*, September 67(3): 305-316

Perrini F., S. Pogutz and A. Tencati 2006, "Corporate Social Responsibility in Italy: State of the Art", *Journal of Business Strategies*, 23(1): 65–91.

Perrini F., Russo A. and Tencati A. 2007, "CSR Strategies of SMEs and Large Firms. Evidence form Italy", *Journal of Business Ethics*, February 74(3): 285-300.

Porter M. E. 1998, Clusters And The New Economics Of Competition, *Harvard Business Review*, Nov/Dec 76(6): 77-90

- Russo A. and Tencati A. 2009, Formal vs. Informal CSR Strategies: Evidence from Italian Micro, Small, Medium-sized, and Large Firms, *Journal of Business Ethics*, March, 85: 339-353
- Sancassiani W., 2005, "La responsabilità sociale delle imprese nei distretti modenesi", Focus Lab Report, Modena
- Spence L. J. 1999, "Does size matter? The state of the art in small business ethics", *Business Ethics: A European Review*, July 8(3): 163-174
- Spence L. J.; R. Jeurissen; R. Rutherford 2000, "Small Business and the environment in the UK and the Netherlands: toward stakeholder cooperation", *Business Ethics Quarterly*, 10(4):945-965
- Spence L. J. and Lozano J. F. 2000, "Communicating about Ethics with Small Firms: Experiences from the U.K. and Spain", *Journal of Business Ethics*, September 27(1/2): 43-53
- Spence L. J. and Schmidpeter R. 2003, "SMEs, Social Capital and the Common Good", *Journal of Business Ethics*, June 45(1/2): 93-108
- Spence L. J. 2007, "CSR and Small Business in a European Policy Context: The Five 'C's of CSR and Small Business Research Agenda 2007", *Business & Society Review*, Winter 112(4): 533-552
- Tambunan T. 2005, "Promoting Small and Medium Enterprises with a Clustering Approach: A Policy Experience from Indonesia", *Journal of small business management*, 43(2): 138-154
- Theyel G. 2001, "Customer and supplier relations for environmental performance", *Greener Management International*, 35:61-9
- Thompson J. and Smith H. 1991, "Social Responsibility and small business: suggestions for research", *Journal of Small Business Management*, 29(1): 30-44
- Tilley F. 2000 "Small firm environmental ethics how deep do they go?", *Business Ethics: A European Review*, January 8(1): 31-41
- Vyakarnam S., Bailey A., Myers A. and Burnett D. "Towards an Understanding of Ethical Behaviour in Small Firms", *Journal of Business Ethics*, November 16(15): 1625-1636
- Walton S. V., Handfield R. B. and Melnyk S. T. 1998, "The green supply chain: integrating suppliers into environmental management process", *International Journal of Purchasing and Materials Management*, 2-11

FROM COMPLIANCE TO NEW RESPONSIBLE BUSINESS OPPORTUNITIES - EMERGING BUSINESS MODELS IN CHEMICALS INDUSTRIES

Markku Anttonen & Eeva-Lotta Apajalahti

Abstract

Companies have widely accepted the concept of CR in its broad sense. This is seen in increasing number of CR reports and different standards directed to and adapted by companies. Alongside this CR reality the theory and practical business development is evolving to concern the questions of CR Innovation. In this paper we present some evidence of the expansion of corporate responsibility towards CR Innovation and new business opportunities this change has created for companies within the chemicals industry. As an example we describe the chemical management services as potential device for more sustainable chemicals industry. The BASF Success -business unit which offers a variety of chemicals safety related services can be characterized as a new type of innovative business model. In the service eco-efficiency and social responsibility issues are combined and thus different aspects of sustainability are covered. With this case we want to open discussion to further study.

Key words: CR Innovation, Business Models, Chemical Industry, Chemical Management Services, BASF

Introduction

In this paper we present the idea that our western, industrial, business - to -business markets need Corporate Responsibility (CR) innovation and it is possible to develop new business models that should be seen as CR innovations. We show that new, innovative business solutions such as chemical management services are in the market and should be connected more explicitly both in practice and research to CR context as the BASF Success case shows.

Recent CR research literature in corporate responsibility innovation has gained weight and become a focus for defining and conceptualizing. In this paper we understand innovations as any product or service, process, marketing and organizational innovation “that is new or significantly improved with respect to its characteristics or intended uses” (OECD 2005). In addition to OECD Oslo Manual’s (ibid.) we are in line with Rennings (2000) that innovations can be social (new ways of organizing our daily lives) and cultural, i.e. a novel way to perceive our lives in relation to nature and other human beings. The general OECD (2005) definition of different types of innovations does not concern ethical, ecological and social aspects of innovations. We see that in the context of corporate responsibility innovations have to have contribution to the different aspects of sustainability – i.e. ecological, social and economic feasibility of our communities and society. CR we understand in a similar fashion as Halme, Roome & Dopers (2009) meaning all activities done

by companies in order to contribute” *to a better society including its environmental conditions*”. Thus Corporate Responsibility Innovation is seen as any new product/service, manufacturing process, marketing and organizational innovation that contributes to this better society and environmental conditions and is carried out by companies. We see that CR is not necessarily the starting point for CR-innovation. Other types of business innovations might be source of innovative CR solutions as well. Yet the emphasis must be in changing existing business models and developing new ones.

Halme and Laurila (2009) have constructed an action oriented typology of CR activities. In the typology they claim that some innovations can contain activities previously done only for the concerned company but can later be integrated in CR wise innovative new business models. In the action oriented typology of these previous CR activities can be divided into a philanthropic activity and CR integration. Philanthropy indicates firm’s action towards charity and using resources to do good (Halme & Laurila, 2009: 329). CR Integration emphasizes firms responsibilities in relation to primary stakeholders e.g. customers, employees and suppliers by integrating CR issues to everyday business operations and to perform them in more responsible manner (Halme and Laurila 2009). This could mean rather normal responsible code of conduct towards such issues as wages, diversity-orientation in recruiting, paying in time to suppliers, or supporting responsibility measures in supply chain management e.g. banning child-labor and demanding and implementing self environmentally sound practices and policies (ibid.: 330).

We also share the idea of contextuality brought recently forward in CR research¹⁰. By this we mean that companies as any other organizations are embedded in societies and communities in different geographical, cultural, political and economic frames in particular material environment. All these factors affect at least partially the ideas and practices of CR (Halme, Roome & Dopers 2009, 2). Hence something that has worked in our industrial markets may and probably does not work in different context of a developing country and vice versa.

In this article we illustrate shortly of how corporate responsibility has changed over time in chemical industry and present a case where CR issues has created new business models which has many characteristics of being CR Innovation, namely chemical management services (CMS). As an example we illustrate the case of new BASF Success CMS services¹¹. Chemical management services are new type of business that aim to align the service provider’s and customer’s actions to reduce chemical usage and waste, improve supply chain management and increase resource efficiency. Arguably, they also create new business and higher profit margins compared with merely selling chemicals or handling industrial waste. CMS range from the management of the chemical supply to operations, waste reduction, combined logistics services, process management, ICT and other technologies (Anttonen 2008).

¹⁰ Broader discussion on subject in Halme, Roome and Dopers 2009.

¹¹ The data on CMS, material- and eco-efficiency services have been collected in MASCO (Materials Service Company) 1-3 research projects during 2005-2008. Data includes an interview of BASF Success manager in 2007. All MASCO projects were funded by TEKES - the Finnish Funding Agency for Technology and Innovation. More information on the MASCO-projects can be found for example from Anttonen (2008), Anttonen, Halme, Kuisma and Kautto (2009).

In the analysis of the BASF Success and chemical management services and their business models we have used the simple framework proposed by Halme et al. (2007) in the context of materials and eco-efficient service innovation. The framework for defining business model consist four questions for probing the market viability of a service. First, each business has to consider what benefits can users or customers derive from the service (compared to more traditional ways and means of fulfilling their needs) i.e. added value to the customers. Second, they have to understand the competitive advantage the service offers to the customer i.e. the strength of the service in relation to competitive alternatives. Third, they have to understand what capabilities and other resources does the provider or the network of providers have and what capabilities and resources they still need. Fourth, they have to figure out how the service is financed i.e. how the income flow is formed.

Eco-efficiency (EE) is one of the key concepts in analyzing BASF example¹². Origins of the concept lay in the early 1990s and since then have been utilized in many different contexts. The fashion of the concept was that for the first time, at least in business, the focus of environmental consequences was withdrawn to the pre-processes as minimizing material throughput instead of end-of-pipe solutions. The use of EE has been justified that it creates more benefits i.e. added value with smaller resource and material usage and thus smaller environmental consequences. As EE combines two dimensions of sustainability ecological and economic efficiency it gives an opportunity to interpret interrelation of these dimensions. However the third social dimension of sustainability is not included and thus needs to be added separately when overall sustainability is assessed. This has proved to be surprisingly difficult which can also be seen in the variety of eco-efficiency based tools for analysis (KCL-ECO¹³, SimaPro¹⁴ etc.) and parallel, yet not overlapping Corporate Social Responsibility standards. However it is very rare if not non-existing to see all the three dimensions of sustainability used in a way that they contribute to each other or are integral part of each other.

Although the practical implementation of eco-efficiency in companies has been strongly promoted by the World Business Council for Sustainable Development (WBCSD) (See e.g. DeSimone et al. 1997) and has gain favor in public, for example the implementation of EE in publicly listed companies in Finland has been weak (Hoffrén & Apajalahti 2009; Erkko, Melanen & Mickwitz 2005). The main reasons of sticky adoption of EE in companies are the lack of suitable and determining tools, goals and targets. Continuous improvement of EE alone is necessary condition to reach more sustainable development (SD), but at the same in most cases it is not sufficient condition (Hoffrén & Apajalahti 2009). Main critic of EE is the relativity of the measure. As EE is relative measure despite increased efficiency the availability of natural resources and the waste absorption capacity of the environment can continue to decline. In practical measurement of EE economic dimension often dominates and determines the direction of eco-efficiency (Apajalahti 2008). Other critic is related to too small improvements as EE is compatible with modern

¹² The data collected on practical measurement of eco-efficiency in IFEE –project (Indicators framework for eco-efficiency) was funded by the Academy of Finland. Information and more on the results of IFEE can be found from Apajalahti (2008).

¹³ For further information www.kcl.fi/page.php?page_id=166

¹⁴ For further information see www.pre.nl/default.htm

economic growth it does not consider more radical change that is needed to reach more sustainable development (see e.g. Welford 1997; Casagrande & Welford 1997).

Development of CR Innovations in emerging markets is crucial and important future challenge when emerging markets are catching up more mature markets in size. However, industrialized part of the world is still causing most of the environmental consequences. In this article we underline that there is both need and space for research on how to develop CR Innovation in mature markets, such as chemicals and their industrial usage that have both significant environmental and societal effects.

The Chemical Industry And The Burden Of The Past

In the relation to society the chemical industry still carries the burden of the less responsible history. The history spans from Rachel Carson and her *Silent Spring* (1962) making visible the effects of pesticides to nature and humans alike (Economist, 1996). During this time and afterwards the bright future offered by chemical engineering and science started to get tarnished with ongoing incidents and tragedies such as Love Canal 1953 in USA¹⁵, Union Carbide pesticide plant accident in Bhopal, India 1984¹⁶ and Sandoz plant along river Rhine in Basel, Switzerland¹⁷ and conflicts between industry, NGOs' and public government. After the Bhopal and Sandoz the chemical and environmental regulations started to tighten up throughout Europe. By the year 2007 this had lead to extensive and tight REACH regulation in the European Union¹⁸. At the moment California has accepted similar type of legislation as REACH at the state level in USA and China is developing its own 'REACH'-legislation. In USA chemical legislation started to tighten up in late 70's and 80's leading to legislation such as Superfund Act and SARA 1986.

These accidents and broader changes caused chemical industry to change it processes and find ways to response to societal failure. As a major response to the burden of past the chemical industry started its own, volunteer Responsible Care program, which started in Canada 1986 (CEFIC 2006) and gradually spread to the chemical industry globally. Responsible Care© (here after RC) is a voluntary program formed by of individual companies and both national and international industry associations. Its aims are shown in the following table one (ICCA 2006).

¹⁵ Love Canal, Niagara Falls, N.Y. was a dumping ground for chemical waste of Hooker Chemical Company and was gradually destroyed between years 1940-1953. By the 1990s, the town had been cleaned up enough for families to begin to resettle back to the area.

¹⁶ Over 3 000 people died because a leakage of gas from the Union-Carbide pesticide plant.

¹⁷ Over 1,000 t of mainly agrochemicals were washed into s river Rhine as firefighters extinguished a warehouse blaze. Sandoz is the predecessor of Novartis.

¹⁸ REACH = Registration, Evaluation and Authorization of Chemicals. REACH is the most extensive piece of chemical legislation bringing together broad set of previous regulation. It also has changed the chemical landscape so that now the industry needs to show that chemicals are safe and/or they can be used safely. Previously the public environmental authorities had to prove that some chemicals are not safe to humans or environment.

Table 1. The overall aims of Responsible Care© program

The aims of Responsible Care© (ICCA 2006)
Continuous improvement of the environmental, health and safety knowledge and performance
Efficient use resources and minimizing waste
Report openly performance, achievements and shortcomings
Listen, engage and work with people to understand and address their concerns and expectations
Cooperate with governments and organizations in the development and implementation of effective regulations and standards
Provide help and advice to foster the responsible management of chemicals by all those who management and use them along the product chain

As shown in the table RC concentrates on perhaps the more traditional site of the environmental issues in chemicals industry. Members of RC and industry associations claim substantial improvements in safety and environmental management in companies that are members of the RC program. However RC program does not explicitly require actions or provide guidelines in particular social issues among such as globalization and poverty, which have perhaps become the new focus of CR research. Critics of RC also claim that it this program has not been successful and lacks real leverage because the program lacks sanctions against participating companies that fail to meet the aims of it (ENDS 2005). Last of the aims comes close to the BASF's Success and the chemicals management services concept which is opened in the following chapter.

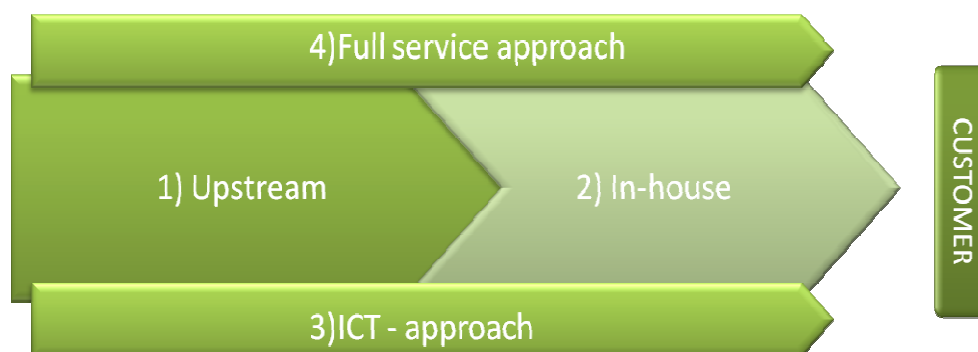
Chemical Management Services as CR-Innovative Business Solutions

The Business Models of Chemical Managements Services

Chemical management services (CMS) are defined as services that aim to reduce chemical usage by offering chemical solutions instead of chemical products (Bierma & Waterstraat 2000, Stoughton & Votta 2003). Resource management is a similar service concept, with the idea to shift from waste management and hauling towards waste prevention and the more efficient use of materials in the customers' production processes (USEPA, 2002, Ligon and Votta, 2001; Ligon, Mishra and Votta, 2000). As a concept, chemical management services are still forming. Alongside it, especially in Europe, concepts such as chemical product services (Kortman et al., 2007) and chemicals leasing (Jakl et al., 2004) are used in a similar fashion. All these concepts share the idea of aligning the relationship between the service provider and the customer in a way that they share incentives to move towards more efficient use of materials and increased waste avoidance. Thus, they serve to decouple the service providers' income from the quantity of chemicals sold or waste processed.

Anttonen (2008) has divided chemical management services into four typological classes. Some service providers concentrate on *streamlining supply side management from upstream*. These services are closely related to supply side management or inbound logistics management of chemicals. Large proportion of these companies operate in chemicals distribution and have broadened their more traditional delivery and sourcing. *In-house: managing chemicals in production processes*: In this group the companies of offering services concentrate on operating processes and increase the process efficiency in the customers' production facilities. The chemicals involved are often support chemicals such as lubricants, coolants, etc. Most of these service providers are business units of established chemicals manufacturers. Third group of companies offer broad variety of *IT focused* services based solely on different ICT and software solutions and services. These companies are mainly small and medium size companies that had found their market niche in specialized software and technical solutions (i.e. chemicals purchasing, inventory management, labeling, EHS and safety data sheet SDS management). Fourth type of service provider companies' are large multinational chemicals manufacturers that have started new business units to offer comprehensive or *integral services* from covering all above mentioned aspects. (Anttonen 2008)

Picture 1. Chemical management services typology by Anttonen (2008).



Modified from Anttonen 2008. Greening From Front to Back Door? A Typology of Chemical and Resource Management Services. Forthcoming in Business Strategy and the Environment. DOI: 10.1002/bse.544

The economic benefits for customers mainly accrue from the reduced amount and consolidated number of chemicals used, which reduce the costs of chemicals purchasing. Other economic benefits are created through improved manufacturing processes (CSP, 2004). Chemical Strategies Partnership found in a study concentrating on chemical management services in the USA that the first year cost savings range from 5 to 25 percent (ibid.). For longer time periods, cost savings vary from six to ten per cent per year compared to the starting point. Corbett and Decroix (2001) argue that long-term contracts and partnerships usually offer the greatest benefits for both the service provider and the customer. In resource management, the customer's economic benefits are created through diminished waste management costs. Environmental benefits are created by reduced chemical volumes, reduced

emissions, reduced risk (through proper usage of products and less harmful chemicals), and better data for reporting (CSP, 2004). For example SAFECHEM, a German-based service provider of closed loop chlorine solvent services (SAFECHEM Europe GmbH, ND b) reports from 40 up to 80 per cent reductions in solvent usage. This is in line with Vachon and Klassen's (2006) findings on supply chain management. Their (ibid.) study shows that when the customer's chemical supply base is diminished and when the collaboration with primary supplier is deepened, there are increasing environmental benefits.

Chemical management services are formed when other business innovations such as 3rd party logistics, ICT-innovations on purchasing, warehousing, etc. are connected with environmental, health and safety issues with a goal to reduce the usage of chemicals in general and particularly the use of hazardous chemicals.

CMS have been studied in the connection of so called servicing – research discussion (Anttonen 2008; Halme, Anttonen, Kuisma, Kontoniemi 2006, Mont 2006, etc.) and in connection to the ideas of cleaner production (Schawager 2008). This broader discussion concentrates on the possibilities of services to decouple (to some extent) our western society's development from the use of natural resources. The servicing is perceived differently by different authors (for example Jänicke et al., 1989, Lovins & Lovins 1999). And it has rarely been explicitly connected to corporate responsibility strand of academic discussion and business development alike Halme and Laurila (2009) form one exception to this.

BASF Success - Increasing Customer's Eco-Efficiency and Social Responsibility as Business

BASF as a case company of CR Innovation has its somewhat dark history, though it has considered being a responsible employer towards its employees by providing vocational training, community and family help in kind of a philanthropic approach. BASF has been and still is one of the largest if not the largest chemical manufacturer and truly global actor in the chemical industry. Besides the main production and flagship site in Ludwigshafen in Southern Germany it has subsidiaries and major production facilities in China, Korea, Mexico, Spain, etc. (International Directory of Company Histories 2003). It has a long history far over a century¹⁹ starting with artificial dyes manufactured out of coal tar²⁰ (for example indigo).

As CMS provider BASF success business unit differ other chemical management service companies that it both states clearly sustainable development and eco-efficiency as desirable aim and it also promises to deliver services enhancing these goals. This business unit has developed both tools for analyzing eco-efficiency and social-efficiency or impacts of their customers manufacturing processes. Success also utilizes other capabilities that BASF group can offer. Most of these services are

¹⁹ BASF was founded in 1865 as Badische Anilin- und Soda-Fabrik AG, nowadays known as BASF Aktiengesellschaft (International Directory of Company Histories 2003).

²⁰ In a broad sense this already kind of a material efficiency business. Coal tar was a messy byproduct of gas distillation, which BASF transformed into product that was inexpensive and more reliable compared to similar organic substance (International Directory of Company Histories 2003)

different types of consultative specialist services including waste and wastewater management consultation, REACH-consultation, energy production analysis, toxicology and eco-toxicology tests and risk assessments, EHS solutions and logistics planning.

The eco-efficiency tool is an applied Life Cycle Analysis (LCA) and comply with ISO 14040-14 043 standard (Wall-Markowski et. al., 2004). By the October 2007 over 350 customer processes had been evaluated by using this tool (BASF Success 2009). Analyzed processes include fish farming, vitamin production, insulation for housing, etc. (Saling et. al. 2007). The ecological and eco-efficiency effects (soil, water and air emissions; energy use and materials usage) are transformed to costs and savings for indicators identified in the following table two (Wall-Markowski, et. al. 2004) Different impacts are weighted and compared with each other by using weighting coefficients. The coefficients are 1) the experienced societal impact of the product or process, 2) the relative importance of these issues in relation to national or regional emissions and energy consumption and 3) the impact of individual substances for example on CO₂ emissions. The coefficients are product and process specific (Wall-Markowski, et. al. 2004). As a result of the analysis an eco-efficiency label for eco-efficient products i.e. products that fulfill the eco-efficiency criteria set in the analysis and verified by a third party evaluation and publication in the internet (BASF Success 2009).

Table 2. The variables/indicators used in the BASF eco-efficiency tool

Eco-efficiency tool					
natural resource usage	landuse	energy consumption	emissions	risks	health effects
For example coal, oil, bauxite and natural gas usage	Extense and purpose of landuse	Total energy consumption including transportation, products (LCA)	Air-, water-, and soil emissions Amount and quality of the solid waste generated in customers manufacturing processes	Risk analysis cover potential accidents and their scale The quantities and qualities (hazard, safety, etc.) of the used substances	Analysis covers human health risks of the used substances and resources

Source: Saling, Kicherer, Dittrich-Krämer, Wittlinger, Zombik, Schmidt, Schrott, & Schmidt, (2002).

As an example of the above mentioned 300 eco-efficiency analysis and new business for Success and the other BASF business units can be mentioned the management of Mercedes A –series coating. BASF coatings unit both operates and manages coating line in a production facility instead of merely selling coating and paint for the

customer. Before the agreement was awarded for BASF the Success-unit performed the eco-efficiency analysis to the customers production lines and for the coatings they were using. Based on the results of the analysis the amount of used coating per car was reduced into one fifth of the original, which means approximately five kilogram's less paint per vehicle. Besides the eco-efficiency improvements potential Success can construct a social profile for the chosen product or manufacturing process. The social profile and the eco-efficiency analysis are connected to SeeBalance©²¹ i.e. SocioEcoEfficiency analysis. The social profile includes indicators portrayed in the following table three.

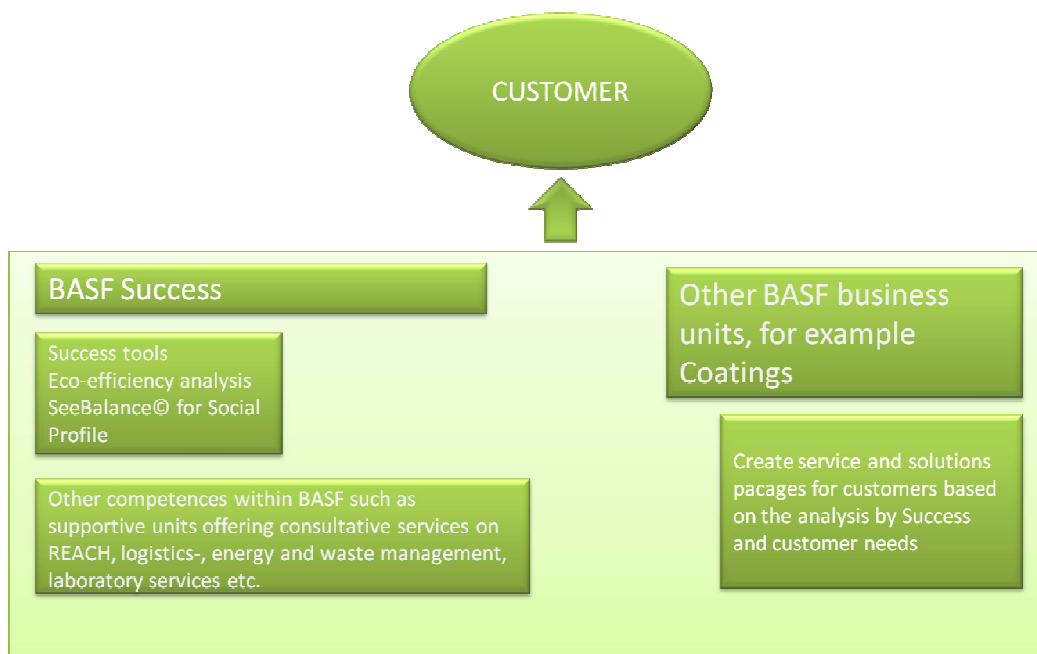
Table 3. The Indicators used for social profile in SocioEcoEfficiency Analysis tool SeeBalance©

Social Profile				
employees	international	future generations	Consumers	Local and national communities
working accidents	community	number of trainees	toxicity potential	employees
fatal working accidents	child labour	R&D (company expenditures)	other risks and	qualified employees
occupational disases	foreign direct investment	capital investments	functional product characteristics	gender equality
toxicity potential +transport	imports from developing countries	social security	...	integration of handicapped people
waggess and salaries				part time employees
professional training(company expenditures)				family support
strikes and lockouts				

Source: Peter Saling, Anahi Grosse-Sommer, Ana Alba-Peréz and Daniela Kölsch (2007).

²¹ In cooperation with the Universities of Karlsruhe, the University of Jena and the Öko-Institut (Saling, Grosse-Sommer, Alba-Peréz & Kölsch 2007).

Picture 2. The BASF business model change and the role of Success, internal units and other business units.



Compared to other similar types of chemical management services it is interesting that they do not connect or speak about their solutions to corporate responsibility and especially to the enhancement of their customers CR unlike BASF. Most of their value claims are connected more to direct economic efficiencies or towards more traditional EHS²². Success is an exception together with German Safechem, a subsidiary of American DOW Chemicals or Swedish AGA (owned by German Linde Gas) with their Sisource chemical management services. However Safechem and AGA connect their services to the ecological sustainability.

Discussion And Conclusions

The BASF Success example fulfills the criteria for CR - innovation, as it is a new innovative business model providing both more ecologically and socially responsible business operations for BASF's customers. This is done by providing the eco-efficiency analysis and the construction of social profile. Innovative it is also in the sense that BASF seems to be in the forefront of global industrial manufacturer that offer these type of services, including the social aspects. From CR-innovation point we view especially the integration of ecological and social "efficiencies" together. At the market there are lot of different LCA -software tools (KCL-ECO, SimaPro, etc.) and consultative services. These type of consultative and software-tools concentrate mainly on the ecological dimension of corporate responsibility. On the other hand also variety of social responsibility and corporate social responsibility reporting

²² EHS stands for Environment, Health and Safety issues; also HSE version of this acronym is used by the companies for representing these activities.

services are offered. In the Success concept it can be said that the social, ecological and economic dimensions are operationalized and analysed in reflection to each other.

Though Success is still small business unit, it may and in our understanding have changed also BASF business strategy from merely selling chemical products to services (e.g. coating operations). This service approach itself is not that innovative anymore, but eco-efficiency and social profile included to the service is truly innovative. Other, mainly US based chemical management service providers have not included the social impacts of their customers operations to the service offering. This may be due to different roles and understanding of corporate responsibility, EHS and sustainability between companies operating in North-America and in Europe. Sustainability and eco-efficiency as such are European origin concepts and they have had greater impact in politics within Europe. Though not in the focus of this paper it would be interesting to compare the political differences in context of CR and business innovation and see how the differences may effect and in what way these services could be advanced. This would be worth while especially, because the chemical management services under the concept of chemicals leasing (Jakl & Schwager 2008) has been accepted by UNIDO²³ to be one way to turn industries towards more sustainable paths in their cleaner production programme. Yet in our opinion BASF is a example of starting strategic change in chemical industry and the changing strategies within the chemicals industry - "instead of being the problem, being part of the solution" as representatives of the European Chemicals Manufactures Association CEFIC stated in held in April in Tchech Republic during the Tchech EU presidency²⁴.

Of course to this model has questions that need to be studied in more detail and with critical approach. First it can be asked how much Success service concept creates true eco-efficiency effects for the customers, without forgetting the critique that eco-efficiency as a concept is not sufficient enough just fine tuning instead of radical change. It should also be asked if the social profile is measuring what it is supposed to measure – social sustainability of the manufacturer concerned. We believe that the BASF system, being in line with corporate social responsibility reporting standards, is a good beginning to start to consider measuring social impacts and what is more important to put them in the context and in comparison to ecological dimensions at the same time. At BASF -level it can and must also be asked how unbiased the eco-efficiency tool is towards chemicals or chemical solutions manufactured and provided by other companies than BASF or that are genuinly more in line with principles of *green chemistry*²⁵. For this and the previous question of the eco-efficiency impacts need further more detailed study and practical implementation. However, we see that CR innovative business model introduced here is itself more interesting for CR-innovation perspective at this moment. CMS type of business models (Anttonen 2008, Halme et al 2007) may be difficult to transfer as such to other industries due the fact that materials and processes vary not just between manufacturing industries but even between them. Chemicals and chemical

²³ United Nations Industrial Development Organization

²⁴ Delivering the HLG results in the regions: Follow-up Conference to the High Level Group on the competitiveness of the European chemical industry on 16th/17th April 2009 in Ústí nad Labem/ Czech Republic. The corresponding author participated in the conference.

²⁵ "[c]hemistry that efficiently (preferably renewable) raw materials, eliminates waste and avoids the use of toxic and or hazardous solvents and reagents in both products and processes"(Sheldon 2008).

compounds are used in all industries and some type of uses are similar despite the industry in question, namely such as lubricants, cooling fluids, water purification, etc. Materials and natural resources and manufacturing processes (for example comparing semi conductors and metals manufacturing) used at different industries vary considerably. Results of a recent research project MASCO 3²⁶ (Materials efficiency and new business of waste and environmental management services) show that manufacturing industries are very interested in eco-efficiency and consider corporate responsibility issues very important. However they saw that the best knowledge on the materials needed and used in processes and how the materials efficiency could be increased lies within the company or industry concerned. As a part of the overall eco-efficiency energy efficiency was perceived more complex problem to be handled within companies or an industry (MASCO 3, 2009). Third research area could be the connection between materials and energy efficiency and how to make it more visible and also show the connection between human-industry relations, not just as Mwh consumed but in more detailed fashion (forms of energy production, technology, renewable or not, local or from international energy markets, etc.)

What is already transferable and used as outsourced services in some industries is the idea of selling reliable operations management in order increase quality and reliability of the manufacturing processes. Also outsourced sourcing and purchasing is used in several industries to some extent in our understanding. However, more interesting in the context of CR-innovation is to connect the eco-efficiency together with the social effects and risks of particular manufacturing facility and look the effects of different materials and production processes to the social impacts and risks would still be quite innovative or at least different from existing models. A number of other questions remains to be answered before it can be said that this type of CR-innovative business models could be developed to other industries. Chemicals can be such materials, used by all other industries as process and support materials alike that it is possible to develop these CMS and eco-efficiency + social sustainability services. Interesting question is that who in manufacture chain could offer these types of services - could it be for example technology providers in heavy metals? How they could provide the services - would a single service provider offer them by deepening and expanding its services or could different networks as production mode work better? What kinds of business models are needed for this? Or in what way the commercial tools available already could be used and developed to combine different aspects of corporate responsibility perhaps differently compared to BASF example? Though eco-efficiency as a concept has been criticized and it can be questioned if it is possible to measure the social impacts of companies in socially benign and sensitive way BASF example shows that in some way it is possible to enhance eco-efficiency and social sustainability in economically feasible way. Furthermore this example is a significant, because it is not possible to change existing industrial processes overnight. Therefore gradual improvements through eco-efficiency and taking social impacts under paralel analysis is important. Success as an example and CMS in general shows that in can be also feasible and innovative business. They also show that CR innovation is very much organizational and strategical innovation, not just technological.

²⁶ The studied industries were manufacturing industries in general, construction industry, retail- and wholesale industries and logistics. Research included both a survey (n=294) and 44 interviews. Unpublished research report of TEKES (the Finnish Funding Agency for Technology and Innovation) funded research project on innovative business models at environmental and waste management services.

References

Anttonen, M. (2008). Greening from the Front to the Back Door? A Typology of Chemical and Resource Management Services. *forthcoming in Business Strategy and the Environment*. DOI: 10.1002/bse.644.

Anttonen, M., Halme, M., Kuisma, M. and Kautto, P. (2008). Materiaalitehokkuuden palveluista ympäristömyötäistä liiketoimintaa (MASCO2) Loppuraportti. Helsinki School of Economics, Working Papers W-457. Available: helecon.lib.hse.fi/onl/db/MIX/DDW?W%3DALL+PH+WORDS+%27Anttonen%27+ORDER+BY+PUBLYEAR/Descend%26M%3D7%26K%3Db105658%26R%3DY%26U%3D1.

Apajalahti, E-L(2008). *Metallien jalostuksen ekotehokkuus Suomessa 2000–2006* (The eco-efficiency of metals refining in Finland 2000-2006). Masters thesis. Faculty of Business Studies. Department of Economics. University of Vaasa.

BASF Success (2009). *Quantifying Sustainability: Eco-Efficiency Analysis and SEEBALANCE® Efficiency in Ecology and Economy*. [Online]. [Referred to 17.8. 2009]. Available: www.basf.com.

BASF 2006. Shaping the Future. Corporate Report 2006.

BASF (2009). *What is the SEEBALANCE®?* [Online]. [Referred to 17.8. 2009]. Available: http://www.basf.com/group/corporate/en/function/conversions:/publish/content/sustainability/ecoeficiencyanalysis/images/Quantifying_Sustainability_EcoEfficiency_Analysis_and_SEEBALANCE.pdf.

Casagrande, E. and Welford R. (1997). In: Welford, R. (1997), *Hijacking Environmentalism. Corporate Responses to Sustainable Development*. Earthscan. London.

CEFIC (2009). *Responsible Care Europe 2007 - 2008*. [Online]. [Referred to August 17 2009]. Available: www.cefic.be/Files/Publications/CEFIC_RC_Report_2008.pdf. Chemical Strategies

Partnership CSP (2004). Chemical Management Services, Industry Report 2004: Creating Value Through Service.

DeSimone L. D. and Popoff F. (1997). *Eco-efficiency. The Business Link to Sustainable Development. With the World Business Council for Sustainable Development*. MIT Press.

Economist (1996). Toxic Shock. *The Economist*. August 3rd, 77-79.

Erkko, S., Melanen, M. and Mickwitz, P. (2005). Eco-efficiency in the Finnish EMAS reports - a buzz word? *Journal of Cleaner Production* 13, 799-813.

ENDS (2005). *Two decades of Responsible Care: Credible response or comfort blanket?* Industry Report No 76, January 2005. ENDS Report 360, 19-23.

Halme, M., Anttonen, M., Kuisma, M., Kontoniemi, N. and Heino E. (2007). Business models for material efficiency services: Conceptualization and application. *Ecological Economics* 63, 126-137.

Halme M. and Laurila J. (2009). Philanthropy, Integration or Innovation? Exploring the Financial and Societal Outcomes of Different Types of Corporate Responsibility. *Journal of Business Ethics* 84, 325-339.

Halme M., Roome N. and Dobers P. (2009). Corporate responsibility: Reflections on context and consequences. *Scandinavian Journal of Management* 25, 1-9.

Helminen, R. (1998). *Eco-efficiency in the Finnish and Swedish Pulp and Paper Industry*. Acta Polytechnica Scandinavica. Mathematics, Computing and Management in Engineering Series No. 90, Espoo.

Hoffrèn, J. and Apajalahti E. (2009). Emergent Eco-efficiency Paradigm in Corporate Environment Management. *Sustainable Development* 17:4, 233-243.

ICCA (2006). *Responsible Care 1985-2005*. [Online]. [Referred to August 17 2009]. Available: http://www.icca-chem.org/ICCADocs/12_RC_1985-2005_Oct2005.pdf.

Jakl T. and Schwager P. (eds.) (2008). *Chemical Leasing Goes Global: Selling Services instead of Barrels: A Win-Win Business Model for Environment and Industry*. Springer Verlag, Wien.

MASCO 3 (2009). Kilpailuetua tuottavat ympäristöhuoltopalvelut (Environmental services providing competitive advantage). Unpublished research report of the TEKES (the Finnish Funding Agency for Technology and Innovation) funded research project on innovative business models at environmental and waste management services.

OECD (2005). *Oslo Manual: Guidelines for collecting and interpreting innovation data. A joint publication of OECD and Eurostat, OECD Publishing, third edition*. [Online]. [Referred to August 17 2009]. Available: www.oecd.org/document/23/0,3343,en_2649_34451_35595607_1_1_1_1,00.html.

Rennings K. (2000). Redefining Innovation – eco innovation research and the contribution from ecological economics. *Ecological Economics* 32, 319-332. SAFECHEM Europe GmbH. NDb. Chemical Product Services and Chemical Leasing as Risk Management Best Practices. Public positioning paper.

Saling P., Grosse-Sommer A., Alba-Peréz and Kölch D. (2007). *Using the Eco-Efficiency Analysis and SEEBalance in the Sustainability Assessment of Products and Processes*. Presentation given in the 4th BMBF-Forum for Sustainability: Sustainable Neighborhood – from Lisbon to Leipzig through Research (L2L), 8-10 May 2007, Leipzig. [Online]. [accessed: August 17 2009]. Available: www.corpotate.basf.com/en/sustainability/oekoeffizienz/vortraege.htm?id=V00-Yt1ZFCNeybcp*SO.

Saling, P., Kicherer, A. Dittrich-Krämer, B., Wittlinger, R., Zombik, W. Schmidt, I., Schrott, W. & Schmidt, S. (2002). Eco-efficiency Analysis by BASF: The Method. *International Journal of Life Cycle Management* 7, 203-218.

Sheldon, R. A. (2008). Green and sustainable chemistry: challenges and perspectives. *Green Chemistry* 10, 359-360.

Schwager, P. (2008). Chemical leasing – an introduction in Thomas Jakl and Petra Schwager (eds.) *Chemical Leasing Goes Global: Selling Services instead of Barrels: A Win-Win Business Model for Environment and Industry*. SpringerVerlag, Wien, 9-16.

Vachon, S. and Klassen, R.D. (2006). Extending green practices across the supply chain: the impact of upstream and downstream integration. *International Journal of Operations and Production Management* 26, 795–821.

Welford, R. (ed.) (1997). *Hijacking Environmentalism. Corporate Responses to Sustainable Development*. Earthscan. London.

DOES OPEN INNOVATION STRENGTHEN CORPORATE RESPONSIBILITY?

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Abstract

Meanwhile within a multiplicity of companies corporate responsibility can be identified. However, there is a gap between wording and acting sustainably or responsibly. Nowadays, stakeholder integration is a main trend for companies to be or act sustainably or responsibly. It can also be stated that open innovation methods, such as stakeholder dialogues, innovation workshops, ideas competition, web-communities and toolkits can enable companies to find new and sustainable solutions and activities to act sustainably and responsibly due to the enlarging of the knowledge base and opening perspectives in ad-hoc or continuous communication with consumers and stakeholders. Yet, the question raises: does open innovation really lead to or strengthen corporate responsibility? All open innovation methods have a different dialogue orientation and a different level of participation and therefore diverse possibilities to support corporate responsibility. This study emphasises the strengths and weaknesses of selected open innovation methods to strengthen corporate responsibility on the basis of an empirical analysis of 6 German-based companies.

Keywords: CR and sustainability, open innovation methods, sustainable innovations

Introduction

One of the critical questions for managers, policy-makers and other stakeholders is the importance of innovation and organisational learning in order to strengthen corporate responsibility. To guarantee a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland 1987) societal change, the creation of new institutions and green technologies are necessary (Ghosh 2001; Ghoshal et al. 2000). There is a close connection between sustainability, corporate responsibility (CR) and corporate social responsibility (CSR), yet there are some main differences. CSR can be defined as a “concept whereby companies integrate social and environmental concerns in their business operations and in their interactions with their stakeholders on a voluntary basis. Being socially responsible does not only mean to fulfill legal expectations, but also going beyond compliance” (European Commission 2001: 6). CSR activities can relate to several phenomena, mostly social-ecological issues. CR is broader and mainly integrates business aspects and business ethics in special. Businesses make use of CR for several reasons, e.g. promotion, handling risks or cooperating with stakeholders. Corporate responsibility addresses fundamental challenges to prevailing business models as companies trying to implement sustainable and social-

ecological requirements may find their conventional way of operating fundamentally challenged (Arnold 2007):

- Processes, products and services need to be rethought and rearranged
- Completely new information and ways of thinking as well as new business models and business ethics need to be integrated into management decision-making processes
- New ways of external and internal communications with groups of stakeholders need to be identified and implemented
- Companies' basic values and knowledge systems need to be reflected and changed.

These challenges will require new or recombined knowledge or ideas and fundamental changes in corporate strategy and objectives for the majority of all companies (Arnold 2007; Teece et al. 1998). Therefore, the use of open innovation methods (OIM) and corporate learning become a key element of any effort to implement CR and sustainability effectively within companies.

Although there is an extensive literature on the actions that have been taken by companies, such as developing new modes of production and new products, initiating new modes of participation or stakeholder engagement, less attention has been paid to the role OIM and organisational learning play in influencing CR actions taken by companies. With respect to open innovation methods, various stakeholders representing different social positions and interests, such as NGOs, investors, government bodies or consumers, can be integrated in open innovation processes (to strengthen CR). Integrating users into the planning and development of innovative products and services offer the following advantages: Asking future users about their needs, ideas and solutions and taking this knowledge into consideration at an early stage in the innovation process increases the likelihood that the final product will be accepted and successfully spread in the marketplace. Additionally, regarding sustainability/CR the social-ecological effects of sustainable consumption and production can often be ascertained at an early point in time. The wide variations in corporate responses to CR and sustainability open up a series of questions around:

- When and why do companies use OIM to integrate sustainability and social-ecological responsibility into business practices and strategies?
- What effects do these innovations generated by OIM have on CR?
- What do OIM promote or inhibit regarding CR?

Even though the management studies literature provides answers to these questions in the broader context of corporate strategy, little has been written specifically on OIM and CR. Shown the weaknesses in the theoretical frameworks, this chapter seeks to advance the literature by examining empirical evidence from six German-based companies in the fields of housing and construction, mobility and transportation as well as diet which used OIM to develop sustainability innovations. The article consists of six sections: sustainable change and CR, open innovation methods, conceptual framework and methodology, results, conclusions and consequences.

Sustainable Change and CR

Due to a global increase in mechanisation and the social development of societies, human activities reached new levels and scope in time and space causing complex risks (Arnold 2007). In order to face and manage these risks in a responsible way, using lifecycle and long-term perspectives, sustainable development aims at, in economic terms an efficient, in social terms a fair, and in environmental terms a compatible, development. The idea of CR confronts firms with several new challenges. Some of the main sustainable requirements are (1) implementing and realising the national sustainability strategy and CR, (2) including the interests of different stakeholder groups, (3) changing routines and processes towards more sustainability and CR, (4) considering long range consequences, (5) generating and offering sustainable and responsible solutions, and (6) focusing on lifelong learning and responsible acting.

According to the regulative view of sustainability, mutual learning processes lead to more sustainable patterns of action (Hübscher & Müller 2001). In general, this kind of learning also includes stakeholders. If firms accept and use the interests of stakeholders for their product and service development, their strategies and their corporate development, as well as for the initiation of interactive learning processes, OIM will serve as a chance for accelerating sustainable development and CR in society in the long run. Renn and Webler (1996) argue that even environmental problems are suitable for cooperative processes, because these procedures need collective binding arrangements that are neither deduced from the rationality of experts nor legitimated by the use of political routines.

Analysing OIM means to consider if new or changed action patterns led to far reaching entrepreneurial learning processes or if these methods are part of a green washing campaign. This argumentation follows Probst and Büchel's (1997: 15) idea of organisational learning: a "process by which the organization's knowledge and value base changes, leading to improved problem-solving ability and capacity for action". This definition integrates the outcome perspective by asserting that corporate learning has to serve a specific purpose. In this context, CR and the concept of sustainability serve as a fundamental framework or a specific purpose. A goal of the empirical research was to examine through case studies when and why companies use OIM to integrate sustainability and social-ecological responsibility into business practices and strategies. Thus, main influencing factors, identified from the literature and other case studies (Arnold 2007; Siebenhüner & Arnold 2007), that seem to be causal for CR learning processes, were analysed to understand whether and how they influence corporate actions in practice. According to Arnold's (2007) empirical studies regarding sustainable change actual or anticipated stakeholder requirements were highlighted as a critical driver for action by large companies, whereas the medium-sized companies suggested that internal factors were critical to accelerating their sustainability learning processes and actions (though acknowledging the importance of external drivers). Thus, four main aspects shall be stressed as influencing factors for using and implementing OIM to strengthen CR practice (see fig. 2):

- *Values and norms* (Rothman & Friedman 2001; Schein 1995): these studies examined the manner in which changes in organisational values and norms may influence the direction and type of corporate learning processes, and the outcomes from these processes. CR-/sustainability-oriented values and norms manifest themselves in mission statements and well-developed (sustainability) reporting schemes (Alvesson 2005), particularly in large companies. According to Arnold (2007) the fear of damage to the companies' reputation is a strong driver for stakeholder orientation in the companies. When coupled with the tradition of these companies of accepting responsibility for common welfare, this fear led to distinctive learning and innovation efforts.
- *Knowledge transfer* (Barabási 2002; Blatter 2003; Crampton et al. 1998; Mutch 2002): the research examined the role of internal networks (formal and informal) in disseminating sustainability-related knowledge through the organisation. Knowledge transfer, e.g. via internal networks, is an important vehicle for CR learning, particularly in the large companies (Siebenhüner & Arnold 2007). Joint projects, conferences and virtual communities were all identified as important in allowing information to be exchanged and new sustainability-/CR-related knowledge to be created.
- *Stakeholder requirements* (Dyllick 1989; Hedberg 1981): Stakeholders have an influence on the CR to supporting change process. A tight collaboration with the stakeholders can enable CR change (Arnold 2007), e.g. by maintaining a good image and retaining the ability to be competitive.
- *Competition* (March 1991; Walgenbach 2000): the entrepreneurial activities of the competitors initiate sustainability-oriented changes by provoking reflecting and searching processes in the company which are the source for the development of new solutions. However, the condition has to be fulfilled that companies recognise changes in their relevant field and implement (or are able to implement) them in specific activities. At the same time there is a tight connection with ideas and guiding principles of a sustainable development or CD necessary, like zero emission, life-cycle concepts or responsible behaviour.

Open Innovation Methods (OIM)

User and community-based innovation are current trends in innovation management. User integration means including future customers and users in the innovation process on a targeted basis – from the initial idea all the way to the innovation's introduction and diffusion in the marketplace (phases: invention, development, testing, implementation, diffusion). User integration in innovation processes and community-based innovation could enhance awareness of products and increase their acceptance among a broader public. So called lead users are a vital source of innovation (von Hippel 2005, 1988.). Since the 1980s a number of empirical studies has been conducted regarding lead users in high technology and industrial markets (Franke & Shah 2003; Herstatt & von Hippel 1992; Lilien et al. 2002; Olson & Bakke 2001; Urban & von Hippel 1988).

OIM are all methods that open the traditional way of innovating. Traditionally, new products and services were developed by the companies themselves. Nowadays, in research and practice these 'closed processes' have been opened up. Stakeholders and companies increasingly interact and act as shared innovators (von Hippel 1978, 1988). The new basic principle is called 'open innovation' - a process to combine external and internal competences in the innovation process by using different methods (e.g. innovation workshops, idea contests). Previous research showed the effectiveness of this approach (Franke et al. 2006; Lilien et al. 2002). Realising open innovation, companies can use a number of methods (Lüthje & Herstatt 2004; Urban & von Hippel 1988):

- A dialogue offers a tool to engage people in a serious discussion about a special theme (Arnold 2007). In stakeholder dialogues companies discuss particular and/or structural problems resulting from business activities with stakeholders (Hansen et al. 1997). The dialogue's focus is set on reducing social and environmental impacts and improving corporate routines and processes towards more sustainability or CR.
- Innovation workshops are interactive meetings providing a practical framework and structured approach for generating and discussing sustainable solutions that deliver breakthrough results (Arnold 2007).
- A web community is a virtual group that takes the form of a social network, an internet forum, a group of blogs, or other kinds of web applications to interact, share knowledge or develop issues (Franke & Shah 2003; Piller et al. 2005).
- An idea contest is a forum in which persons with a special interest in the topic can generate and hand in creative ideas or concepts with regard to a certain topic defined by an organiser, e.g. the company (Piller and Walcher 2006; Walcher 2007).
- Toolkits are an integrated set of software routines or utilities that are used to develop and maintain applications and databases. They provide companies a portfolio of information, services, news, forms, sample contracts, checklists and software tools. (Franke & Piller 2004; von Hippel 2001). A toolkit can support users to integrating their own needs independently into new product concepts (Reichwald et al. 2007: 145).

Open innovation processes can be classified into different levels of interaction and integration (see figure 1). At present, there is no generally accepted framework of stakeholder integration. With respect to user integration Pobisch et al. (2007) developed a category regarding user involvement and interaction in innovation processes. In figure 1 the level of integration reflects the degree of how deeply and comprehensively a user or customer is involved in the innovation process. The level of interaction represents the degree of working together with other users or companies representatives and the possibility of having influence on contents and process development. For example, using a toolkit the users or stakeholders are highly involved in the process, but cannot influence the contents or the routines so much in contrast to workshops and communities. However, the level of integration of idea contests is lower compared with toolkits or workshops, because the stakeholders

or users are only partly integrated in the process or at least at one special point in the innovation process.

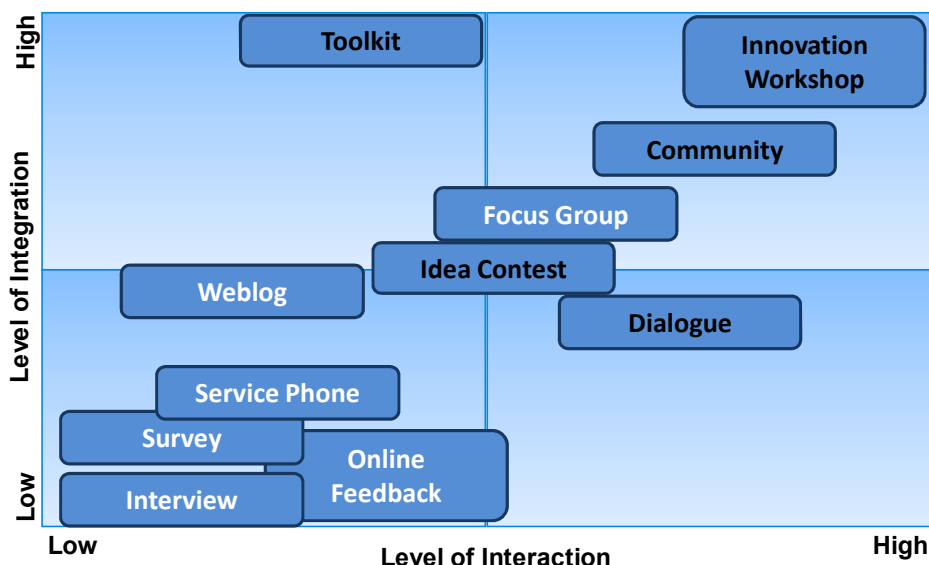


Figure 1. Open Innovation Methods
Source: On the base of Pobisch et al. (2007: 11).

All these methods are characterised by dialogue processes. In the context of sustainability, environmental and social standards, sustainable strategies and investments are mostly discussed. As companies have to accomplish certain duties and responsibilities in society, in general, OIM have several functions and goals (Boehnke 1998; Hansen & Bode 1999; Osmers 2004) such as: providing information, promoting the mutual understanding of positions and interests and enlarging the knowledge base, finding and discussing realisable solutions. This means opening perspectives in ad hoc or continuous communication and opening up sustainability oriented corporate learning and changing processes, legitimating corporate responsibility and obtaining and improving entrepreneurial image, selecting authoritative decisions, holding-up decisions and generating uncertainty.

The functions of the interactive processes are based on several theoretical streams. In communication studies, the fruitful dialogue processes are characterised by a shared problem definition or a shared understanding of the objectives to be achieved. Brainstorming and the exchange of ideas and interests therefore become part of the process (Hansen & Raabe 1991). In this respect, interactive processes are constitutive, because the conditions and the knowledge needed to solve problems emerge while searching cooperatively for solutions (Bechmann 1997). Motivation, attitudes, objectives and knowledge of the participants – even hidden and unconscious ones – appear in the process (Hansen et al. 1996; Kenber & Salter 2002).

Referring to systems theory, dialogue processes do not aim at consensus or at producing securities, but at agreeing on acceptable or sustainable degrees of uncertainty (Luhmann 1989). The function of bindingly engaging in procedures to make decisions is to generate uncertainty by retarding decisions. This is more an

expressive than an instrumental function, because these proceedings generate the current security of action patterns with no guarantee for success (Luhmann 1989). Therefore, interactive processes also use this paradox: Making sustainable decisions means firstly to retard decisions and to generate uncertainty in order to cause a current security of action patterns. During this phase of insecurity in the context of communication, it is secondly possible to attain the assurance of the dimension of future uncertainty.

Conceptual Framework and Methodology in View of Theoretical Background

Although some firms have used OIM successfully for years, it is hard to find ongoing processes in practice, such as dialogues in which products, strategies or product-related environmental and social criteria are discussed (Foster & Green 2000; Hansen & Raabe 1991). First, it is of interest how the company-related factors (see figure 2) have an influence on the companies' use of open innovation methods. Moreover, it is of interest how OIM have an influence on sustainability or CR activities. In other words: Innovation can change the world, but do OIM really lead to more sustainability or CR? Are interactive innovations better CR innovations? Answering these questions and identifying relevant aspects of innovation methods, the following conceptual framework was developed (Figure 2).

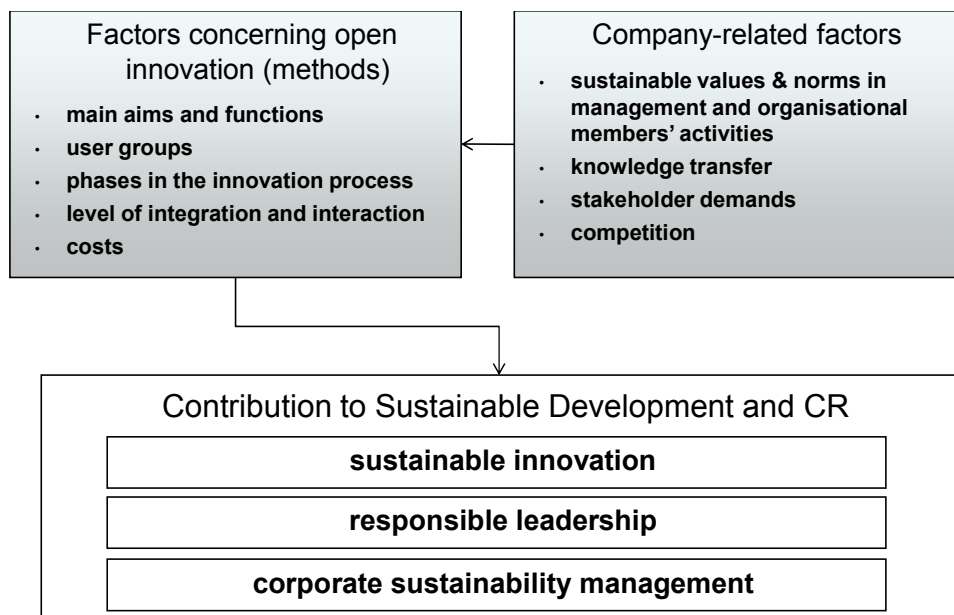


Figure 2. Analytical framework
Source: Own illustration

The fundamental assumption to be proved is if OIM enable companies to find better sustainable or CR solutions. The goal of this empirical research is to study the use of OIM and the factors strengthening sustainable and CR change. Based on the

analytical framework, this study aims at finding causal relationships between open innovation (methods) and corporate responsible activities.

For that purpose, several examples of OIM were analysed. The research involved empirical analyses of 6 German companies as follows:

- Two large companies in the field of building and habitation (construction companies, apartment management companies)
- Two large companies in the field of mobility (transportation company)
- A small company in the field of mobility (internationally operating urban mobility and services company)
- A medium-sized company in the field of diet (food production)

The companies were selected because of their engagement in CR, in sustainable products or processes in the three defined activity fields/ industries. In addition, case selection was based on the companies' demonstrated willingness to use OIM. All analysed interactive processes or OIM had to contain the following aspects:

- Involvement of and interaction between customers and/or company representatives
- Mutual idea creation, exchange of values or knowledge
- High reference to sustainability or CR

Questions concerning sustainable or CR impact were: including the different stakeholders' interests, generating sustainable solutions or new sustainable products and services, the level and way of improving of products and services, changing intraorganisational routines and processes, implementing and realising open innovation methods, motive, purpose and participants of interactive processes, level of user interaction and integration, significance and specificity of sustainability or CR issues, etc.. These main points are an extract of the investigation and literature research of previous interactive processes.

Guidelines, questionnaires, face-to-face interviews, telephone interviews and action research were used to obtain information on the dialogue processes using open innovation methods. This field study employed semi-structured and thematically focused interviews, which were supported by desktop studies of related documents and action research (Mayring 2002; Yin 2003). In the period of March 2006 until June 2009, a total of 12 persons from communication departments, management, R&D, marketing and sustainability or environmental units were interviewed. In total, 6 stakeholder dialogues, 6 innovation workshops, 4 web-communities, 2 idea contests and 1 toolkit were analysed.

Minutes, transcriptions and the composition of categories were used for data preparation. Content analysis was used to interpret the data (Yin 2003). Data analysis used a coding system according to the analytical framework, meaning each of the factors was operationalised by several codes (Mayring 2003). A code system of cause-effect combinations was developed to identify the conditions for using OIM and the emergence of CR activities after having used OIM. The used qualitative case study design allowed the analysis of complex social topics such as open innovation processes and CR or sustainable development.

Results

It is new to accept and implement the non-market acquirements of various users and stakeholders in their strategies and action patterns and to have transparent user and stakeholder communication for many companies. There are some relations between sustainable learning conditions, open innovation and CR activities. The following results point out the compared case study results and highlight the fact that the use of OIM cannot be described by unique dominant influencing factors because it is a dynamic interaction of diverse effects.

- **Values and norms:** All six companies covered by this research were characterised by their willingness to: (1) take stakeholder demands seriously, (2) address central public issues and concerns, (3) provide constructive answers to these challenges. They tended to be more transparent and open-minded than other companies in the same business field. Irrespective of CR issues, using OIM seemed to be a good alternative to common marketing instruments, esp. for the food company and the transportation companies. The housing companies saw the social dimension as being as important as the environmental dimension of sustainability due to their historical development and the managers' vision. Thus, OIM would be a good opportunity to check the stakeholders' requirements and further CR activities. A common theme across all six companies studied was that, while most sustainability-related values and norms were established at the top of the organisation, these top-down guidelines did not preclude bottom-up sustainability-related initiatives from emerging. However, the companies' decisions to use OIM for integrating more sustainability or developing more CR were taken by the top management. CR values or sustainability norms are not directly connected with the willingness to use open innovation methods. Using OIM to bring CR issues into more practice is mainly dependent on the corporate openness and culture.
- **Knowledge transfer:** The importance of internal networks was highlighted in particular by the large and small transport company and the housing companies, all of which noted that many CR activities were driven by a network of change agents and employees concerned with CR issues. These networks were used as a platform for the dissemination of new concepts, technologies and ideas, thereby allowing higher levels of learning to emerge. Thus, OIM are used to implement sustainability, new knowledge, experiences and capabilities into the organisation (also see Ernst & Kohn 2007) and to strengthen the customers' view or the commitment to service. So, missing organisational knowledge transfer can be a motive to use OIM for improving it, and to add missing information or good knowledge transfer can be the reasons for improving product and service development by using OIM.
- **Stakeholder requirements:** stakeholder demands make the use of OIM easier. The level of stakeholder integration and interaction depend on the company's situation, its spirit and purpose as well as the problems to be solved, the risks and the aimed results (Green & Hunton-Clarke 2003). Making target-oriented decisions before starting an interactive process, companies reflect their expectations and their reasons when using open innovation methods. The

companies beware an anticlimax, e.g., if the aimed results are not reached, these cost-intensive and time-consuming dialogue processes will be deprecated by the stakeholders/users (Ferdinand 2004). Klein & Steinert (2004) emphasize the sustainability of agreements. If concessions are retracted, relations, networks and image will be damaged badly, even more than an interactive process before.

- **Competition:** The entrepreneurial activities and the use of OIM in companies on the same market are joined with the competitors. The pioneer activities of a company can initiate other companies' activities in the market. So, being a leader in using OIM or at least a second follower is crucial for choosing open innovation.

Having a closer look to OIM in detail, it becomes clear that all methods have different functions and opportunities to stimulate CR or sustainability issues. Toolkits are very limited to the selected modules in advance. Thus, the CR frame is almost given by the developer except for free space-fields at the platform. The ideas contest is broader with regard to CR changes; however, ideas often have to be developed further afterwards. Communities, workshops and dialogues have good opportunities for addressing and discussing CR issues because of their interactive elements. Concerning innovation development dialogues are a bit double-edged because sometimes it is not clear how the gained information will be used in the corporate innovation process, or if the real process' function is to check or hold-up decisions and hence to generate uncertainty (see table 1).

<i>Criteria of OIM</i>	Dialogue	Innovation workshop	Community	Ideas contest	Toolkit
<i>Aims and functions</i>	providing information, mutual understanding, legitimating CR, holding-up decisions, generating uncertainty	enlarging the knowledge base, finding and discussing realisable solutions, opening up changing processes, holding-up decisions	enlarging the knowledge base, exchange of ideas and interests, opening up changing processes, legitimating CR,	enlarging the knowledge base, improving entrepreneurial image, legitimating CR, opening up changing processes	providing information, improving entrepreneurial image, legitimating CR, selecting authoritative decisions
<i>User groups</i>	all different kind of users or stakeholders	lead users, committed users	highly involved people with interest in interaction and knowledge share	concerned users	specialists, highly involved people with reference to current matters
<i>Phases in the innovati</i>	all fitting, depends on the aim	all fitting, depends on the aim	all fitting, depends on the aim	all fitting, depends on the aim	late phases (testing, implementati

<i>on process</i>					on)
<i>User knowledge</i>	mainly need-related	need- and solution-related	mainly solution-related	need- and solution-related	mainly need-related
<i>Costs</i>	reasonable	reasonable - high	(very) high	reasonable – high	(very) high
<i>CR impact</i>	<ul style="list-style-type: none"> - CR communication of new products or services - green marketing of improved products or social activities - adopting information to improving special elements more eco-friendly or socially 	<ul style="list-style-type: none"> - mostly incremental, but sometimes also radical product or marketing innovation - new product/service strategies 	<ul style="list-style-type: none"> - mostly incremental, but also radical product or service innovation - CR communication of new products 	<ul style="list-style-type: none"> - mostly incremental product, service or marketing innovation - CR communication of new products or services - green marketing of improved products or social activities - new product/service strategies 	<ul style="list-style-type: none"> - incremental product innovation - survey of preferred products and module combination - adopting information to improving special elements more eco-friendly or socially - CR impact is mainly fixed by programming the opportunities to choose - CR communication of new products

Table 1. Opportunities of using OIM

Source: Own illustration

Regarding user groups there is a trend: the higher the level of integration is the more specific the users are or have to be. Toolkits, for instance, are proper for highly involved people or users that are currently concerned with this special topic, e.g. people want to build or buy a passive house or a low energy house. In such situations they use a toolkit to play with or to check opportunities. In dialogues, contests or communities different kinds of users take part, however, all are concerned or interested in the topic. Innovating specifically means to choose lead users to obtain a precise concept or new ideas. Thus, all methods can be used in each innovation phase, except toolkits, they should be used in the late phases of innovation processes because of their limitation in use and topic. Workshops and

contests are helpful in using the need- and solution-related knowledge of the people, because the users will give information of both knowledge forms. Working with communities often means to bushwhack; therefore companies should use communities to address specific questions or problems to be solved and manage the process likewise. However, communities can also be screened for new ideas and solutions, but this is a very time-consuming and expensive process. Thus, it would be better to combine an ideas contest with a community to develop specific ideas further and to link it to theme-related already existing communities. The costs for the development of a toolkit are currently very high, because of all the programming as well as the coordination processes beforehand. Dialogues and workshops can have reasonable costs, because they can be organised at a moderate level. The better and more comprehensive the equipment should be the more expensive they will be.

Concerning CR impact there are two points of importance: (1) each open innovation method has different potentials for identifying and developing CR/sustainability issues or innovations. (2) The implementation and realisation of CR/sustainability innovation depend on the companies' strategy and willingness to CR/sustainability. In tendency, the higher the level of integration is the more precise CR solutions are. The higher the level of interaction is the more radical CR or sustainable solutions can be. In practice, most ideas were incremental. In the small transport company from the sample, for instance, environmental requirements, generated in an innovation workshop, were transformed into technological challenges by engineers, product developers and service personnel. This, in turn, led to the development of new ideas and approaches to respond to the environmental requirements as well as deliver on the organisation's core products or services. In case of the construction companies, their most important CR activities are the renovation of houses to a level of passive or low-energy house usage and the construction of eco-residential areas with homes using solar energy or plants. The realisation of new and innovative communication strategies and marketing tools, generated in workshops, communities and ideas contests, is an elementary component of CR management.

Conclusions and Discussion

This empirical study focused on the question how OIM can enable companies to find new and sustainable solutions, and thus act responsibly. Despite the small sample size, this survey allows to draw some conclusions from the relationship between learning dynamics, the usage of OIM and sustainability innovation or CR activities. Regarding the analytical framework three major conclusions emerge:

First, there is some evidence that OIM strengthen CR activities – at least they raise CR/sustainability issues. Regarding sustainable or CR innovations it can be stated that OIM have a different level of interaction and integration, and therefore diverse possibilities to support sustainable and CR activities. Moreover, the companies' values and openness are important. According to Walther's (2004) empirical studies a well-organised innovation management indicates a higher level of corporate learning ability. The transfer of changed knowledge bases, assumptions, values and capabilities is supported by structure and culture. From an economical point of view, the success of dialogue processes is governed by institutionalisation. Ongoing

interaction enables companies to monitor trends and to understand the stakeholders' or users' attitudes and values better. OIM are also helpful in acquiring purposeful background information. If the interactive methods are to be institutionalised, the chosen methods will need to be considered carefully with regard to costs and aims. However, companies tend to no-use of OIM in difficult situations or conflicts.

Second, the analysis also showed that consumers can become so-called prosumers. But, do they want to be it permanently? The corporate freedom to develop sustainable products and services partly depends on the interaction with stakeholders or users. In each case cooperation could be improved. The companies accepted the stakeholders and users as competent actors and experts of daily life. Most companies made good experience with open innovation tools, and thus invited the users to exchange ideas further. Especially in innovation workshops new products have been adopted to the user's needs. Therefore, the users realised their role in product and service development (Hoffmann 2007). Sometimes the users also tried to increase their behavior towards more sustainability. However, a very critical point is: users bring in their ideas, but very often they do not have any rights concerning their submitted ideas (except for some prizes).

Third, most OIM were used to legitimate corporate responsibility and improve corporate image or to test new tools. Results are often integrated in sustainability reports as well as in communication. Yet, results developed by OIM should be integrated in processes, product innovation, concepts and visions permanently. According to Ferdinand (2004), these are the main factors of successful use of OIM. Therefore, establishing dialogue processes and the use of OIM often require change agents or new managers. Hansen and Raabe (1991) emphasize that the reason for stakeholder participation in product development is more often a strategic decision than an immediate result of the company's environment. However, sustainability has to be addressed directly by all methods. Sustainability and CR are not issues of methods or tools, but an issue of multicausal complexity which cannot be solved within a workshop or interactive processes, and it will even get more complex if there are filtering mechanisms due to companies' constraints.

Consequences

A great advantage of sustainability-oriented or CR-related processes is the possibility of expanding the knowledge base and opening perspectives on ad-hoc or continuous communication with stakeholders/users (Hart 2007). This can open up CR/sustainability oriented corporate learning as well as changing processes. Early users' integration in product or service development, for instance, enables a company to include users' practical and contextual knowledge into its strategies and action patterns (Piore et al. 1994). Thus, firms can open up additional sustainable/CR potentials during the use phase of their goods (Hage & Hoffmann 2004). OIM will not change the world; instead they can initiate changes towards more sustainability or CR activities. With the help of OIM new views emerge which enable companies to initiate sustainable change. But how do OIM support sustainability or CR? Together with stakeholders, companies can negotiate their own interests and those of stakeholders. Thus, sustainable development is strengthened and responsibility is

located in a new manner (Mark-Ungericht 2004). However, there are difficulties and risks for companies, especially when the dialogue results are not directly noticeable for users or stakeholders in general, such as newly structured intra-organisational processes or the leaving out of toxic materials in the production process. In total, strengthening CR – OIM help, but it depends...

References

- Alvesson, M. (2005). *Understanding organizational culture*. London: Sage.
- Arnold, M. (2007). *Strategiewechsel für eine Nachhaltige Entwicklung. Prozesse, Einflussfaktoren und Praxisbeispiele*. Marburg: Metropolis.
- Barabási, A. -L. (2002). *Linked: the New Science of Networks*. Cambridge, MA: Perseus.
- Bechmann, G. (1997). Diskursivität und Technikgestaltung. In: S. Köberle, F. Gloede & L. Hennen (Eds.). *Diskursive Verständigung? Mediation und Partizipation in Technikkontroversen*. Baden-Baden: Nomos, 151-163.
- Blatter, J. (2003). Beyond hierarchies and networks: institutional logics and change in transboundary spaces. *Governance – an International Journal of Policy and Administration* 16:4,503-526.
- Boehnke, K. (1998). Stakeholder-Dialoge. In: A. Biesecker, W. Elsner & K. Grenzdörffer (Eds.). *Ökonomie der Betroffenen und Mitwirkenden: Erweiterte Stakeholder-Prozesse*. Darmstadt Centaurus, 181-203.
- Brundtland, G. (1987). *Our Common Future: The World Commission on Environment and Development*. Oxford: Oxford University Press.
- Crampton S. M. et al. (1998). The informal communication network: factors influencing grapevine activity. *Public Personnel Management* 27:4, 569-584.
- Dyllick, T. (1989). *Management der Umweltbeziehungen: öffentliche Auseinandersetzungen als Herausforderung*. Wiesbaden: Gabler.
- Ernst, H. & Kohn, S. (2007). Organisational Culture and Fuzzy-Front End Performance in New Product Development. *Zeitschrift für Betriebswirtschaft*, Special Issue No. 2, 1-18.
- European Commission (2001). *Promoting a European framework for corporate social responsibility*. Brussel: Green Paper, COM (2001) 366.
- Ferdinand, N. (2004). Mit Ernsthaftigkeit zum Erfolg!. *Ökologisches Wirtschaften* 1, 13-14.
- Foster, C. & Green, K. (2000). Greening the innovation process. *Business Strategy and the Environment* 9:5, 287-303.
- Franke, N., Hippel, E. & Schreier, M. (2006). Finding commercially attractive user innovations: A test of lead user theory. *Journal of Product Innovation Management* 23:4, 301-315.

- Franke, N. & Piller, F. T. (2004). Value creation by toolkits for user innovation and design: The case of the watch market. *Journal of Product Innovation Management* 21:6, 401-415.
- Franke, N. & Shah, S. (2003). How communities support innovative activities: an exploration of assistance and sharing among end-users. *Research Policy* 32:1, 157-178.
- Ghosh, S. (2001). Introduction to the special issue. *Journal of Operations Management* 19, 131-142.
- Ghoshal, S. (2000). Value creation. *Executive Excellence* 17:11, 10-11.
- Green, A. O. & Hunton-Clarke, L. (2003). A Typology of Stakeholder Participation for Company Environmental Decision-Making. *Business Strategy and the Environment* 12:4, 292-299.
- Hage, M. & Hoffmann, E. (2004). Partizipative Produktentwicklung - Die Chance für nachhaltige (Unternehmens-) Entwicklung. *Ökologisches Wirtschaften* 1, 19-20.
- Hansen, U. & Bode, M. (1999). *Marketing & Konsum: Theorie und Praxis von der Industrialisierung bis ins 21. Jahrhundert*. München: Vahlen.
- Hansen, U. & Raabe, T. (1991). Konsumentenbeteiligung an der Produktentwicklung von Konsumgütern – Ergebnisse einer empirischen Untersuchung. *ZfB – Zeitschrift für Betriebswirtschaft* 61:2, 171-194.
- Hansen, U., Niedergesäß, U. & Rettberg, B. (1996). Dialogische Kommunikationsverfahren zur Vorbeugung und Bewältigung von Umweltskandalen: Das Beispiel des Unternehmensdialoges. In: G. Bentele et al. (Eds.). *Dialogorientierte Unternehmensführung*. Berlin: Vistas, 307-332.
- Hansen, U., Niedergesäß, U. & Rettberg, B. (1997). Unternehmensdialoge mit gesellschaftlichen Meinungsführern – Beispiel. *Procter & Gamble - pr magazin* 4, 43-50.
- Hart, A. (2007). *Foundations of a Customer-Oriented Strategy. Integration and Involvement*. Saarbrücken: VDM Verlag Dr. Müller.
- Hedberg, B. (1981). How organizations learn and unlearn?. In: P. C. Nystrom & W. H. Starbuck (Eds.). *Handbook of organizational design*. New York: Oxford University Press, 8-27.
- Herstatt, C. & von Hippel, E. (1992). Developing new product concepts via the lead user method: A case study in a “Low Tech Field”. *Journal of Product Innovation Management* 9, 213-221.
- Hoffmann, E. (2007). Consumer integration in sustainable product development. *Business Strategy and the Environment* 16:5, 322-338.

Hübscher, M. & Müller, M. (2001). Wo bleibt das Individuum in der Nachhaltigkeitsdebatte? Eine integrative Ethik für eine Nachhaltige Entwicklung. *Zeitschrift für Wirtschafts- und Unternehmensethik* 2:3, 365-384.

Kenber, M. & Salter, L. (2002). *The Gold Standard: Quality Standards for CDM and JI Projects* [Online]. [Referred to 21.8.2009]. Available: http://www.wwf.or.jp/lib/climate/COP8_standards.pdf.

Klein, A. & Steinert, A. (2004). Erfolgreicher Stakeholder-Dialog: Ein Governance Modell?. In: D. Dietzfelbinger & R. Thurm (Eds.). *Nachhaltige Entwicklung: Grundlage einer neuen Wirtschaftsethik*. Mehring: Rainer Hampp Verlag, 117-128.

Lilien, G. L., Morrison, P. D., Searls, K., Sonnack, M. & von Hippel, E. (2002). Performance assessment of the lead user idea-generation process for new product development. *Management Science* 48:8, 1042-1059.

Luhmann, N. (1989). Politische Steuerung: Ein Diskussionsbeitrag. *Politische Vierteljahresschrift* 30:1, 4-9.

Lüthje, C. & Herstatt, C. (2004). The lead user method: an outline of empirical findings and issues for future research. *R&D Management* 34:5, 553-568.

March, J. G. (1991). Exploration and Exploitation in Organizational Learning. *Organization Science* 2:1, 71-87.

Mark-Ungericht, B. (2004). Die Ethical Trading Initiative - Multistakeholder-Dialog, organisationale Grenzen und betriebliche Verantwortungsräume in Zeiten ökonomischer Entgrenzung. *WISO - Wirtschafts- und Sozialpolitische Zeitschrift* 1: 27, 61-90.

Mayring, P. (2002). *Einführung in die qualitative Sozialforschung*. Weinheim: Beltz.

Mayring, P. (2003). *Qualitative Inhaltsanalyse, Grundlagen, Techniken*. Weinheim: Beltz.

Mutch, A. (2002). Actors and networks or agents and structures: towards a realist view of information systems. *Organization* 9:3, 477-496.

Olson, E. L. & Bakke, G. (2001). Implementing the lead user method in a high technology firm: A longitudinal study of intentions versus actions. *The Journal of Product Innovation Management* 18, 388-395.

Osmers, H. (2004). Stakeholderdialoge und Unternehmenserfolg: Eine empirische Studie über Erfahrungswerte bei führenden deutschen Konzernen, Oldenburg/Berlin, www.gelena.net.

Piller, F. T. & Walcher, D. (2006). Toolkits for idea competitions: a novel method to integrate users in new product development. *R&D Management* 36: 3, 307-318.

- Piller, F. T., Schubert, P., Koch, M. & Moeslein, K. (2005). Overcoming mass confusion: collaborative customer co-design in online communities. *Journal of Computer-Mediated Communication* 10: 4.
- Piore, M. J., Lester, R. K., Kofman, F. M. & Malek, K. M. (1994). The Organization of Product Development. *Industrial and Corporate Change* 3:2, 405-434.
- Pobisch, J. et al. (2007). *Konsumentenintegration in Nachhaltigkeits-Innovationen – ein Beitrag zur unternehmerischen Verbraucherbildung?*. Freising: TU München, Diskussionsbeitrag Nr. 12, Consumer Science.
- Probst, G. & Büchel, B. (1997). *Organizational Learning: the Competitive Advantage of the Future*. London: Prentice-Hall.
- Reichwald, R. et al. (2007). *Der Kunde als Innovationspartner*. Wiesbaden: Gabler Verlag.
- Renn, O. & Webler, T. (1996). Der kooperative Diskurs: Grundkonzeption und Fallbeispiel. *Analyse & Kritik* 8:2, 175-207.
- Rothman, J. & Friedman, V. J. (2001). Identity, conflict, and organizational learning. In: M. Dierkes, A. B. Antal, J. Child & I. Nonaka (Eds). *Handbook of Organizational Learning and Knowledge*. Oxford: Oxford University Press, 582-597.
- Schein, E. H. (1995). *Organizational culture and leadership*. San Francisco: Jossey Bass Publishers.
- Siebenhüner, B. & Arnold, M. (2007). Organizational learning to manage sustainable development. *Business Strategy and the Environment* 16:5, 339-353.
- Teece, D. J., Pisano, G. & Shuen, A. (1998). Dynamic capabilities and strategic management. *Strategic Management Journal* 18:7, 509-533..
- Urban, G. L. & von Hippel, E. (1988). Lead user analyses for the development of new industrial products. *Management Science* 34:5, 569-582.
- Von Hippel, E. (1978). Successful industrial products from customer ideas. Presentation of a new customer-active paradigm with evidence and implications. *Journal of Marketing* 42:1, 39-49.
- Von Hippel, E. (1988). *The sources of innovation*. New York: Oxford University Press.
- Von Hippel, E. (2001). Perspective: User toolkits for innovation. *Journal of Product Innovation Management* 18:4, 247-257.
- Von Hippel, E. (2005). *Democratizing innovation*. Massachusetts: MIT Press Cambridge.

Walcher, D. (2007). *Der Ideenwettbewerb als Methode der aktiven Kundenintegration: Theorie, empirische Analyse und Implikationen für den Innovationsprozess*. Wiesbaden: Gabler.

Walgenbach, P. (2000). *Die normgerechte Organisation*. Stuttgart: Schäffer-Poeschel Verlag.

Walther, M. (2004). *Umweltmanagementsysteme und Unternehmenskultur: unternehmerische kulturelle Passung als Wirkungsdeterminante von Umweltmanagementsystemen? - Eine empirische Untersuchung in sechs Unternehmen*. München: Mehring.

Yin, R. K. (2003). *Case Study Research. Design and Methods*. 3rd ed., Thousand Oaks, CA: Sage.

IMPLEMENTING CORPORATE RESPONSIBILITY INNOVATION IN ORGANISATIONS: A THEORETICAL FRAMEWORK

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Abstract

Many companies nowadays are faced with the additional goals of innovation and CSR. Attached to these goals they have to take into account the interests of new types of stakeholders. The combination of the Viable System Model and sociotechnical system theory offers a theoretical framework for the development of innovation (high involvement innovation) and CSR (high involvement responsibility) in organizations. The Viable System Model describes the functions and their required relations an organization must produce in order to be able to realize and adapt its goals. Sociotechnical theory offers the concrete structural instruments for this.

This can form a basis for developing a practical tool to implement high involvement innovation and high involvement responsibility in organizations, by analyzing and designing interactions with stakeholders (dialogue, cooperation) in conjunction with the structure of the organization.

Key words: Innovation, CSR, organizational structure

Introduction

Due to changes in the environment, the factors influencing the competitive position of companies have changed in the course of time. Were from the sixties to the eighties respectively the factors efficiency, quality and flexibility crucial, from the nineties onwards innovation and corporate social responsibility have been added to these requirements.

Many organizations face the challenge of developing the necessary competences for innovation and corporate social responsibility²⁷ and to obtain insight in their interrelatedness.

²⁷In this paper we understand by CSR the responsibility of an organization for the impacts of its decisions and activities (products, services and processes) on society and the environment, through transparent and ethical behaviour that

- contributes to sustainable development, health and the welfare of society;
- takes into account the expectations of stakeholders;
- is in compliance with applicable law and consistent with international norms of behaviour; and
- is integrated throughout the organization and practiced in its relationships²⁷ (ISO 26000, 2009).

The current context in which organizations operate is characterized by complex technological, economic and social developments, in which organizations have to take position and choose their direction. The globalization process has had a significant influence on this development (Jonker & Cramer 2005; Mathis 2008). By the economic development and the interconnectedness between different locations around the world on the basis of the communication of ideas, the movement of trade, capital and people, environmental and social issues have increasingly become salient (Jonker & Cramer 2005; Van der Wal 2008; Hertz 2009), as is shown by the current climate, energy and food crises.

Companies face the challenge to make decisions in a different way, so that social and environmental issues are better integrated with financial and economic ones. This means that in addition to the needs of shareholders, companies have to take into account the changing needs and expectations of a broader array of stakeholders²⁸ (Jonker & Cramer 2005; Mitchell, Agle & Wood 1997; Cramer 2003; Elkington 1997).

It is important that the organizational structure can incorporate knowledge exchanges with these stakeholders (Castells 2000; Hastings 1993; Nohria & Ghosal 1997; Schoemaker 1998). Organizations face the challenge of connecting the innovative and participatory capabilities of working in networks of stakeholders with the control and organization capabilities of working in hierarchies (Schoemaker 1998).

The use of interorganizational relationships and networks is an important factor behind the innovation capability of companies (Chesbrough 2006). This is comprised in the 'open innovation' concept. Open innovation can be defined as 'the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively' (Chesbrough et al. 2006:1). The concept of 'open innovation' describes how the design of the complex interdependencies between people, resources, processes, structures and organizations contributes to the success or failure of innovations. The challenge is to create a network of mutual interdependencies so that maximum use is made of the knowledge and creative capabilities from outside the organization. In innovation literature the advantages of innovation in networks are emphasized. Networks serve as a coordination mechanism for knowledge transfer and learning between organizations (Hakansson 1989; Meeus and Faber 2006; Oerlemans & Kenis 2007).

As partners in innovation networks the literature often cites the primary, economic stakeholders like customers, suppliers, colleague-companies, competitors and knowledge institutes. But today's complex social reality also requires openness, dialogue and cooperation with other societal stakeholders in the context of corporate responsible innovation.

Companies that are more outwardly oriented to a broader array of stakeholders are more open to signals from the economic, social and ecological context (Ayuso et al.

²⁸ Stakeholders are defined in a general way as 'any group or individual who can affect or is affected by the achievement of the organization objectives' (Freeman 1984: 46; Friedman & Miles 2006:4). It is up to the organization to select the relevant stakeholders that contribute to making organizational decisions that add to society being ordered to enable its citizens to live a fulfilled life (loosely based on Aristotle).

2006; Senge & Carstedt 2001). These signals may then be proactively captured and translated into new products/services, processes and business models (Rodriguez et al. 2002).

Thus, managing the dynamics of open innovation and social responsibility is an important basis for sustainability and viability of the organization.

When an organization as a whole is designed in such a way that innovation is built in the primary activities from the organization down to its smallest units, Tidd et al. (2005) speak of 'high involvement innovation'. The same can be applied to CSR: when the organizational structure is designed so that the primary activities from the organization down to its smallest units - as much as the division of labour permits - reflect the organization's performance and societal function(s), we can speak similarly of 'high involvement responsibility'.

Thus companies are faced with additional goals (innovation, CSR), and attached to these goals they have to take into account the interests of new parties. The aim of this study is to obtain insight in how stakeholders can be involved in corporate responsible innovation of products and processes, and how these interactions with stakeholders and CR innovation processes can be anchored in the organizational structure.

There are three important questions we attach to the aim of involving stakeholders in innovation of products and processes:

1. How can the interactions with stakeholders be integrated so that the organization as a whole remains viable? To answer this question, we will make use of the Viable System Model (Beer 1979, 1985, 1995)
2. How can the organizational structure be designed so that it creates most opportunities for innovation: high involvement innovation? To answer this question, we will make use of the Viable System Model and sociotechnical theory (De Sitter 1998)
3. How can the organizational structure be designed so that CSR can be anchored throughout the organization: high involvement responsibility? To answer this question, we will make use of the Viable System Model, sociotechnical theory and stakeholder theory.

The combination of the Viable System Model (Beer 1979, 1985, 1995) and social system theory (Trist et al. 1963; De Sitter 1998) offers the possibility to describe, analyze and design interactions with stakeholders (dialogue, cooperation) in conjunction with the infrastructure of the organization. This can be a basis for capturing stakeholder knowledge and transform it into innovative products, services and processes.

The Viable System Model

Organizations, certain networks of organizations (e.g. a supply chain) and a society can be considered as 'viable systems', i.e. systems²⁹ that can lead a separate

²⁹ 'A system consists of a group of elements dynamically related in time according to some coherent pattern'

existence and are able to survive (Ashby 1969; Beer 1979, 1985). Beer formulated a model - the viable system model (VSM) - specifying what a system must do in order to be able to survive. The Viable System Model articulates the functions a system should fulfil and the relations between them that are required for viability. This provides a set of norms for diagnosing organizational viability and adjusting existing organizational structures, but can also be used to describe and analyze the relations between different system levels like the company level, the level of an organizational network and the societal level - which is important for CR innovation.

Beer builds his theory around the work of Ashby (1969). Ashby's law of requisite variety signifies that each system must be able to deal with complexity (variety) in its environment by creating sufficient internal regulatory variety which resolves the variety stemming from disturbances to essential variables of the organization. There are three strategies for companies to solve the problem of the complexity differences between environment, organization and its management:

1. Goal setting. Through the setting of organizational goals it is determined which environment variables are relevant to the organization. This means that only certain parts and aspects of the environment may constitute a source of possible interferences with the organization's functioning. These parts and aspects constitute the organization's relevant environment.
2. Attenuation and amplification. Attenuation means the reduction of the variety of possible disturbances. Amplification means: increasing the regulatory variety to cope with the remaining disturbances, given the selection of essential variables (implied in the goals) and the design of relevant attenuators.
3. Recursion. Each system contains a set of other viable systems (like business units, teams in an organization). Each of these subsystems also has the ability to attenuate or amplify, with the result that less regulation is needed at the level of the higher system.

Together, the three strategies constitute Beer's solution of the complexity problem. By pointing at these strategies for dealing with complexity Beer couples the existence of organizations to Ashby's Law of Requisite Variety. For example:

Environment Energy company

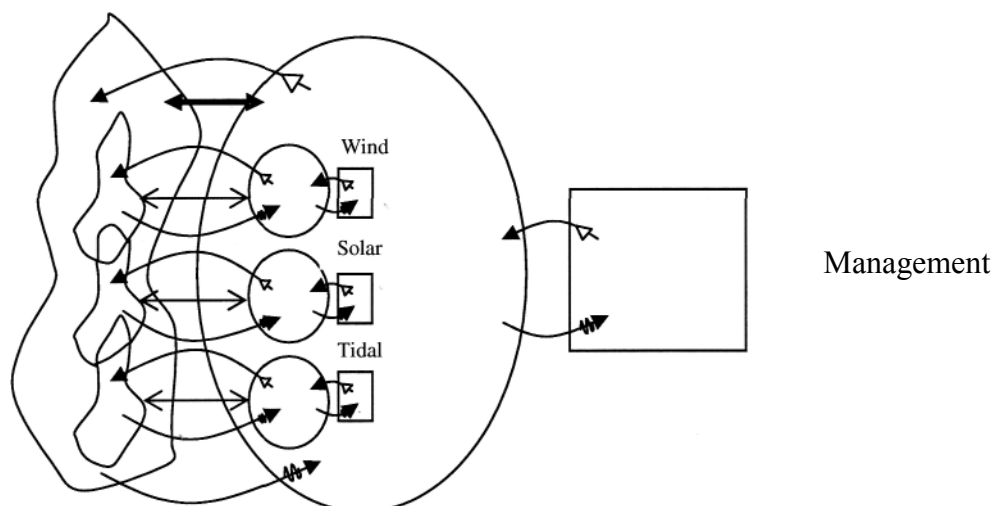


Figure 1: Energy company and the three strategies for complexity reduction. Source: Achterbergh & Vriens, 2009 (adapted from Beer 1995).

This is a energy company modelled as a viable system containing a set of viable systems. It is organized in the (order)streams wind, solar and tidal energy. Each of these streams is a viable system with its own primary activity, its own management, its own relevant environment, its own attenuators and amplifiers, and its own input/output relations.

The oval shapes represent the primary activities, providing respectively wind, solar, and tidal energy. The small boxes on the right side of the oval shapes represent the management of these primary activities. Each of the management boxes has its own attenuators and amplifiers (curved single tipped arrows). Each of these viable systems has its own relevant environment (the shapes on the left side as part of the total environment). The curved arrows represent attenuators and amplifiers, and the double tipped arrows represent input/output relations between each viable system and its environment.

Organizations depend on and contribute to a larger environment. Using the viable system model this larger environment can be modelled as sets of viable systems to which the organization contributes, such as an organizational network, the economy or the society it is part of (Achterbergh & Vriens 2009). On the basis of the VSM it can be analyzed how the viability of the organization and its contribution to these systems (networks, society) to which it belongs can be improved by changes in the organizational design (strategy of upward recursion).

For example, in order to avoid unwanted side-effects of organizational performance³⁰ on both society and the ecological environment, societal subsystems can develop - in

³⁰ The performance of an organization can be defined as 'the set of input/output relations of an organization to other societal subsystems, based on its primary activities' (Teubner, 1985:163). Through their performance organizations contribute to the realization of the function of a societal subsystem. For example, by way of its output a company can contribute to the function of the economic subsystem: ensuring the satisfaction of future social needs.

particular the political and legal system - attenuation programs (strategy of attenuation), based on more or less stabilized societal values: for example regulation to reduce the use of toxic materials. Organizations should incorporate these programmes into their structures and decisions. In this way they not only take into account the goals of their primary activities, but also societal values related to their performance and side effects.

But despite this framework of legislation and other forms of regulation organizations can still behave more or less 'socially responsible'. Therefore societal 'amplifying programs' (strategy of amplification) are often put in place, which aim for example at increasing the reflection of companies on the societal impact of their activities and taking responsibility for it. For instance, by means of audits or duties of disclosure (Teubner 1985:164,168; Achterbergh & Vriens 2009).

The integration of these programs of societal subsystems is an important organizational contribution to society and a form of corporate social responsibility. At the same time, societal programs are reinforced when organizations integrate these values in their structures and decisions. This is a form of upward recursion. In addition, using the method of 'downward recursion' it can be analyzed how systems within the organization (like business units, teams) can be designed in order to absorb as much complexity as possible, resulting in less complexity at the level of the organization as a whole (Beer, 1995).

The VSM can form a basis for dealing with environmental complexity and integration of societal norms (economic, social, ecological). It does so by describing the strategies for complexity reduction and also by specifying the internal functions necessary and sufficient for organizational viability. In order to remain viable a system must be able to *realize* and *adapt* its goals. To this purpose, it needs exactly five functions (Beer 1985):

1. Primary activities: concerns the making of the products or services for systems in the environment. The primary activities realize the goals constituting the viable system's *raison d'être* (Espejo et al. 1996).
2. Coordination: coordination of interdependencies between these primary activities.
3. Control: the primary activities and coordination are necessary, but not sufficient for the viability of an organization. Each primary activity can still pursue its own goals without contributing to the realization of the strategy of the viable system as a whole. For this reason there must be a third function 'Control' ensuring synergy and cohesion between primary activities. It is the task of control to translate the goals of the viable system (e.g. an energy company) into goals for the primary activities (e.g. supplying wind, solar and tidal energy) and to monitor and regulate the realization of these goals.
4. Intelligence: the task of intelligence is to scan the environment of the organization for relevant developments and to initiate adaptation in such a way that the organization stays aligned with these developments (e.g. who are the relevant stakeholders, which technological developments take place, which are the social and ecological needs etc.).
5. Policy: has the tasks of coordinating the interaction between control and intelligence and consolidating its results by (re)defining the identity and mission of

the organization in a way that fits both developments in its environment (intelligence) and its internal potentials for change (control).

These functions and their interactions provide a set of norms for diagnosing and designing viable systems like organizations. Functions one to three, i.e. the 'primary activities', 'coordination' and 'control' enable the system to *realize* its goals. Functions three to five, i.e. 'control', 'intelligence' and 'policy' enable the system to *adapt* its goals.

Achieving viability and high involvement responsibility means then that through the entire organization, at all levels of recursion, the functions policy, intelligence and control should *develop* inclusive performance goals (i.e. including social and ecological values); and that the functions control, coordination and primary activities should *realize* performance goals not only in reference to organizational viability, but also in reference to a just society and the organization's contribution to it.

To realize this, the design of the organizational structure is crucial. For instance, a bad design of the division of labour may hinder the coordination between the primary activities. Or, a too detailed and too frequent report system may overburden the control function with data about the performance of primary activities. So, the design of the organizational structure is an important enabler or disabler of viability.

The VSM however, does not offer a concrete design of the organizational structure that is able to produce the required effects between organizational functions. Sociotechnical systems theory does provide such a design that facilitates high involvement innovation and responsibility.

Designing The Organizational Structure: Socio-Technical Theory

With regard to the two additional goals for organizations - innovation and CSR -, the traditional task-oriented tayloristic production concept is not adequate anymore by its difficulties to adapt to the changing demands of the market (Marsden 1999; Kern & Schumann 1985; Maurice et al. 1986; Piore & Sabel 1984; De Sitter 1998). So the last few decades new work structures have been advocated that are more output oriented. The fundamental difference lies in the organization of business processes.

Output-oriented structures are less hierarchical, more holistic and team-based than task-oriented structures with their functionally differentiated departments, a focus on individual tasks and rigid job descriptions. A decentralized, output-oriented organizational structure as advocated by sociotechnical theory allows for high involvement innovation and responsibility to be integrated throughout the organization.

Conceived in the United Kingdom as a result of the accidental rediscovery of an old colliers' work tradition (Trist & Bamforth 1951; Trist et al. 1963), the sociotechnical concept was elaborated and put to the test in India, Holland and Scandinavia in the 1960s and subsequently exported to the United States and Australia as well. Several

local variants emerged in Scandinavia, Australia and The Netherlands. Virtually all sociotechnical system design variants to date have their roots in open systems theory (Van Eijnatten 1993), inspired by discoveries in the fields of biology and cybernetics (just like Beer's VSM). The Dutch version, Integral Organizational Renewal (IOR), has proved a prominent representative of modern sociotechnical system design in Europe due to its advocacy of holistic, non-hierarchical structures, the integration of both work and organization design with information systems design, as well as an emphasis on learning and innovation. IOR is one of the common approaches to systems renewal in The Netherlands (Van Einatten 1993).

IOR is based - just like Beer's VSM - on the cybernetic 'Law of requisite Variety' (Ashby 1969). When systems are faced with external or internal disturbances (variety of disturbances), the system has to have sufficient regulatory options available to resolve those distortions (variety of regulation). IOR applies this idea to work processes. The work process is defined as a network of mutual functional dependencies with workstations as elements. In this network disruption can occur. In this case there are two possibilities:

1. The disturbances are absorbed in the workplace, which requires sufficient regulatory capacity. This can be stimulated by an output-oriented structure.
2. The disturbances will spread throughout the organization in the absence of sufficient regulatory capacity, which is often the case in task-oriented structures.

As mentioned, to realize the goals of innovation and CSR, the traditional task-oriented production concept is not adequate anymore to adapt to changing demands of market and society. In task-oriented structures activities of the same type are grouped together, often by department. This is usually coupled to specialized labor. Not the order flow is the starting point, but the individual operations. These structures with a hierarchical way of production control lack flexibility. Because of the separation between specialized production tasks on the hand, and control, preparation and support tasks (such as maintenance, planning, quality control, etc.) on the other hand, employees do not have sufficient regulatory capacity to solve problems and to contribute to innovation. This type of structure is a source of internal complexity and disturbances. As a result, the organization is not optimally able to pick up signals from economic, social and ecological stakeholders and to translate these in innovative solutions.

So in recent organization theory new work structures are advocated that are output-oriented. Output-oriented structures are less hierarchical, more holistic and team-based than task-oriented structures. The decentralized structure allows for high involvement innovation and responsibility to be integrated throughout the organization. Employees at all levels have insight in the performance and role of the organization in society. They are able not only to consider goals specifying the performance, but also societal values and goals regarding performance related side-effects. This allows for local responsibility and involvement with performance. Societal values can thus be built into the structure, goals and decision making. Sociotechnical theory provides a solid basis for the design of such an structure, and describes the necessary steps to take:

1. The complexity (internal variety) of the production process is reduced by input simplification. The production process is divided into product- or customer-oriented sub streams (strategic business units). The work is not grouped on the basis of similarity of activities - as in task-oriented structures - but per order or client stream. This means there are fewer chances of internal disturbances and distortions in the exchanges with the market.
2. These independent sub streams are provided with their own preparation and support activities (defunctionalisation). Activities with regard to relevant external stakeholders can be coupled to each order stream. These stakeholders should include not only the economic stakeholders (customers, suppliers, financiers), but also stakeholders that represent social and ecological values.
3. The order streams are divided into segments. These are self-supporting sub streams that form a complete phase in the production process. The purpose of segmentation is to reduce the internal variation by bringing together executive functions with a minimum of common external interfaces.
4. The tasks within a segment are assigned to teams. Within a team, all the regulatory tasks which belong to the operational activities and the necessary preparation, support and monitoring of (societal) values are brought together.

By designing the production structure in this way potential distortions can be reduced. At the same time, the potential for variation and coordination is increased.

This simplification of the production structure is a precondition for the decentralization of the control structure. The external and internal variation and the complexity of interfaces is reduced. Less variation and fewer links reduce the number of alignments between control activities. So, with the redesign of the production structure in this way the complexity of the production control can also be decreased.

In this way, system complexity is reduced through the design of the organizational structure. Consequently, the management burden and the sensitivity to disturbances is drastically diminished. This can result in a better quality of the organization, of work and of stakeholder relations (Nieuwkamp 2008).

As it appears, organizations designed according to Beer's en De Sitter's controllability principle (based on Ashby's Law of Requisite Variety), resulting in output-oriented structures, not only distribute complexity enabling organizational viability, they also offer opportunities contributing to individual and societal viability. Unlike task-oriented structures, output-oriented structures provide opportunities for societal goals to make a difference throughout organizations. They allow for local responsibility and involvement with performance and function related tasks: "Given their simple structures and complex jobs, they allow for the development of job-related skills, moral virtue, and practical wisdom, invoking other motivators than fear and requiring other kinds of learning than operand conditioning" (Achterbergh & Vriens 2009).

However, these output oriented structures only offer opportunities for high involvement innovation and responsibility, they cannot guarantee success.

The combination of the VSM model and sociotechnical system theory offers a theoretical framework for the development of innovation and CSR in organizations. This framework can be used to describe, analyze and design interactions with stakeholders in conjunction with the infrastructure of the organization.

This all can form a basis for developing a practical tool to implement high involvement innovation and high involvement responsibility in organizations, which will briefly be discussed below.

Translation to Practice: A Tool for High Involvement Innovation and Responsibility

With regard to the theme of involving stakeholders in CR innovation processes and developing a tool for high involvement innovation and responsibility two questions are relevant:

1. From a functional perspective: what activities the organization has to undertake in order to involve stakeholders in processes of innovation: the WHAT question. This can be determined on the basis of the Viable System Model.
2. From an structural perspective: HOW-question.
How can the organizational structure be designed in order to integrate the activities under (1) and facilitate high involvement innovation and responsibility? This can be done with the help of sociotechnical theory.

Ad 1. With regard to the functional perspective the following steps will be followed (a to c):

- a. Stakeholder theory can supply the necessary knowledge for the functional decomposition of the process of interaction with stakeholders. On the basis of stakeholder theory activities can be distinguished that an organization needs to undertake in order to involve stakeholders in innovation processes and concrete methods linked to those activities (e.g. methods of stakeholder mapping, methods of stakeholder analysis, participation methodsetc.).On the basis of stakeholder literature the following core activities are distinguished:

S1:Strategy and issue selection

S2: Stakeholder analysis

S3: Stakeholder selection

S4: Stakeholder dialogue/cooperation

S5: Processing results

S6: Translation of results into innovation of product/process/business model

S7: Feedback and evaluation

- b. On the basis of the viable system model the activities under (a) can be translated to functions in organizations and the relations between these functions.

The VSM identifies the five functions and interactions between them which are necessary and sufficient for the viability of an organization. These five functions are: primary activities, coordination, control, intelligence and policy.

- c. This (a and b) can be represented in a table (table 1). This table forms a basis for a tool to implement the involvement of stakeholders in CR innovation processes:

				Stakeholder activities						
Socio-technical theory		VSM		S1	S2	S3	S4	S5	S6	S7
Operational regulation	Regulation by design	Realization	F1.primary activities							
			F2 Coordination				X			
			F3 Control							
Strategic regulation	Regulation by design	Adaptation/innovation	F3 Control	X		X	X	X	X	X
			F4 Intelligence	X	X	X	X			X
			F5 Policy	X						X

Table 1: Coupling of stakeholder activities to VSM functions and regulatory capacity (sociotechnical theory).

Clarification of the table:

With regard to the activity ‘Issue-selection’ (issues in which to involve stakeholders) one can determine which VSM functions are involved and in what manner (this is derivable from the sufficient and necessary relationships between the functions of the VSM model). For example, the activity S1 ‘Issue-Selection’ is part of the discussion between the functions ‘Intelligence’ and ‘Control’ (F3-F4) and Policy (F5).

Regarding the activity S2 ‘Stakeholder Analysis’: this should be part of the VSM-function ‘Intelligence’(F4)³¹.

When resources of stakeholders are deployed in innovation processes, the function ‘Control’ (F3) is responsible for the organization and cohesion of the primary activities carried out in this network of stakeholders. Knowledge about how these stakeholder networks should be managed lies in the control function. The control function must have knowledge of what the cooperation with stakeholders may provide and what impact this will have on the viability, i.e. the realization and adaptation of goals of the organization. The function ‘Intelligence’ (F4) studies the same network of stakeholders, but with the perspective of the future (‘outside and then’): e.g. is this the best competence basis, are there other stakeholders with whom we could work together etc.

In general, the VSM functions F3 (control), F4 (Intelligence) and F5 (Policy) ensure the adaptation of the identity and goals of the organization and deal with questions like: what is our contribution to society, what are the possible side-effects and dysfunctions of our business, which stakeholders could we involve in corporate responsible innovation processes?

In the alignment between the functions Control and Intelligence perspectives of stakeholders (knowledge lies with the Intelligence function) are balanced against the organizational capacity and available resources (this knowledge lies in the Control function). In this way, with the help of the VSM, it can be determined which organizational functions should be involved in different activities regarding stakeholders and how they should be linked to one another.

Ad. 2. Sociotechnical theory provides then the instruments to develop a concrete organizational structure to realize these functions and their required relations (see section 3). In this way the combination of the VSM and sociotechnical theory can form a basis of a tool for an effective engagement of stakeholders in innovation of products and processes, and especially for anchoring this in the organizational structure.

Conclusion

The Viable System Model describes the functions and their required relations an organization must produce in order to be able to realize and adapt its goals. Sociotechnical theory offers the concrete structural instruments for this. Within the general knowledge/decision domains coupled to the functions of the VSM (primary activities, coordination, control, intelligence and policy) and their relations, sub domains can be distinguished concerning the activities towards stakeholders (regarding their involvement in CSR and innovation processes). In a concrete

³¹ The intelligence function focuses on developments in the environment of the company. This signifies in the first place the spotting of opportunities and threats in the longer term. The intelligence function focuses on what Beer calls “the outside and then”.

practical situation these decision domains concerning the interaction and cooperation with stakeholders can now be identified. This creates a coupling between the design of the structure of the organization and the cooperation in networks of stakeholders. This makes a diagnosis and design advice possible with respect to this coupling in the field of CR innovation.

Using sociotechnical theory, an organizational structure can be designed that is able to realize the functions required for the viability of the organization. A decentralized, output-oriented organizational structure (that can be designed using the sociotechnical design parameters) allows for high involvement innovation and responsibility to be integrated throughout the organization.

To that end, sociotechnical theory has to be further supplemented with activities regarding the involvement of stakeholders in order to achieve sustainable innovations.

References

- Achterbergh, J., Vriens, D. (2009). *Organizations: Social Systems Conducting Experiments*. Berlin: Springer Verlag.
- Ashby, W.R. (1969). Self regulation and requisite variety: introduction to cybernetics. In F.E. Emery (Ed.). *Systems thinking: selected readings*. Harmondsworth: Penguin Books
- Ayuso, S., Rodriguez, M. A. and J.E. Ricart (2006). Using stakeholder dialogue as a source for new ideas: a dynamic capability underlying sustainable innovation. *Corporate Governance*, vol. 6: 4, 475-490.
- Beer, S. (1979). *The heart of the enterprise*. Chicester: John Wiley & Sons Ltd.
- Beer, S. (1985). *Diagnosing the system for organizations*. Chicester: John Wiley & Sons Ltd.
- Beer, S. (1995). *The Heart of Enterprise*. Chichester: Wiley.
- Bolwijn, P.T., & Kumpe, T. (1991). *Marktgericht ondernemen: Management van continuïteit en vernieuwing*. Assen: Van Gorcum.
- Castells, M. (2000). *The information age: Economy, Society and culture, vol 1: the rise of the network society*. Malden: Blackwell
- Chesbrough, H. W. (2006). *Open Business Models*. Harvard Business School Press, Boston, MA.
- Chesbrough, H. W., Vanhaverbeke, W. and West, J. (eds.) (2006). *Open innovation: Researching a new paradigm*. Oxford University Press: Oxford.
- Cramer, J. (2003). *Ondernemen met hoofd en hart*. Assen: Koninklijke Van Gorcum.
- Eijnatten, F.M. van (1993). *The paradigm that changed the workplace*.
Stockholm/Assen: Arbetslivscentrum/Van Gorcum.
- Eijnatten, F.M. van, & Sitter, L.U. de (1995). Moderne sociotechniek in Nederland: Debenadering van integrale organisatievernieuwing. In F. Huijgen & F. D. Pot (red.), *Verklaren en ontwerpen van productieprocessen*. Amsterdam: SISWO/Instituut voor Maatschappijwetenschappen, 21-60.
- Elkington, J. (1997). *Cannibals with forks: the triple bottom line of 21st century business*. London: Capstone
- Espejo, R. & Harnden, R. (1989). The VSM revisited. In R. Espejo & R. Harnden (Eds). *The Viable Systems Model: Interpretation and Application of Stafford Beer's VSM*, Wiley, London.

- Espejo, R., Schumann, W., Schwaninger, M., & Bilello, U. (1996). *Organizational Transformation and Learning: A cybernetic approach to management*. Chichester, John Wiley & Son
- Freeman, R.E. (1984). *Strategic management: a stakeholder approach*. Boston: Pitman
- Friedman, A. L., S. Miles (2006). *Stakeholders: theory and practice*. Oxford university Press.
- Håkansson, H. (1989), *Corporate technological behavior: co-operation and networks*. London: Routledge.
- Hastings, C. (1993). *The new organization*. New York: McGraw Hill
- Hertz, N. (2009). Voorbij het Gucci-kapitalisme. *De Volkskrant*, 21 februari.
- Jonker, J. & Cramer, C. (eds.) (2005). *Making a difference: the Dutch national research program on Corporate Social Responsibility*. The Hague: Ministry of Economic Affairs.
- Jonker, J, Van Pijkeren, M. (2006). Strategievorming en MVO: hoe bedrijven in de praktijk een eigen aanpak kunnen ontwikkelen. In L. Moratis & M. van der Veen (red.). *Basisboek MVO: maatschappelijk verantwoord ondernemen*. Assen: Koninklijke Van Gorcum
- Kern, H., Schumann, M. (1985). *Das Ende der Arbeitsteilung*. München: Verlag C. H. Beck.
- Mathis, A. (2008). *Corporate Social Responsibility and public policy-making: perspectives, instruments and consequences*. Enschede: Universiteit Twente
- Marsden, D. (1999). *A theory of employment systems: Micro-foundations of societal diversity*. Oxford: Oxford University Press
- Maurice, M., d'Iribarne, A., Eyraud, F., & Rychener. (1986). *Des entreprises en mutation dans la crise: Apprentissage des technologies flexibles et emergence de nouveaux acteurs*. Aix en Provence : Laboratoire d'économie et de sociologie du travail.
- Meeus, M.T.H., Faber, J., & Oerlemans, L.A.G. (2006). Do network structures follow innovation strategy? In J. Sundbo, A. Gallina, G. Serin & J. Davis (Eds.). *Contemporary management of innovation*. Houndmills: Palgrave Macmillan, 131-146.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *The Academy of Management Review*, 22:4, 853-886.

- Nieuwkamp, B.E.M. (2008). *De arbeidsrelatie: het spel en zijn regels*. Dissertatie. Nijmegen: Radboud Universiteit.
- Nohria, N. & Ghosal, S. (1997). *The differentiated network: organizing multinational corporations for value creation*. San Francisco: Josey Bass
- Oerlemans, L., Kenis, P. (2007). Netwerken en innovatieve prestaties. In J. Boonstra (red.), *Ondernemen in allianties en netwerken: een multidisciplinair perspectief*. Deventer: Kluwer, 33-52.
- Piore, M., Sabel, C. (1984). *The new industrial divide*. New York: Basic Books.
- Rodriguez, M. A., Ricart, J.E., and Sanchez, P. (2002). Sustainable development and the sustainability of competitive advantage: a dynamic and sustainable view of the firm. *Creativity and Innovation Management* 11:3, 135-146.
- Schoemaker, M. (1998). *Organiseren van werk en contractrelaties: tussen slavernij en anarchie*. Deventer: Kluwer
- Senge, P. and Carstedt, G. (2001). Innovating our way to the next industrial revolution. *MIT Sloan Management Review*. 42:2, 24-38.
- Sitter, L.U. de. (1998). *Synergetisch produceren: Human resources mobilisation in de productie: een inleiding in structuurbouw*. Assen: Van Gorcum.
- Teubner, G. (1985). Corporate Fiduciary Duties and Their Beneficiaries. A functional approach to the legal institutionalization of corporate responsibility. In K. Hopt & G. Teubner (eds.). *Corporate governance and directors liabilities legal, economic and sociological analyses of CSR*. Berlin: Walter de Gruyter.
- Tidd, J., Bessant, J., & Pavitt, K. (2005). *Managing innovation: integrating technological, market and organizational change*. Haddington: Scotprint
- Trist, E.L., & Bamforth K.W. (1951). Some social and psychological consequences of the longwall method of coal getting. *Human Relations* 4:1, 3-38.
- Trist, E.L., Higgin, G.W., Murray, H., & Pollock, A.B. (1963). *Organizational choice: Capabilities of groups at the coalface under changing technologies; the loss, re-discovery and transformation of a work tradition*. London: Tavistock Publications, re-issued 1987. New York: Garland.
- Wal, K. van der. (2008). *Wat is er met de ethiek gebeurd?*. Kampen: Uitgeverij Klement

**PART FIVE: CORPORATE RESPONSIBILITY
MEASURES & STANDARDS**

FINANCIAL VALUE MEASUREMENT OF CORPORATE RESPONSIBILITY

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Abstract

Corporate responsibility is a widely accepted, but highly multidimensional concept. It is also argued to be a business approach that creates long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments. In practice, companies are developing tools for comprehensive responsibility management and disclosing related information in responsibility reports. The major challenge is how to transform the concept of corporate responsibility so that it is recognized and valued accurately in a company's financial reporting and analysis.

We analyze the issues behind corporate responsibility practices and developments that have been typical of Finnish corporations' approach to responsibility management and reporting. By the means of classification we demonstrate the extent to which companies put a value on their social and environmental impacts and, where this is done, how. We also discuss about the call for financial analysis, done by firms themselves, on the corporate responsibility performance. Finally, three illustrations, developed from actual data, establish a link between corporate responsibility performance and financial measures.

Keywords: Corporate responsibility; Economic value; Performance measurement; GRI; Income statement; Balance sheet

Introduction

It is widely accepted that corporations should be socially responsible and follow sustainable development practices. Firms can be tempted into behavior that is considered socially unacceptable if e.g. production costs abroad are a small fraction of the production costs in a firm's home country. In such a situation, and in terms of short term production costs, it would be beneficial for a firm to have the production abroad. However, awareness among western consumers often prevents firms from taking undue advantage of cheap production under questionable conditions.

The concept of "good corporate citizenship" captures the idea a modern, responsible firm tries to follow. In market economies, a balance exists when demand and supply

match with each other. Improved consumer awareness forces firms to supply products and services that are in line with responsible production and consumption patterns. In addition, firms themselves can be active and increase consumer awareness by highlighting their own high standards of responsibility in their products and services. It has been proposed that high quality corporate sustainability reporting could decrease information asymmetry between a firm and its stakeholders (Healy & Palepu, 2001). A decrease in information asymmetry also increases the legitimacy of firms if their activities are based on responsible standards (Deegan, 2001).

Porter & Kramer (2006) have studied the link between competitive advantage and corporate social responsibility (CSR). They confirm the view, also presented in this paper, that companies are more and more held accountable for the social consequences of their activities. The authors therefore call for the connection and integration of corporate responsibility and companies' core business operations and strategies. In other words, this important link is currently very weak or non-existent. Adams & McNicholas (2007), among others, has shown (by action research) that lack of experience and knowledge regarding sustainable reporting in firms is hindering the development of accountability in reporting. Porter and Kramer state that current corporate responsibility reporting does not offer a coherent framework for corporate responsibility activities. There are wide gaps between the actual ethical, social and environmental performance when compared with the reported performance (Adams, 2004).

The citation below captures some of the problems of analyzing the financial effects of CSR (Peloza, 2006):

Attempts to accurately measure the financial return from CSR are more than an academic exercise. Many nonprofit organizations are now reliant on corporate sources of support, and without sustained support many may not have the ability to pursue their missions. The increased pressure faced by managers to justify the allocation of scarce resources means that dollars spent on CSR activities are becoming more closely scrutinized, and these dollars are at risk of being withdrawn.

Griffin & Mahon (1997) highlighted the need for actual performance measures to provide a more thorough and accurate assessment of factual corporate social performance (CSP) and not only *perceptions* of CSP. In their comparison of six chemical firms' CSP and corporate financial performance (CFP), they pointed out that companies need to focus on a few, key CSP and CFP measures in order to increase the internal validity of their results. Knox & Maklan (2004) provided support for the views presented in Griffin & Mahon (1997) when they analyzed CSR policy and practices across six multinational firms. The authors called for an integrated approach to triple bottom line reporting (financial, social, and environmental transparency). Recently also Cooper & Owen (2007) figured out that both voluntary and mandatory based corporate social reporting offer only little (low accountability) for organizational stakeholders for facilitating action.

Our purpose in this paper is twofold: 1) demonstrate the extent to which companies put a value on their social and environmental impacts and, where this is done, how, and 2) propose a three-phase classification scheme for the financial valuation of

responsibility issues (roadmap). First purpose is based on relevant academic literature and empirical evidence from Finland. Regarding the second purpose, three-phase classification will be applied for Finnish listed firms.

We review the literature that shows how firms' social and environmental impacts have been tried to value. This is done in section two. Based on the identified void in the prior literature, we will, in section three, suggest some possibilities for improving the current state of the art in corporate responsibility reporting in order that the true value of corporate responsibility could be better understood and valued by the markets (in line with the view presented in Adams & Larrinaga-González, 2007; Yachnin & Associates, & Sustainable Investment Group, 2006). Our valuation measures are derived from the Global Reporting Initiative (GRI) context. Therefore, the relevance of GRI-based reporting is presented at the beginning of section three. Also in section three, our three-phase classification for responsibility valuation is interpreted and used to certain Finnish firms. Section four summarizes the paper.

Valuation of Social and Environmental Impacts

Our overall valuation argument is that GRI disclosures enhance corporate transparency and, therefore, reduce the uncertainty about corporation's future cash flows. Prior research has found that corporate environmental performance information is valuable to investors in different settings (Clarkson, Li, Richardson, & Vasvari, 2008 and literature cited there).

According to voluntary disclosure literature companies disclose "good news" in order to differentiate themselves from other "bad news" firms. By this behavior the "good news" companies try to avoid the adverse selection (Clarkson et al., 2008). By the means of enhanced voluntary disclosure "good news" firms inform markets about certain positive aspects in their operations and management that assist investors in their valuation (Murray, Sinclair, Power, & Gray, 2006; Wahba, 2008). We propose that more developed GRI disclosures, containing corporation's social and environmental impacts, would be useful when investors and other stakeholders analyze firms.

Potential of GRI guidelines to support corporate valuation

GRI-based Sustainable Reporting from the Financial Valuation Perspective

Since the emergence of the GRI Sustainability Reporting Guidelines¹, several companies have issued comprehensive sustainability reports covering economic, environmental and social performance data. The GRI is using a term "sustainability reporting" as a common name for overall corporate non-financial reporting covering

a wide variety of themes, such as: corporate responsibility, sustainability, CSR, environmental health and safety (EHS) and environmental reporting.

There is evidence that the systematic implementation of GRI-based reporting provides business benefits for firms in terms of improved sustainability performance and efficiency. When companies make the link between sustainability and business strategy explicit and visible, stakeholders are in a better position to assess how sustainability strategy and actions contribute to firm performance and value. For example, if an automotive company discusses its decisions to develop hybrid cars for growing environmental awareness among its consumer base and the emergence of regulations limiting carbon emissions, stakeholders can make better sense of company's strategy and relate sustainability performance to overall corporate performance. Furthermore, this kind of information is often relevant also for financial valuation purposes.

Only by following good stewardship of resources a firm can create value for its stakeholders in the long run. Within firms it is possible to track impact of sustainability activities to company's financial results and financial position measured in the profit and loss statement and balance sheet. The GRI guidelines emphasize this in the section Strategy and Analysis (GRI 2006, p. 22-23). Based on the GRI guidelines, the analysis of significant sustainability impacts, risks and opportunities should focus on the long-term prospects and financial performance of the corporation. The GRI guidelines recommend that in their sustainability reports companies should explain a company's sustainability strategy and key priorities, and how market trends and issues link to a company's sustainability strategy and key priorities. Part of the GRI standard disclosures is also a discussion of key sustainability risks and opportunities and their implications for business strategy and financial performance. This should be supported by the provision of sustainability performance data, which highlights key achievements, failures and performance against targets. Disclosed information should be standardized and comparable through time and across companies.

Contrary to GRI guidelines vast majority of companies are not yet disclosing financial value analysis in their reports in an attempt to assist readers to recognize links between sustainability and financial performance in terms of income statement and balance sheet. From financial valuation perspective the biggest shortfall in sustainability reporting occurs when they fail to make the link between a company's sustainability strategy and performance and its overall business strategy and performance. These shortcomings in information supply, in turn, cause difficulties for firm valuation.

Yachnin et al. (2006) carried out a study to develop a pilot framework for analyzing the relevance of sustainability metrics for financial valuation. They concluded that it is possible to transfer the impact of corporate sustainability practices into financial valuation measurements. For their study they used five mining companies and the data reported in their sustainability reports as a basis for analysis. Sustainability performance indicators were analyzed based on their relevance and potential for translation into financial valuation measures. The study addresses seven performance indicators: two environmental, four social, and one economic. The analysis demonstrates how corporate sustainability performance can be translated into

financial valuation measures. The study recommends disclosure of direct links between sustainability performance and financial performance. However, they figured out that current reporting practice does not provide sufficient specific and quantitative information. This limits the valuation of the vast majority of a company's reported sustainability performance.

Characterizing Various Phases for GRI-Implementation

Standardized and comparable reporting is necessary in order to communicate adequate sustainability data for financial valuation purposes. Companies have published various kinds of environmental and sustainability reports from the early 1990s. However, a systematic, generally accepted sustainability reporting practice is still evolving. The boost for the development of standardized and comparable sustainability reporting was the establishment of the Global Reporting Initiative (GRI) sustainability reporting guidelines in 2000. Despite the guidelines, the content of those reports has remained highly heterogeneous. The current reporting practice for sustainability performance is insufficient for financial valuation purposes.

Many companies struggle with how to most effectively communicate their sustainability performance to investors so that it can be understood and integrated into their decisions. To be useful for investors, sustainability data should be standardized and comparable over time to facilitate comparisons between current and historic performance. It should also be comparable across companies as this allows investors to distinguish between the performances of different companies. (White, 2005; Gilbert & O'Loughlin, 2009)

Based on strong practical experience we propose a classification that characterizes firm's GRI reporting and potential development path in the future. This classification hopefully helps to create an approach that implements GRI systematically from the point of view of financial valuation. This three phases of GRI implementation is based on experience derived from corporate reporting practices (Alenius, 2005) and empirical studies conducted by a corporate responsibility consulting company Proventia (Lovio & Kuisma, 2006, Niskala et al. 2004, Proventia 2006). It should be mentioned that three phase classification is stylized in order to highlight major characteristics in each of the phases. In reality the boundaries of each class are somewhat overlapping.

Currently several companies produce corporate sustainability reports with external communication being the major driver for the GRI implementation. Phase 1 is the first step for implementing GRI as a framework for external reporting purposes (Table 1 below). In this phase, a company provides a stand-alone GRI report which is published separately from the corporate financial reporting cycle (need for an external report at corporate level). At this phase GRI data collection is carried out in different ways without unified reporting procedures. The information provided is typically annually consolidated data with statements and qualitative information. In phase 1, it is also difficult to establish Group-wide quantitative targets, because of data availability and credibility limitations. In phase 1, a company can provide

detailed information and descriptions on corporate sustainability practices. Reports may be long and contain detailed qualitative information supported by some data.

After gaining experience of reporting, companies usually start using the GRI-based sustainability data also for business performance management purposes. We call this as the second phase (Table 1 below). In phase 2, a company starts more effectively utilize GRI-based data also for management purposes. It is necessary that corporate data collection procedures can provide complete and accurate information for company or group-wide consolidation. Phase 2 implementation calls for sophisticated data collection, consolidation, and management systems. Reporting will occur several times per year. Typically external assurance for ensuring data credibility is applied. In phase 2, a company also develops internal reporting processes and uses site level data for benchmarking. In order to establish company or Group-wide quantitative sustainability targets, company needs phase 2 level implementation. This more precise target setting and integration into a firm's strategy is in line with Porter & Kramer (2006).

The third logical step (third phase) would be to transfer the sustainability data also into measures for financial valuation purposes (Table 1 below).

For the third phase we propose a more systematic implementation of GRI in order to provide information for financial valuation. That requires stronger integration than phases 1 and 2 provide. Corporate responsibility reporting in phase 3 is integrated into corporate financial reporting processes and often into financial accounting and business performance measurement systems as well. Indicators of phase 3 level practice would be integration into the financial reporting cycle, the analysis of financial drivers behind sustainability performance data and clear metrics in terms of the financial impact of sustainability. In practice this would include identifying most relevant sustainability indicators, translating these indicators into financial valuation. Figures should show added value of corporate responsibility in financial terms, including impacts on profit and loss statement, balance sheet and overall corporate valuation (Yachnin et al., 2006).

Table 1. Features in the various phases of a GRI implementation

Characterizing features	Phases		
	Phase 1: Discrete implementation of GRI for external reporting purposes (discrete external)	Phase 2: Use of GRI for internal performance management purposes (discrete external, internal)	Phase 3: Integrating GRI into financial reporting and valuation (integrated external and internal)
Integration level of sustainable reporting	- Stand-alone external report	- Internal reports and benchmarking	- Integrated into financial reporting cycle and processes
Use of sustainability data	- External reporting not utilized in performance management	- Group level performance targets established - Sophisticated data collection methods including internal controls for data quality	- Analysis of financial drivers based on performance data
Data collection cycle	- Annual data collection	- Monthly or quarterly data collection	- Integrated data collection into financial accounting systems
Auditing		- External assurance	- Integrated assurance framework

An example of third phase integration is a Danish pharmaceuticals company Novo Nordisk², which has fully integrated sustainability disclosure in the financial reporting. In the annual report, the company presents consolidated sustainability key figures, performance indicators and related accounting principles following the financial statements format. This report is named as consolidated non-financial statements. In the review of board of directors the company provides discussion and analysis of sustainability impacts, risks and opportunities on business and financial performance. All the disclosed information is also externally assured by the auditors.

Reaching the phase 3 level implementation is often an incremental development process. However, starting firms could even speed up their sustainability process and target more directly towards phase three. Next we analyze how sustainability of Finnish listed firms will be positioned to the three phases characterized above.

Three-Phase Classification in the Context of Finnish Listed Firms

Three-phase classification is meant to show and characterize logical steps how a firm can systematically strengthen its sustainability reporting and its impact for internal and external purposes. In this section we apply this classification for Finnish listed firms in order to see what the current situation is in their sustainable reporting. Our classification helps firms also to recognize potential issues and ways to improve their GRI reporting .

For the purpose of analyzing current reporting practices we reviewed all OMX Helsinki listed firms that published GRI based reports in 2006. Finnish firms have a tradition of high quality financial reporting (Lindahl & Schadewitz, 2009). Therefore, it is also among one of the best countries having a potential to find high quality sustainability reporting. Legislation and regulation in Finland is also in line with the European Union. Therefore the findings reported here are also relevant in the EU and in its regulatory context. We based our sample construction on a leading experience and knowledge in Finland in this. That guidance resulted to 18 companies providing either a stand-alone sustainability report or a sustainability report as a part of their annual report (GRI-based reporting practice among these firms is detailed in Appendix). The sample represents different industrial sectors including materials (8), industrials (2), information technology (2), finance (2), consumer discretionary (1), consumer staples (1), health care (1) and utilities (1) companies. The sample companies are typically among the largest companies in their industry and often also recognized sector sustainability leaders, which are indicated by the fact that 78 % of sample companies is or has previously been a component of some of the major sustainability indices, such as Dow Jones Sustainability Index or FTSE4Good.

The categorization is based on the publicly available information companies provided in their sustainability reporting. Companies were classified to the three phases based on their sustainability reporting practices. The reports cover a wide variety of sustainability information and relatively large amount of sustainability performance indicators. Significant differences were identified when analyzing companies' activities in terms of sustainability target setting, data collection procedures and use of data for internal management purposes, role of external assurance and provision of financial value measures and discussion about the link between sustainability performance and business performance.

The vast majority of the analyzed companies (14) represent the phase 1 GRI implementation level (see Table 2 below). Those companies represent eight different industries (forestry: 3 (firms), information technology: 2, chemicals: 1, industrials: 2, finance: 2, pharmaceuticals: 1, food processing: 1, and metals: 2). No clustering for certain industries can be recognized. For those companies the starting point for GRI implementation has clearly been to produce an external sustainability report. They collect sustainability data on annual basis and provide reports to external stakeholders in order to communicate information on their sustainability activities.

Four companies are categorized in the phase 2 in their GRI implementation (one firm from each of the following industries: energy, packaging, retail, and forestry). In this second phase sustainability data is utilized also for performance management and Group-level quantitative target setting. They have also implemented sophisticated

sustainability data gathering and internal reporting procedures with internal and external controls.

Table 2. Current situation of GRI implementation among Finnish listed companies

Phase	Phase 1: Discrete implementation of GRI for external reporting purposes	Phase 2: Use of GRI for internal performance management purposes	Phase 3: Integrating GRI into financial reporting and valuation
Companies	1. Ahlstrom (forestry) 2. Elcoteq (information technology) 3. Kemira (chemicals) 4. Metso (industrials) 5. M-real (forestry) 6. Nokia (information technology) 7. OKO (finance) 8. Orion (pharmaceuticals) 9. Outokumpu (metals) 10. Raisio Group (food processing) 11. Ruukki (metals) 12. Sampo (finance) 13. UPM (forestry) 14. Wärtsilä (industrials)	1. Fortum (energy) 2. Huhtamäki (packaging) 3. Kesko (retail) 4. Stora Enso (forestry)	

None of the companies analyzed has explicitly integrated sustainability into financial value drivers (Phase 3) so far. However, there were some indications that the phase 2 level companies are developing processes in the direction of phase 3. Examples of this kind of information are reported discussions on sustainability risks and opportunities in terms of business strategy, achievement of targets and direct cost information such as, environmental costs and liabilities, and integration of sustainability data management to financial data management systems.

For further analysis we went through all the sustainability performance indicators disclosed in their sustainable reports/annual reports by the sample firms in order to recognize their value relevance. We limited our analysis to the sustainability performance indicators which have most use in financial valuation and where a logical link between sustainability performance and financial performance can be recognized. When analyzing financial value relevance of sustainability performance indicators, we utilized the definitions provided by the Finnish Accounting Board (FAB). In the General Guidance^[3] the FAB recommends the disclosure of sustainability-related performance indicators and other information in the Review of Operation, when this information is material for financial reporting purposes. In the FAB guidance the materiality principle for sustainability performance indicators is expressed in financial terms (table 3 below). The general guidance recommends disclosure of environmental and social performance indicators and other information when it is relevant in order to gain and understand a “true and fair view” of the company’s financial performance, financial position, business development and achievement of long-term financial targets.

According to the general guidance given, all relevant environmental and employee-related sustainability information should be disclosed in the Review of Operations when this information is material in order to understand company’s financial situation and factors having impact on business in the future. For this purpose the general guidance defines 24 sustainability performance indicators as potential financial value drivers. Of these indicators 20 represent the same sustainability aspects and performance indicators as defined in the GRI guidelines. These 20 indicators are listed in Table 3, which provides also some examples where the financial value relevance for each indicator comes from.

Table 3. Sustainability-related GRI performance indicators consistent with the Finnish Accounting Board's General Guidance⁴

Sustainability issues	Performance indicators	Financial value relevance
<i>Panel A: Environmental indicators</i>		
A1. Energy	1. Energy consumption	Current and future energy costs Availability and price of energy Energy savings potential Use of non-fossil fuels
A2. Materials	2. Material consumption	Use of hazardous and restricted materials, Material efficiency Acceptability of raw materials, traceability costs
A3. Water	3. Water consumption	Water costs and efficiency
A4. Air emissions	4. Greenhouse gas emissions 5. Emissions of ozone-depleting substances 6. Other air emissions (SO ₂ , NO _x , VOC, particulates, dust)	Emission trading Current and future compliance costs
A5. Waste water effluents	7. Significant emissions into water	Current and future compliance costs
A6. Waste	8. Waste generation	Current and future waste management costs Recycling possibilities
A7. Environmental expenditure	9. Environmental expenditure	Financial impact of environmental capital expenditure, operating expenses and liabilities
<i>Panel B: Social indicators</i>		
B1. Employee structure and organizational changes	10. Employee breakdown by geographical area, business area, functions 11. Permanent and temporary employees 12. Full-time and part-time	Current and future employee costs Employee resource planning Reductions in workforce Retaining human capital

	employees 13. Employee turnover 14. Age structure 15. Redundancies	
B2. Knowledge and development	16. Percentage of employees with regular development discussions 17. Training days	Human capital value and competence development
B3. Occupational health and safety	18. Lost time due to injuries. The frequency of injuries 19. Absence rate	Cost of lost days
B4. Equal opportunities	20. Gender structure	Employee satisfaction

Based on these 20 performance indicators, we reviewed the sustainability reports of 18 listed Finnish companies from the year 2006 in order to see whether they provide an analysis of the financial value drivers behind sustainability performance or expressed sustainability information in financial terms. We ascertained that none of the companies provided directly this kind of information or analysis in their sustainability reports. The reports fail to make a link between a company's sustainability strategy and performance and its overall business strategy and performance. They also fail to explain how sustainability trends and drivers are linked to market factors driving corporate strategy and how these trends affect the company's financial outcomes.

The reports are characterized by an absence of discussion on financial value analysis. Relevant sustainability data is scattered and therefore difficult to use for valuation purposes. This is partly explained by the fact that sustainability reporting practices are in an early, developing, stage of their development and reporting recommendations in this area are not yet fully implemented and integrated in companies' operations.

Our sample gave additional evidence that the current level of sustainable reporting is clearly not comprehensive enough for valuation purposes. In other words, in terms of our three-phase classification, firms are, at best, in phase two. In the next section, we display three examples of how information disclosed in phase two can be developed further to become phase three information, where GRI is integrated into external reporting and internal performance management purposes.

Three Illustrations of Deriving and using Sustainability Reporting Information for Financial Valuation Purposes

In this section we derive some financial valuation measures based on information actually disclosed in phase 2. The constructed measures are examples of phase 3 measures. In other words, we develop GRI measures in the direction of an explicit financial valuation. The sample companies here were selected because of data availability and a long track record in quantitative sustainability performance improvement. We picked up three examples where financial valuation related information can be derived from companies' sustainability reports. In other words, our examples are built on actually disclosed data in firms' sustainable reporting. These examples represent financial valuation potential of occupational health and safety (table 3, B3), energy (table 3, A1), air emissions (table 3, A4), and environmental expenditures (table 3, A7)

Improvement of Safety Performance in Fortum

For an energy company, such as a Finnish energy firm Fortum, the occupational health and safety issues are relevant also from the business point of view. Fortum is implementing corporate level safety guidelines and instructions. As a result of safety management activities Fortum has improved its safety performance remarkably⁵. The evidence of this is found from the development of lost time injuries frequency from the year 2000 to 2006 (see Figure 1 below).

Lost time injuries frequency (LTIF) is a common and intuitively fairly straightforward indicator used in sustainability reporting. LTIF is defined as:

$$\text{Lost time incident frequency (LTIF)} = (\text{LTI divided by worked man hours}) * 1,000,000 \text{ hours}$$

The indicator describes the frequency of lost time injuries. Based on Federation of Accident Insurance Institutions (2007)⁶, the average lost time injuries frequency in Finland was 39,0 in 2005. This statistic covers only those injuries which result in three or more days absence from work which gives a much lower frequency than the definition provided above. Another important measure for injuries is the average severity rate of lost time injuries, which is the average amount of time that employees are absent from work due to injury. These indicators correlated with financial measures due to additional costs caused by lost time and other injury-related costs. It is estimated that one day absence results average direct costs of 5.600 Euros (European Agency for Safety and Health at Work, 2002)

In Fortum, the lost time injuries frequency was 15 in the year 2000. However, the average lost time injuries frequency in similar industries worldwide was at that time below 4. Since then Fortum has established company Group-wide targets for lost time injuries and has improved its performance: in 2006 LTIF was 3.7 and target for 2007 is 2. The ultimate, stated, goal for lost time injuries in Fortum is zero.

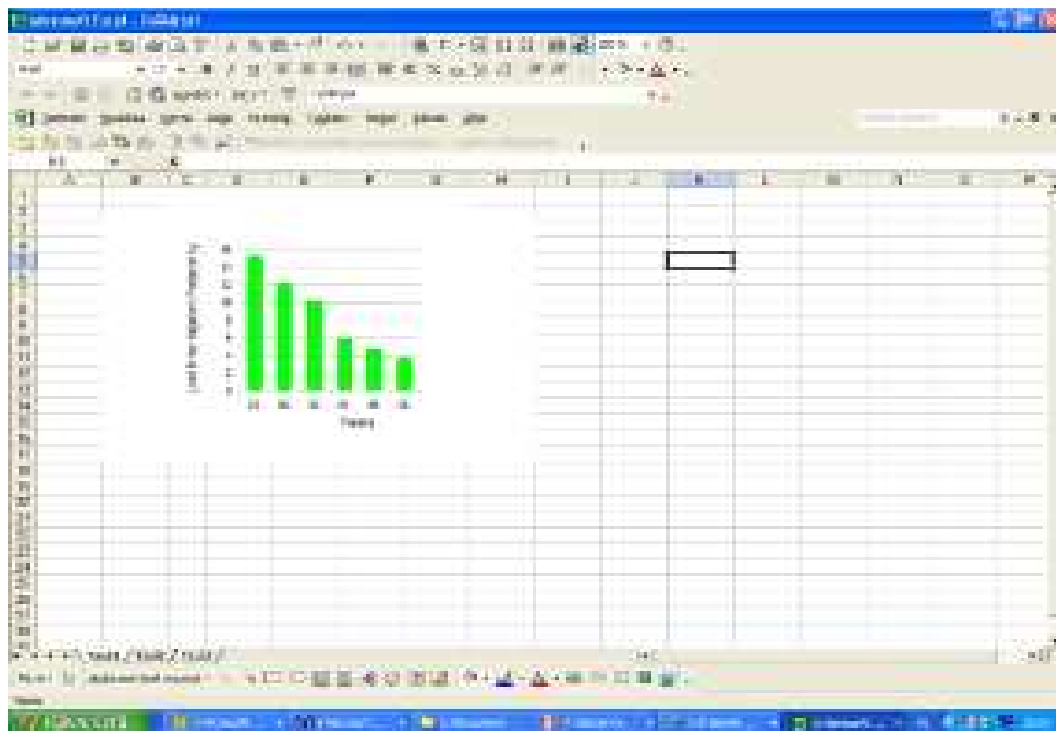


Figure 1. Lost time injuries frequency in Fortum⁷

The financial benefits of improved safety performance are not disclosed in Fortum's company reporting. If an estimate for the direct costs of one day lost due to injury is, say, 5000 Euros and an average severity rate is ten days, the value of LTIF improvement from 2001 to 2006 in Fortum is about 8 million Euros (direct savings of lost day costs). This figure does not take into account any indirect economic cost savings and other benefits resulting from an improved safety performance. However, these figures are possible to compute and integrate into financial value analysis of sustainability actions.

Financial Value of Energy and Air Emissions in Stora Enso

Another illustration of financial valuation with obtained cost savings is energy efficiency and greenhouse gas emission reductions improvement. Contrary to the example given by Fortum above, Stora Enso also discloses measures in its annual reports that are directly usable for financial valuation. However, these figures are not included in the company's sustainability reports, but disclosed in financial terms in the financial statements. Stora Enso has established and announced, a Group-wide target of reducing energy consumption by the means of energy efficiency reviews and by developing renewable energy mix portfolio. Stora Enso reported significant improvements in energy efficiency in 2006. There is a Group-wide target for reduction of Greenhouse gas emissions. The company reported direct revenues from the sales of CO²-emission allowances due to a decrease in the use of fossil fuels in 2006, which amounted to approximately 117 million Euros. Energy costs represent 9 % of Stora Enso's total costs, being 1,250 million Euros. Stora Enso also generated income from its environmentally friendly power-generation in Sweden and Belgium

where it uses renewable resources and is thus entitled to Green Certificates for onward sale to generators that consume non-renewable resources. The income from this amounted to 24 million Euros.

In company like Stora Enso there is a direct link between sustainability and financial performance in energy and greenhouse gas emission issues. Financial data related is now disclosed only in the financial statements. Stora Enso's sustainability report, however, include relevant information on energy and greenhouse gas emission targets and activities on energy efficiency and greenhouse gas emission reductions, but the financial valuation of these issues is missing. This is a shortcoming also in GRI. It supports financial reporting, but adds only a little value to the financial valuation. Corporate sustainability reports should have more discussion and data on the financial impacts in order to be in better service for valuation.

Financial Value of Environmental Expenditures in Stora Enso

A clear link between corporate sustainability and financial performance is environmental expenditures. For example Stora Enso reports that its overall environmental expenditures in 2006 totaled 322 million Euros representing some 2 % of its net sales. Stora Enso's environmental costs include environmental capital expenditures (€156 million), operating environmental expenses (€86 million) and environmental liabilities (€42 million). Environmental investments represent 15 % of Stora Enso's total capital expenditures and environmental liabilities 10 % of provisions.

Environmental expenditures are defined as an environmental performance indicator in the GRI guidelines and are therefore usually included in corporate sustainability reports. However, this information, when material, is already required to be disclosed in financial statements. In that sense, corporate sustainability reporting does not add value from the financial valuation point of view if the reasons behind environmental expenditures are not interpreted properly. Stora Enso provides detailed facts about its environmental activities underlying these costs and some valuable information on future environmental investment needs and compliance costs which are useful for financial valuation purposes.

Conclusion

There is a growing interest among companies, investors and other stakeholders to better understand the financial value drivers behind sustainability performance. This requires quantitative financial measures and the financial analysis of corporate sustainability. In order to identify the influence of corporate sustainability on financial performance, its effects must be disclosed and presented in financial terms so that their impact can be integrated into financial valuation.

The main purpose of this paper was to demonstrate the extent to which companies put a value on their social and environmental impacts and, where this is done, how. Furthermore, based on earlier research, we concluded that sustainability reporting has some value relevance even in its present form. The literature indicated that this impact has not yet been focused on enough in corporate sustainability management and reporting practices or in academic research. The explicit link between corporate sustainability performance and financial performance is extremely thin or even absent.

We presented a three-phase classification in order to clarify the current phase of the sustainable reporting and develop a path for further advancements towards better financial valuation and reporting. A sample of Finnish OMX listed firms were categorized into the phases presented in the model. Finally, three examples, derived from the actual corporate data, were constructed in order to illustrate how GRI information can be converted into financial value measures. We demonstrated via systematic examples how companies can respond to the challenge of transforming the concept of corporate sustainability so that it is reflected in a company's financial performance. In the economic evaluation of a firm, the crucial measurements are based on the income statement and the balance sheet, especially earnings.

References

- Adams, C. A. (2004). The ethical, social and environmental reporting performance portrayal gap. *Accounting, Auditing & Accountability Journal*, 17, 731-757.
- Adams, C. A., & Larrinaga-González, C. (2007). Engaging with organisations in pursuit of improved sustainability accounting and performance. *Accounting, Auditing & Accountability Journal*, 20, 333-355.
- Adams, C. A., & McNicholas, P. (2007). Making a difference. Sustainability reporting, accountability and organizational change. *Accounting, Auditing & Accountability Journal*, 20, 382-402.
- Alenius, J. (2005) *Control environment in sustainability accounting. Descriptive study of 17 Finnish sustainability reporters*. Graduate thesis, Helsinki School of Economics.
- Al-Tuwaijri, S. A., Christensen, T. E., & Huges, K. E. II (2004). The relations among environmental disclosure, environmental performance, and economic performance: a simultaneous equations approach. *Accounting, Organization, & Society*, 29, 447-471.
- Brammer, S., & Pavelin, S. (2006). Voluntary environmental disclosures by large UK companies. *Journal of Business Finance & Accounting*, 33, 1168-1188.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, 33, 303-327.
- Cooper, S. M., & Owen, D. L. (2007). Corporate social reporting and stakeholder accountability: The missing link. *Accounting, Organizations and Society*, 32, 649-667.
- Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: economic incentives, public pressures or institutional conditions? *European Accounting Review*, 14, 3-39.
- Deegan, G. (2001). *Financial accounting theory*. McGraw-Hill: Beijing.
- European Agency for Safety and Health at Work, (2002). *Työtapaturmien ennaltaehkäisyn taloudellinen arviointi yritystasolla [Financial evaluation of prevention of occupational injuries at company level]*. Fact 28/2002 Euroopan työterveys- ja työturvallisuusvirasto.
- [Federation of Accident Insurance Institutions](#), (2007). *Työtapaturmat ja ammattitaudit. Tilastovuodet 1996-2005. Arviointia kehityksestä. [Occupational injuries and illnesses. Statistics 1996-2005. Analysis of development]*. Tapaturmavakuutus-laitosten liitto.

Greeves, L., & Ladipo, D., (2004) *Added values? Measuring the 'value relevance' of sustainability reporting*. London: Imagination (GIC) and Lintstock.

Gilbert, S., & O'Loughlin, J., (2009) *Reaching Investors. Communicating Value through ESG Disclosure*. Global Reporting Initiative. Reporting Practices.

GRI (2002). *Sustainability Reporting Guidelines*, Global Reporting Initiative.

GRI (2006). *Sustainability Reporting Guidelines*, Global Reporting Initiative.

Griffin, J., & Mahon, J. (1997). The corporate social performance and corporate financial performance debate: twenty-five years of incomparable research. *Business and Society*, 36, 5-31.

Hassel, L., Nilsson, H., & Nyquist S. (2005). The value relevance of environmental performance. *European Accounting Review*, 14(1), 41-61.

Healy & Palepu, (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting & Economics*, 31, 405-440.

Knox, S., & Maklan, S. (2004). Corporate social responsibility: moving beyond investment towards measuring outcomes. *European Management Journal*, 22, 508-516.

Lankoski, L. (2000). *Determinants of environmental profit. An analysis of the firm-level relationship between environmental performance and economic performance*. Helsinki University of Technology Institute of Strategy and International Business, Doctoral Dissertations 2000/1.

Lindahl, F., & Schadewitz, H. (2009). *US GAAP and IFRS – How close is 'close enough'?* Working paper, George Washington University, Turku School of Economics, Apr 2009.

Lovio, M., & Kuisma, M. (2006). *Henkilöstöraportointi osana yhteiskuntavastuu-raportointia - Yritysten nykykäytäntöjen kehittäminen [Human resources reporting as a part of corporate responsibility reporting – Development of current practices]*. Helsinki School of Economics, Working Papers W-401.

Milne, M., & Chan, C. (1999). Narrative corporate social disclosures: how much of a difference do they make to investment decision-making? *British Accounting Review*, 31, 439-457.

Murray, A., Sinclair, D., Power, D., & Gray, R. (2006). Do financial markets care about social and environmental disclosure? Further evidence and exploration from the UK. *Accounting, Auditing & Accountability Journal*, 19, 228-255.

Niskala, M., & Schadewitz, H. (forthcoming). Communication via responsibility reporting and its effect on firm value in Finland. *CSREM - Corporate Social Responsibility and Environmental Management*, 17:2

Niskala, M., & Schadewitz, H. (forthcoming). Towards a transformation of corporate responsibility into financial value measures. In Piia Nurmi (Ed.), *Proceedings of the Responsible business – practice, research and development seminar, Turku, Finland*.

Niskala, M, Vahala, K., & Lovio, M. (2004) *Vastuullisen yritystoiminnan kansainväliset suuntaviivat ja eteneminen Suomessa [International trends of corporate responsibility and future directions in Finland]*. KTM, Kansainvälisen sijoitustoiminnan ja monikansallisten yritysten neuvottelukunnan (MONIKA) julkaisuja.

Niskanen, J., & Nieminen, T. (2001). The objectivity of corporate environmental reporting: a study of Finnish listed firms' environmental disclosures. *Business Strategy and the Environment*, 10, 29-37.

Pelozo, J. (2006). Using corporate social responsibility as insurance for financial performance. *California Management Review*, 48, 52-72.

Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, Dec, 78-92.

Proventia (2006) *Yritysvastuuraportoinnin tulevaisuus -seminaarin materiaali, 1.6.2006. [Corporate responsibility reporting in the future-seminar material]*. 2future (<http://www.tofuture.eu>)

Solomon, J. F., & Solomon, A. (2006). Private social, ethical and environmental disclosure. *Accounting, Auditing & Accountability Journal*, 19, 564-591.

Wahba, H. (2008). Does the market value corporate environmental responsibility? An empirical examination. *Corporate Social Responsibility and Environmental Management*, 15, 89-99.

White, A. L. (2005). *New Wine, New Bottles: The Rise of Non-Financial Reporting*. A Business Brief by Business for Social Responsibility, June 20, 2005.

Vogel, D. (2005). Is there a market for virtue? The business case for corporate social responsibility. *California Management Review*, 47, 19-45.

Yachnin & Associates, & Sustainable Investment Group (2006). *The SDeffect™: translating sustainable development into financial valuation measures – a pilot analytical framework*.

Appendix. GRI-based reporting practice among 18 Finnish listed companies

Company	Reporting practice
Ahlstrom (Materials)	<p>Ahlstrom has issued a GRI-based report since 2003. The report is an integral part of its annual report. Ahlstrom has established some Group-wide key environmental and safety performance indicators that reflect targets within those areas that have the most significant sustainability impact. No numerical targets for these issues are defined other than the lost time injuries frequency. The focus is external communications, but the report includes several data items which are also relevant for performance management purposes. The report is not externally assured.</p>
Elcoteq (Information Technology)	<p>Elcoteq has published GRI-based reports in 2003, 2005 and 2006. The purpose of the report is; <i>“to describe to Elcoteq’s stakeholders the principles applied by the company, as well as what it has achieved so far in the various areas of corporate responsibility in 2006. Corporate responsibility is integrated in the company’s strategy, management structures and corporate governance, and the principles, guidelines and systems that are derived from them. Corporate responsibility has been incorporated into the scorecard that is used as a strategic management tool. Elcoteq’s global management system is designed to ensure that the company attains its strategic goals and that the same operating principles of corporate responsibility are applied in all the company’s units in different countries.</i> (Elcoteq Corporate Responsibility Report 2006, p. 10)</p> <p>In 2006, all of Elcoteq’s operating locations adopted a new corporate responsibility reporting system based on the GRI standard. These data are also utilized for performance management purposes. However, the report is not assured by a third-party.</p>
Fortum (Utilities)	<p>Fortum has published a GRI-based sustainability report since 1999. From 1999 to 2004 the report was assured by an external independent third party. Since 2005 sustainability has been integrated into Fortum’s Annual Report. The Annual Report contains a summary of Fortum’s sustainable development operating principles and the key achievements of the reporting year. Its website provides more detailed information about environmental and safety performance and their related targets. Fortum has established Group-wide targets for safety performance. A corporate wide database system is used to facilitate the systematic recording and handling of occupational accidents and other safety-related incidents and improvement proposals. The safety performance is measured and publicly</p>

	<p>reported on a monthly basis. Several other sustainability data parameters are also used for Group-wide performance management purposes.</p>
Huhtamäki (Materials)	<p>Huhtamäki does not issue a separate GRI-based report. The company has defined several sustainability performance indicators which are collected Group-wide. The company has set targets and identified key performance indicators which are regularly reported to internal management for benchmarking purposes. The company's executive committee approved the first Group-wide environmental reduction targets in 2007. The group level indicators are further broken down into internal analysis per technology and per region. Internally, evaluation is carried out between the units to compare existing results against best practices. Within the group safety performance is reported on every month and consolidated at group level for quarterly internal communication. Sustainability data is disclosed in the annual report, but not externally assured.</p>
Kemira (Materials)	<p>Kemira started to publish an externally assured Group-wide environmental report in 1993. The report is an integrated part of Kemira's annual report and is accepted by the Board of Directors. Since 2006 Kemira has also included GRI-based sustainability reporting in its annual report, even though direct reference to the GRI guidelines is not provided. Kemira has not established a Group-wide quantifiable sustainability performance targets. The focus is on external reporting.</p>
Kesko (Consumer Discretionary)	<p>Kesko has issued a GRI-based responsibility report since 2000. Independent assurance promoted the continuous development of the processes behind corporate responsibility management and improved the reliability of reported information and the accuracy of individual indicators. Plus, an assurance has been provided for Kesko's Corporate Responsibility Report since 2002.</p> <p>The report is very comprehensive and has been recognized several times as a best practice report in Finland and in the retail sector worldwide. Kesko has defined a wide set of key performance indicators which are regularly collected and reported. The most relevant indicators are collected on a monthly basis and the company also utilizes this information for internal performance management and benchmarking purposes. Group-wide objectives for corporate responsibility performance were approved by the Corporate Management Board in January 2007 for the first time. Kesko and its Finnish division parent companies adopted an online system for collecting and reporting on corporate responsibility in 2005. The system collects and combines responsibility data from various organizational levels and from specified source systems</p>

	<p>in a form required by the GRI guidelines. The system follows the indicators defined in G2, and an update to G3 is expected to take place during 2007.</p>
Metso (Industrials)	<p>Metso has published a GRI-based sustainability report since 2002. In 2006, Metso clarified the documentation and collection of sustainability information and related responsibilities. The company's aim is to develop internal reporting and follow-up accordingly. However, the main responsibility for Metso's reporting is in Corporate Communications and currently it is very much focused on external reporting and communication. External assurance is not included for the report and no information about the use of sustainability data for performance management purposes is provided. For environmental data collection Metso has a database covering units that have the most significant production and environmental impacts.</p>
M-real (Materials)	<p>M-real issued a sustainability report in 2004 and 2005. In 2006 the sustainability report was included in the parent company Metsäliitto's Annual Report. Sustainability data are reported annually. The report includes an external assurance. The report is focused on external reporting to stakeholders and does not contain much information on the use of sustainability data for internal management purposes in terms of measurable Group-wide targets or internal reporting. However, there is a group target for the lost time injuries frequency rate. Numerical targets for other areas are set by individual mills.</p>
Nokia (Information Technology)	<p>Nokia has issued a GRI-based sustainability report since 2003. The report is not externally assured. Nokia provides detailed sustainability data on economic, environmental and social impacts. Corporate responsibility targets at group level are described in a qualitative format, but no quantifiable targets for key performance indicators are set.</p> <p>The report mainly focuses on external reporting to stakeholders as expressed in the statement provided in the 2005 report: <i>“At Nokia, reporting is an integral part of our corporate responsibility work. We see clear and consistent communications on our progress as fundamental to building trust and reputation that goes far beyond the financial community. We produced our first corporate responsibility report in 2002. Since then, we've worked steadily to increase the quality and scope of our reporting content as well as raise the level of awareness on ethical and environmental issues internally and with our stakeholders. In this way, you could say that our reporting has been more than just a journey towards producing an annual publication. It has become an active and ongoing dialogue with our own people and those outside our</i></p>

	<i>organization with whom we cooperate and work.”</i> Nokia Corporate Responsibility Report 2006
OKO (Finance)	OKO Bank Group has published a GRI-based sustainability report since 2003. The report mainly covers the whole Group, but some sustainability data are based on samples collected from the units. It also contains a description of corporate responsibility principles and related management activities. The report does not include external assurance and it is mainly directed at external communication for stakeholders. No Group-wide quantifiable targets for corporate level performance measurement have been established.
Orion (Health Care)	Orion issued their first sustainability report in 2005 following the principles laid out in the GRI guidelines. The report focuses on external communication, but covers some sustainability performance data. In 2006 the report was included in summary form in the company’s annual report. Furthermore, the company published a short environmental review. No Group-wide quantifiable targets were established and no external assurance was provided.
Outokumpu (Materials)	Outokumpu has issued a GRI-based report since 2004. The report focuses on environmental responsibility issues. There was a lot of discussion about objectives and some quantifiable sustainability targets have been established for Group-wide performance indicators, such as the lost time injuries frequency. Environmental performance targets are mainly set by business units. The report focuses on external communication and does not include external assurance.
Raisio Group (Consumer Staples)	The Raisio Group has published a GRI-based report since 2004. The report contains several key sustainability performance indicators. Targets are mainly presented as qualitative measures and in a form of examples. The report is focused towards external communication and annual reporting. No evidence of its use for performance management purposes is presented. As the report 2006 states “annual reporting will be expanded on in parallel with the development of indicators and reporting systems.” The report does not contain external assurance.
Ruukki (Materials)	Ruukki has published a GRI-based responsibility report in 2000, 2003, 2005 and 2006 and updates for reports in 2002 and 2004. Group-wide targets have been established for safety and environmental performance. However, only a few of them are expressed as quantifiable performance indicators. The main purpose of the report is to provide regular information on the company’s corporate responsibility to external stakeholders.

	The report is not assured by a third-party.
Sampo (Finance)	Sampo started to report in line with GRI guidelines in 2002. The report is focused on the qualitative description of corporate responsibility activities and is aimed at external stakeholders. It includes only a few sustainability performance indicators, but the recommendations of the GRI Finance Sector Supplement have been taken into account. The report is not assured by a third-party.
StoraEnso (Materials)	Stora Enso has issued a GRI-based report since 2002. The company has established a set of Group-wide sustainability performance targets. It also contains detailed sustainability performance data and clear evidence that these data are also utilized in business performance management. Targets are expressed as normalized for production. The company has integrated sustainability into its corporate strategies. The report is externally assured by a third-party.
UPM (Materials)	UPM has published a GRI-based report since 2003. Group-wide sustainability targets are mainly expressed in qualitative terms. However, the report contains detailed sustainability data on major aspects as defined by the GRI guidelines. The focus of the report still seems to be more on external communication than performance management. The report is not externally assured.
Wärtsilä (Industrial)	Wärtsilä issued a GRI-based report in 2000 and was one of the first companies in Finland to implement the GRI guidelines into external reporting. The company also issued a separate sustainability report in 2002 and a report has been integrated into the annual report since 2004. The reported indicators are selected based on their significance at group-level. Wärtsilä's reports in 2004 and 2005 were categorised as "in accordance" reports meaning that all the elements recommended by the GRI guidelines were included. The report includes a lot of data and statements regarding product performance and some Group-wide targets have been established. However, there seems to be only limited evidence that sustainability data would be utilized for performance management purposes. The focus is on external reporting, even though the report is very comprehensive and contains detailed information about product level performance and developments. The report is also assured by a third-party.

[1] Global Reporting Initiative (GRI) guidelines for sustainability reporting, first issued in 2000. The current GRI G3 version was released in October 2006 and is available from <http://www.globalreporting.org>.

[2] <http://annualreport.novonordisk.com/>

[3] Finnish Accounting Board, General Guidance on Review of Operations, 12.9.2006, sections 2.11 Employees and 2.12 Environmental matters.

[4] FAB defines four sustainability performance indicators which are not included in the GRI guidelines. These are performance indicators for remuneration (2 indicators), average length of employment contract and educational structure.

[5] <http://www.fortum.com>

[6] [Federation of Accident Insurance Institutions](http://fi.osha.europa.eu/statistics), <http://fi.osha.europa.eu/statistics>

[7] <http://www.fortum.com>

CORPORATE SOCIAL RESPONSIBILITY SELF-ASSESSMENT MODEL USING THE BRAZILIAN EXCELLENCE MODEL STRUCTURE

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Abstract

This paper will introduce a self-assessment structure that allows organizations to include and control social and environmental factors in its management structure.

The structure's fundamentals are:

First: Concepts about extended excellence models and excellence models that should include the social and environmental factors in every model criteria. Edgeman (2000), McAdam e Lambert (2003)

Second: Corporate Social Responsibility concept has to be treated in a integral way (VAREY, 2008a), (VAREY, 2008b), (WOOD , 1991), (WARTICK;COCHRAN, 1985), where the organization has a responsibility with the society , a responsibility with the products and services that it offers, and also with the individuals that work in relation to the organization.

Third: Every organization has different maturity stages related to its social/economical and environmental management behavior. These different maturity stages are always varying between the legal and ethical behavior (Ethical continuum) (CARROLL, 1979) , (JOYNER; PAYNE, 2002) , (PAYNE, DINAH.; RAIBORN *et al.*, 1997), (RAIBORN; PAYNE, 1990)

Fourth: The self-assessment system has to consider the economical, social and environmental behavior in separate ways, where every factor (economical/social/environmental) can be located in a different maturity stage, (different continuum stage).

This paper will present and characterize every one of the four fundamentals of the self-assessment structure in a deep and extended way, presenting a practical case using the Brazilian and Chilean civil construction company's.

Keywords : Corporate Social Responsibility ; Corporate Social Responsibility Management Model

Introduction

The concepts related to the Corporate Social Responsibility theme are increasingly been used by organizations, and some questions about it have been raised: How do these concepts is been inserted in the companies? How has been performed the management of the inclusion, in the organization, of the factors associated with this concept?

The present article discourse the fundamentals used in the development of a model proposal to evaluate the sustainable management in the organizations, as well as their architecture and system of evaluation.

The model is grounded in three theoretical strands development; they are: (Figure 1)

- Evolution of the excellence models to the models of sustainable excellence;
- Organizational values and behavior to the corporate social responsibility;
- Corporate Social Responsibility

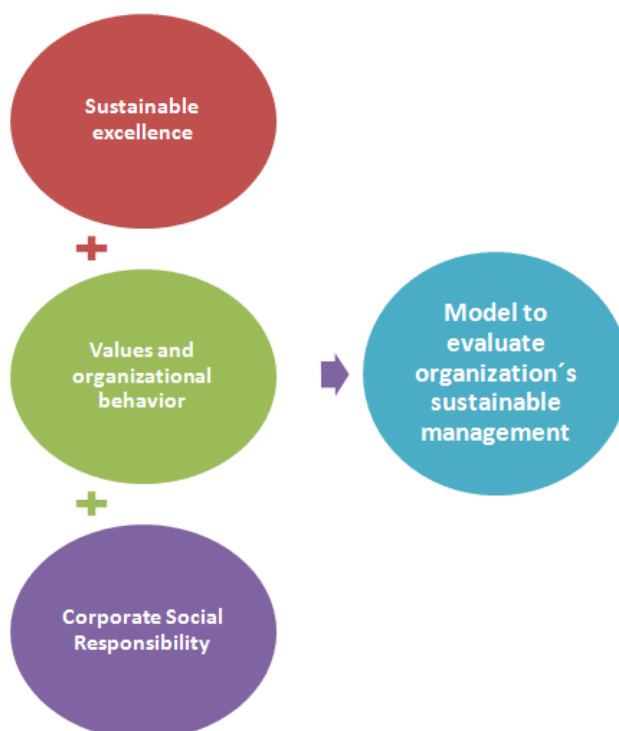


Figure 1: Fundamentals - Model of evaluation of the sustainable management
Source: The authors

Methodology

The characteristics of the research that will be developed in this work are the following ones:

- a) Descriptive analysis of the foundations used to the development of the model;
- b) Presentation of the results of bibliographical research, basis of the formulation of the model. Outreach bibliographical research;
- c) The accomplished research intends to formulate a relationship between the developed model and their foundations / structure and evaluation system.

The research is classified, based in the foregoing aspects, in the following way:

- a) According to the nature: the research is characterized as a basic research since it seeks the acquisition of nature knowledge without practical or immediate purposes. (Jung, 2003).
- b) According to the objectives: it can be characterized as an exploratory research, since it looks to develop, explain and modify concepts and existent ideas, taking into account the formulation of more precise problems or researchable hypotheses for subsequent studies. (SELLTIZ, 1997).
- c) According to the approach: it is characterized as a qualitative research:

“The qualitative research doesn't try to enumerate and/or to measure the studied events. It also doesn't use statistical instruments in the data analysis. It's based on subjects and broader focuses of interest, that becomes more defined as the study advances, trying to understand the phenomena according to the perspective of the subjects, in other words, of the participants of the situation in study.” (MARTINS 1996) *in* (Rodrigues, 2006)
- d) According to the procedures: it is defined as a bibliographical research. This research will be elaborated starting from some material that were already published, mainly constituted of books, articles from newspapers and magazines, master's thesis and Doctoral dissertations and of material available in the Internet.

Objective

General Objective

The objective of this article consists of the presentation of the foundations / structure and evaluation system of a self-assessment model that allows subsidizing the organizations in the incorporation and treatment of the socio-environmental factors in its management, according to the excellence models, specifically to the model used in Brazil by FNQ (***National Quality Foundation***)

Model Foundations

First foundation - Evolution of the excellence models to models of Sustainable excellence

The first foundation of the model refers to the use of the concept of corporate social responsibility, through the evolution of the excellence models. According to March (March, 1999), Edwards, the first ASQ president (*American Society for Quality*), indicated that the statistical techniques of quality not only should be focused in the economic extent, but could also be used in other areas as the social ones. March (March, 1999) and Zairi (Zairi et al. , 2002) argue that Juran also emphasizes the importance of the quality to serve the society. Zairi (Zairi et al. , 2002) indicates that Deming extends the concept of quality as being guided for the satisfaction of the requirements not only of the customers but also of all the stakeholders.

This idea is reinforced by Van Marrewijk (Van Marrewijk et al. , 2004), Karapetrovic and Jonker (Karapetrovic , 2002) in their works, in which they indicate that the new objective of the businesses is the creation of value and synergies. So, the focus of the businesses is no longer the customers but all the stakeholders. The business also is concerned about the environment and about the society, showing the importance of the organization's incorporation of the concepts associated to the corporate social responsibility and to the corporate sustainability. Van Marrewijk points that "the foundations of CSR / CS (Social Corporate Responsibility) / (Corporate Sustainability) can be built in the bases of the quality management and of the excellence models."

Wilkinson (Wilkinson et al. , 1999) also points out that the organizations should focus not only in the satisfaction of their customers' needs, but also in other type of factors as: their employees' well-being, work atmosphere, impact that their products and services produce in the neighborhood and local communities, as well as the effects produced in the use and discard of these products and services.

Wilkinson still indicates that the stakeholders themselves are ever more concerned about this kind of issues, due to which the organizations are using different methodologies and tools to guarantee their customers and stakeholders' satisfaction. This situation - implementation of a series of methodologies and tools - can drive the organization to create series of administration systems inside of it. Wilkinson (Wilkinson et al. , 2001) proposes in his work the use of a single integrated system of administration (IMS Integrated Management System) that could include, in a united way, the methodologies and tools associated to the quality as well as to the environment and society.

In this train of thought, Waddock and Bodwell (Waddock et al. , 2002) inform that, due to the pressures exercised by the different stakeholders and to the globalization, the organizations are more and more concerned about other factors beyond the economic ones. Because of this new concern, they are beginning to implant administration systems to help in the management of these stakeholders. These systems start to exist in the organization together with the system of quality management. For this reason, the authors propose an expansion from the concept of TQM (Total Quality Management) for the concept of TRM (Total Responsibility

Management) that starts to contemplate the needs and concerns of all the stakeholders that interact with the organization.

The third generation of the quality movement rises that way. It is a generation based on the inclusion of the socio-environmental variables in the current models of organizational management. Jonker (Jonker , 2002), Van Marrewijk (Van Marrewijk et al. , 2004) and Waddock & Bodwell, (Waddock et al. , 2002) indicate that the changes in the organizational administration systems should begin for the changes in the structural pillars of the organization (values, foundations, vision, mission), transforming, thus, the organization as a whole, defining new work means, new objectives and goals, as well as new evaluation tools that include the evaluation of the socio-environmental factors. This idea is reinforced by Castka (Castka et al. , 2004) for who any model of change of the management implemented in the organization should be took as a change in the organizational philosophy that should include all the existent processes in the organization.

Through this evolution, it is explicit the need of expansion from the quality concept (TQM) to a larger concept in what could be appraised the relationships of the organization to the environment and society. But it is pertinent to do the question regarding the form how would be implemented the insertion of these new socio-environmental variables in the organization management.

Both Karapetrovic (Karapetrovic , 2003) and Dale & Wilkinson (Wilkinson et al. , 2001) refer to the existence of a varied range of researches and works focused in the analysis of different ways of passage from the second to the third quality generation, indicating the need of integration models definition capable to help the organizations in the implementation these new forms of administration.

Dale and Wilkinson (Wilkinson et al. , 2001) demonstrate the existence of two possible ways of passage for the third quality generation. The first of them happens through the integration of the different administration systems in a great and integrated administration system that consider equally systems of quality, environmental, health and safety among others. The second one happens through the expansion of the concept TQM, to which would be incorporated the socio-environmental factors, through the satisfaction of the needs of all the stakeholders and not only of the customers.

Karapetrovic follows the same train of thought of Dale and Wilkinson, indicating that this passage for the third quality generation can happen through two different roads to which the quality concept is associated.

Karapetrovic defines quality as the ability the organization possesses to satisfy the customer. Analyzing this definition, Karapetrovic indicates that the first step in this evolution happens when the organization do not tries only to satisfy its customer but all the other stakeholders that are related to the organization. The second step happens due to a change in the ability of fulfillment of the costumer's needs - this ability passes from a simple fulfillment of the needs to a fulfillment of these same needs with excellence. (See Figure 2)

As we can see in the Figure 2, on the first road, the organization begins satisfying some of the customers' needs through some administration system deployment (spot A); the evolution of the organization begins when it begins to give attention to other stakeholders (other systems implantation as ISO 14.000 and OHSAS 18001), it is when the organization passes from spot A to spot B. The passage from the spot B to the spot D happens when the organization feels the need of an Integrated Management Solutions (IMS), setting down the third generation of administration systems.

This second passage happens when the organization begins its road to the excellence (the total satisfaction of the customers' needs), passing from the spot A (quality administration system) to the spot C (excellence system focused on the customer). In this case, when the organization begins to focus on the satisfaction of the stakeholders higher than the customers, it would be passing from the spot C to the spot D, characterizing the third generation of the quality movement.

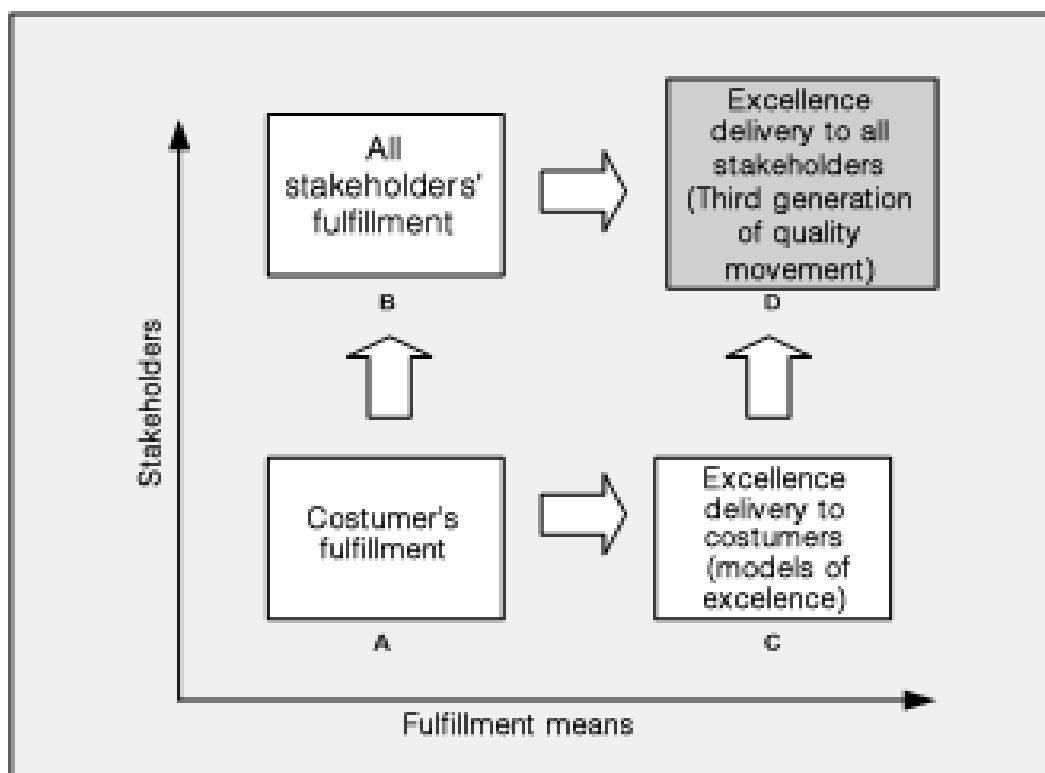


Figure 1: Evolution for the third quality generation
Source: (Karapetrovic , 2003)

Another train of thought points the existence of a third way to reach the satisfaction of the needs of different stakeholders (third generation of the quality movement). This third passage would occur through the dialogue with the different stakeholders, identifying, through this dialogue, their interests, which would have an important incidence in the strategic planning of the organization and in their operational processes. Through this new alternative, the Karapetrovic outline can be reformulated, incorporating a new type of passage which would happen in a direct way among the spots A and D (see Figure 2).

Following the incorporation of this new vision, three forms of passage from the second quality generation to the third quality generation can be identified (see Figure 3):

- Through the integration of the different existent administration systems in the organization;
- Through the extension from the excellence concept to the concept of sustainable excellence;
- Through the incorporation of the dialogue with the stakeholders of the organization.

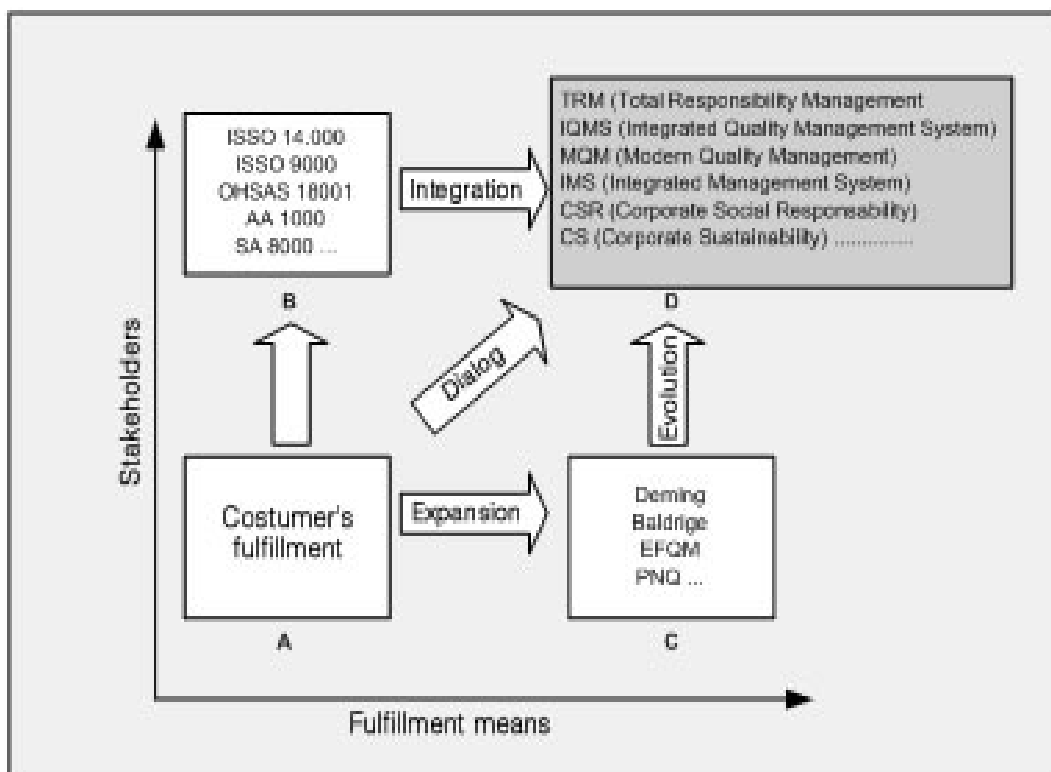


Figure 3: Three evolution roads for the third quality generation
Source: Adaptation by the authors' of Karapetrovic (Karapetrovic , 2003)

In this work we emphasize the third form of passage, through the expansion of the excellence concept, to a concept of sustainable excellence.

Third Quality Generation through the Extension of the Excellence Concept to the Concept of Sustainable Excellence.

The excellence is seen as a synonymous of TQM, which is applied in the organizations through different existing models in the world (BEM - Business Excellence Model). These models present a methodology that, through the use of a self-assessment tool, helps the organizations measure its degree of adherence to the

model in subject. Through these models incorporation of the concepts associated to the sustainable development, (motivated by stakeholders pressures or by the competitive structure of the market) the organization would be evolving to the third generation of the quality concept.

Edgeman, in his article “Measuring Business Excellence: an expanded view” (Edgeman , 2000), exposes a general vision of his proposal of an excellence model that, besides the quality, considers the social, environmental, and technological factors. Edgeman nicknamed this model as “BEST Business Excellence” in which the acronym BEST refers to the four basic components of the model of sustainable excellence proposed by him: B – Biophysical; E – Environmental; E – Economic; S – Societal and T – Technology (Hensler et al. , 2002). According to Edgeman, this model tries to unite the concepts of sustainable development to the excellence models.

Edgeman indicates that the basis of the excellence models (or of the performance measurement) is in the foundations and criteria that his model defined, through which application can guide the organization in its road to the excellence.

Edgeman indicates that his model is based on the insertion of principles and socio-environmental criteria through which the organization could evaluate its level of adherence to the business sustainability, through the BEST pillars (B – Biophysical; E – Environmental; E – Economic; S – Societal and T – Technology).

This relationship between sustainable principles and excellence models can also be found in the model of McAdam and Lambert (McAdam et al. , 2003). According to them, the organization should identify sustainable principles and values of performance, which would come to permeate all the processes and structures of the organization (planning, processes and results). The definition, application and measurement of these principles should be accomplished taking into account the different social players with which the organization interacts.

The first foundation refers the expansion from the excellence models to the models of sustainable excellence, in which the associated concepts related to the social aspects as well as to the environmental ones should be inserted in all criteria of the excellence evaluation. (see Figure 4).

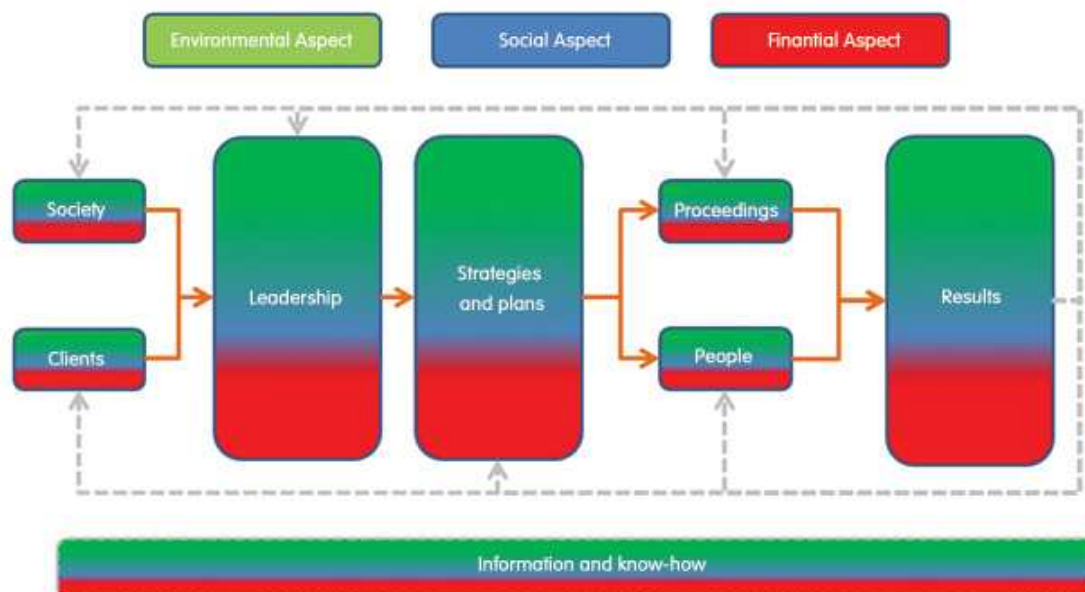


Figure 4: Adaptation of the McAdam and Lambert model (McAdam et al. , 2003) to the excellence model of the National Foundation of the Quality (FNQ, 2008)

Source: The authors

Second foundation - Values and Organizational Behavior to the Corporate Social Responsibility

The Second foundation of the model refers to the organization behavior to its **Socio-environmental responsibility**, which will depend both of the individuals' values and of the organization's values.

Individual Values

According to Schwartz (Schwartz, 1999) the values refer the way people react or behave in different life situations. They are criteria or goals that guide the individuals' life and the way they behave. Agle and Caldwell (Agle et al. , 1999) indicate that the values are integral part of the people's lives, and it is determining, modifying and regulating the relationships among individuals, organizations, institutions and society. For Rokeach (Rokeach, 1968) the values are manners of conduct; it is the belief that a certain way of conduct is better than other. A value is a pattern of behavior that is applicable for several purposes in the human life. Based on their structure of values the individuals act, evaluate and make judgment of actions and attitudes.

Schwartz (Schwartz, 1999) indicates that the values are forms used by the different social players (organizational leaders, politicians, and common people) to behave, to evaluate the other ones behaviors, as well as to explain and to judge the other's behaviors.

For Schwartz and Bilsky (SCHWARTZ et al. , 1987), Tamayo et al (Tamayo et al. , 2000) and (OLIVEIRA et al. , 2004) the values are cognitive representations of three types of universal human needs:

- Biological needs of the organism;
- Need of social interaction for the regulation of the interpersonal relationships, and;
- Socio-institutional needs, that aim the well-being and survival of the group.

Thus, to manage the reality, the individuals have to recognize those needs and to drift, create or learn appropriate answers for its satisfaction. This satisfaction, however, should happen through acceptable forms for the rest of the group. The values, that are principles and goals that orientate the individual's behavior, arise like this.

Organizational Values and Organizational Behavior

According to Rokeach (Rokeach, 1968) and Oliveira & Tamayo (OLIVEIRA et al. , 2004) the individual values definition can be used to define the organizational values. In this article the definition of values of Rokeach will be used to define the organizational values as the ones that orientate the individuals' behavior of an organization (shared values). Paarlberg (Paarlberg et al. , 2007) refers to the organizational values as the principles that guide the behavior of an organization; these principles are also known as organizational culture. Erez (Erez et al. , 2004) defines organizational culture as a group of beliefs and values that are shared by the members of the same organization; Tamayo (Tamayo et al. , 2000) refers to the organizational culture as a group of values existent in the groups that are shared.

For Erez (Erez et al. , 2004), Tamayo (Tamayo et al. , 1996) and McDonald (McDonald et al. , 1991) the importance given to the organizational values is due to the establishment of the administration practices in the organization. For Agle & Caldwell (Agle et al. , 1999) the organizational values have a strong relationship with the strategies proposed by the organization. Oliveira & Tamayo (OLIVEIRA et al. , 2004) indicate that the values have important organizational functions: the first of them regards the creation, mainly among the employees, of mental models that help in the fixation of the objectives and of the organization mission; the second one refers to the fact that the organizational values help in the construction and fixation of the organizational identity. Tamayo et al (Tamayo et al. , 2000) argue that the organizational values are decisive in the employees' performance, satisfaction in the work and in their productivity.

Organizational Continuous Ethics

In spite both the theory and the practice evidence an organic and committed supposed relationship, it is relevant to question: how to know, in fact, if the organization behavior is an appropriate one? Joyner & Payne (Joyner et al. , 2002)

argue that this behavior can be evaluated through the usage of the ethics concept, specifically of the corporate ethics. Raiborn (Raiborn et al. , 1990) defines this corporate ethics as: a system of values and of organizational principles that are associated to a definition of right or wrong.

In Joyner and Payne vision, the organization's ethical behavior can be understood as a continuum one. In one extremity of this continuous is an ethical-legal behavior, in which the actions that the organization accomplishes are a minimum necessary for the execution of the laws and ruling norms. On the other extremity of the continuum is an ethical-moral behavior, in which the actions that the organization accomplishes aim to reach the individuals' well-being as well as all society groups well-being. Between an extremity and another of the continuum, it can be identified other types of behaviors associated to this ethical continuum (see Figure 5).

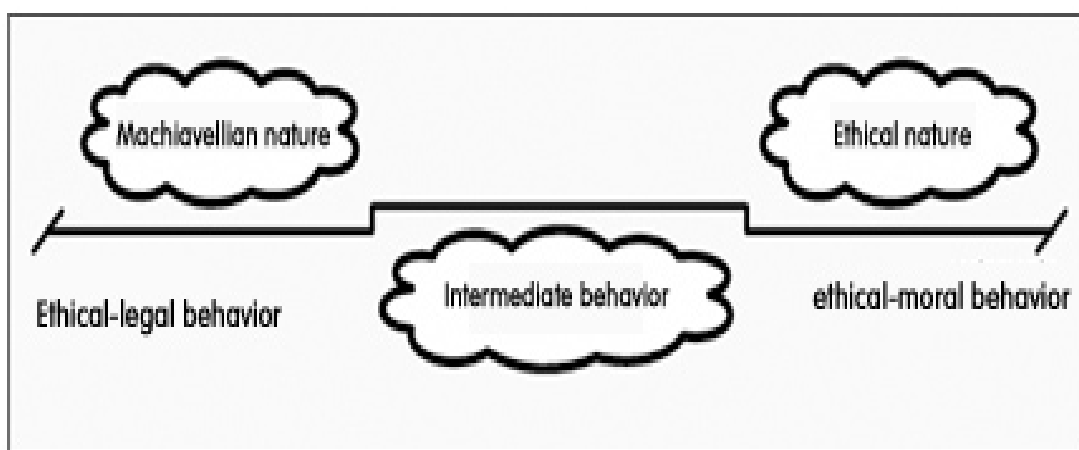


Figure 5: Ethical continuum
Source: the authors

For Porter and Kramer (Porter et al. , 2006), from Harvard Business School, the companies that answer to the call of the social responsibility can make it adopting a reactive or strategic approach. What defines one and another approach is the ethical involvement of the company with the society issues.

In this train of thought, some authors like Carroll (Carroll, 1979; Carroll, 1991; Carroll, 1998; Carroll, 2000a; Carroll, 2000b), Raiborn & Payne (Payne, Dinah. et al. , 1997), (Raiborn et al. , 1990) and Van Marrewijk (Van Marrewijk , 2004) (Werre et al. , 2003) also identify different responses from the organizations to its social responsibility.

For Carroll (Carroll, 1979; Carroll, 1991; Carroll, 1998; Carroll, 2000a; Carroll, 2000b), the possible strategies are:

- Reaction: The organization is concerned about the social aspects (socio-environmental) due to the existent legal mark that includes the organization; the organization is forced to interact.
- Defense: The organization interacts with the social aspects to avoid and to flee, thus, the pressures that could exist (legal and social) due the fact of its lack of socio-environmental concern.
- Accommodation: The organization is concerned with the socio-environmental aspects just because they exist; without any other interest. The organization just does it because the company wants to do it.
- Proaction: The organization, in a voluntary way, interacts with the socio-environmental aspects looking forward to the problems that the organization could cause, only for the fact that it is the right thing to be done.

However, Raiborn & Payne (Payne, Dinah. et al. , 1997), (Raiborn et al. , 1990) classify them as:

- Basic level: In this basic level the organizations just accomplish what the laws and associated regulations indicate that should be done; They don't do anything beyond it.
- Current attainable level: In this level the behavior of the organization is accepted by the society, in general. The organization accomplishes the laws and regulations, although it is also characterized by its lack of effort and of dedication in regard to the socio-environmental problems.
- Practical level: In this level organization tries to make an effort to find some solution to the socio-environmental problems existent.
- Theoretical level: In this level the organization presents an ethical-moral behavior turned completely for the solution of the socio-environmental problems caused by the existence of the company.

Finally, Van Marrewijk (Van Marrewijk , 2004) and Werre (Werre et al. , 2003), classify them in:

- Compliance-driven corporate sustainability: The corporate social responsibility at this level consists of providing welfare to society, within the limits of regulations from the rightful authorities. In addition, organizations might respond to charity and stewardship considerations. The motivation for CS is that CS is perceived as a duty and obligation, or correct behavior.
- *Profit-driven CS*: In this level the corporate social responsibility consists in the integration of the ethical, social and environmental aspects in the organization management, contributing to the maximization of the profits and minimization of the risks. The corporate social responsibility actions are always developed and promoted aiming the economic well-being of the organization.

- *Caring CS*: In this level the corporate social responsibility consists in the balancing of the economic, social and environmental aspects, being that all of them are important in the organization. The corporate social responsibility goes beyond the legal indulgence and of the search for the profit or for the risks minimization.
- *Synergistic CS*: In this level the social responsibility consists of a search for well-balanced, functional solutions creating value in the economic, social and ecological realms of corporate performance, in a synergistic, win-together approach with all relevant stakeholders. The motivation for CS is that sustainability is important in itself, especially because it is recognized as being the inevitable direction progress takes.

These classifications can be summarized in the following board:

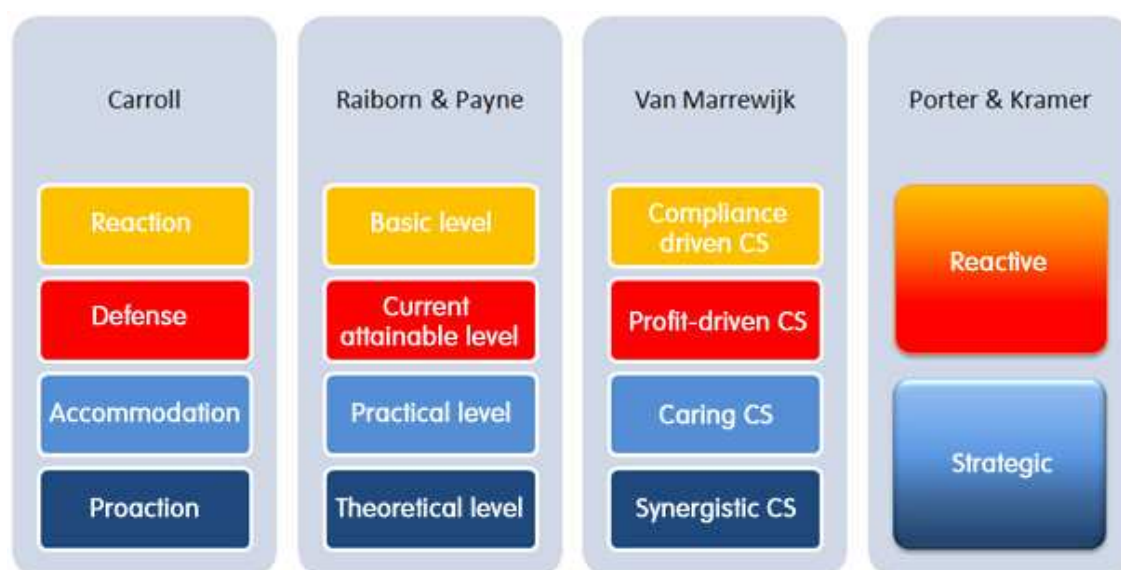


Figure 2: Responses to the Corporate Social responsibility

Source: Adapted from Carroll (Carroll, 1979; Carroll, 1991; Carroll, 1998; Carroll, 2000a; Carroll, 2000b), Raiborn & Payne (Payne, Dinah. et al. , 1997), (Raiborn et al. , 1990), Van Marrewijk (Van Marrewijk , 2004) and (Werre et al. , 2003).

The organization has to take account of the economic, social and environmental variables in any corporate social responsibility system evaluation, since these three variables are the pillars of all kind of sustainable actions (Elkington, 2000). Authors like Sachs (Sachs, 1993) in (Oliveira, 2002) and Wilsdon (Wilsdon 1999) (5K Model) increase another variables that should be addressed in the course of the corporate social responsibility studies. Only the economic, social and environmental variables were considered for the development of this model, as the Figure 7 displays. The intersection of these 3 variables is known as the tripod of the sustainable development or of the corporate social responsibility.



Figure 7: Tripod of the sustainability
Source: Adapted from Elkington (Elkington, 2000)

Ketola (Ketola, 2007) indicates that the evaluation of the corporate social or sustainable performance should take into account each one of these variables, as well as the relations between each one of them.

Ketola (Ketola, 2007) defines the evaluation of the corporate social responsibility through the analysis of the behavior of the organization in relation to each one of the variables asunder (economic, social and environmental), giving in the end one evaluation that considers these three variables connectedly. (Figure 8)

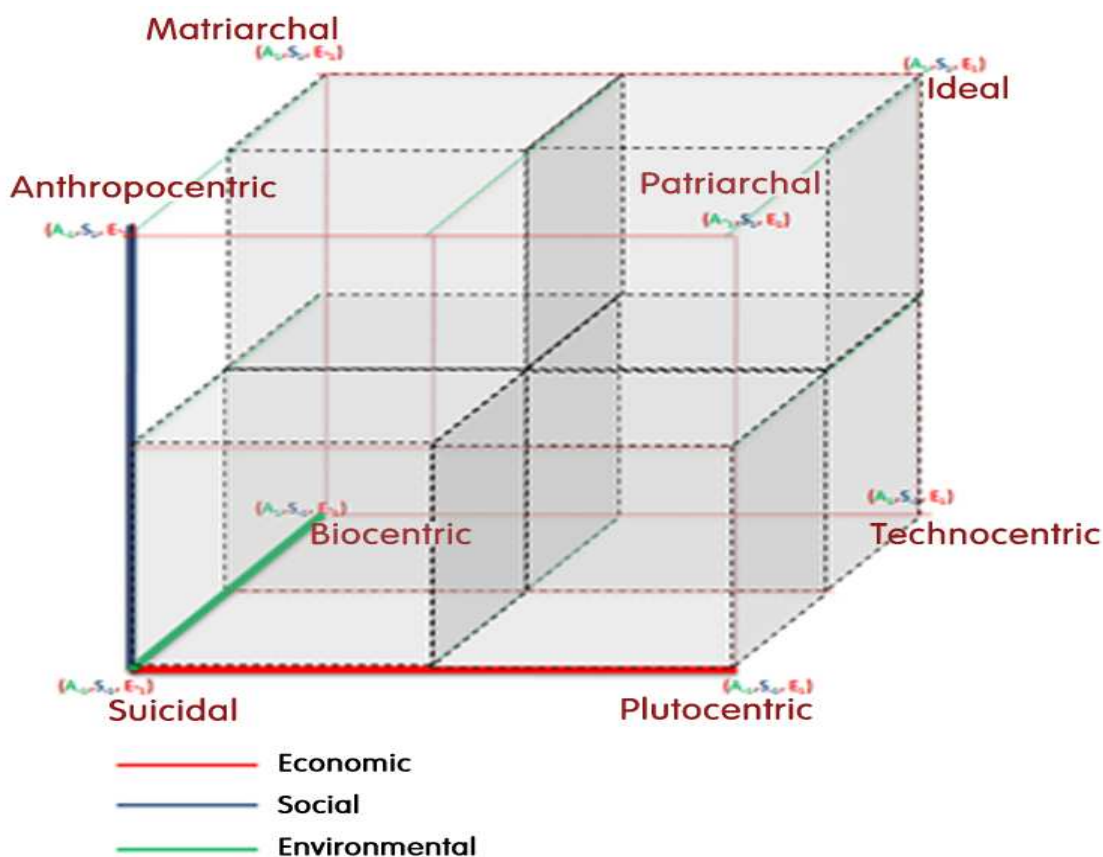


Figure 8: Ketola's Cube
Source: Adapted from Ketola (Ketola, 2007)

The behaviors of each one of the cube vertexes are characterized according to Ketola in the following way (Table 1):

Level	Responsibility Extent		
	Economic	Social	Environmental
Suicidal	-1	-1	-1
Biocentric	-1	-1	1
Anthropocentric	-1	1	-1
Matriarchal	-1	1	1
Plutocentric	1	-1	-1
Technocentric	1	-1	1
Patriarchal	1	1	-1
Ideal	1	1	1

Table 1: Corporate social responsibility behaviors according to their dimensions.

Source: (Ketola, 2007)

The second fundament of the model says that the responses of the organizations to its socio-environmental responsibility may be found in some position of the ethical continuums of the organization. These responses have to be seen in a separate way, since the different behaviors of the organization responsibility (social / environmental and economic) may have different positioning (degrees of maturity or of response) inside of the ethical continuum.

Third Foundation: Integrated Vision of the Corporate Social Responsibility

The third foundation refers to the understanding and insertion of the corporate social responsibility concept in the organization.

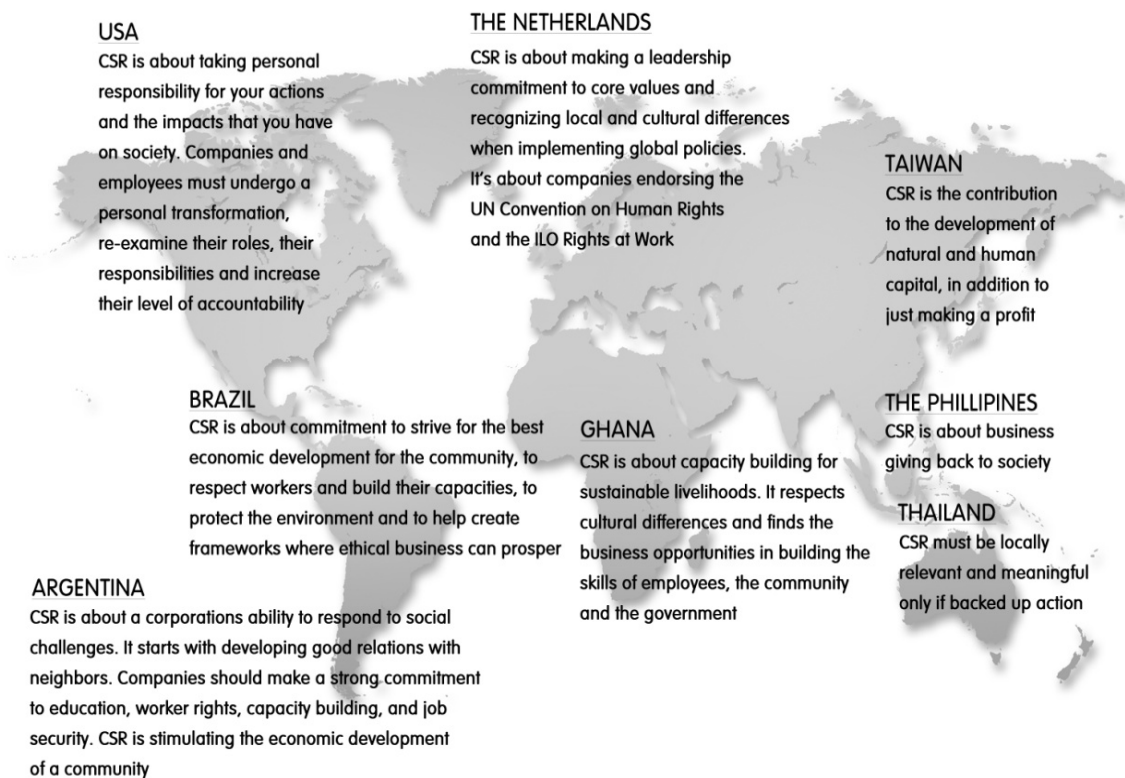
Corporate Social Responsibility: Definitions

Several studies and definitions in the literatures associate the concept of the organization to their economic, social and environmental impacts (Valor, 2005). Valor (Valor, 2005) indicates that the same author can use different definitions associated to this concept in the same article or in different ones. One of the approaches more commonly associated to this concept is known as corporate social responsibility. This denomination has a series of different definitions, with barely defined borders and completely questionable legitimacy (Lantos, 2001).

The corporate social responsibility is also discussed in the literature through themes as: corporate citizenship; corporate philanthropy; corporate responsibility; governance; environmental and sustainable development. All these concepts are used to characterize both the responsibility of the organization to their stakeholders and the social, environmental and economic impacts caused by its operation (Murray et al. , 2007).

According to Murray & Hazlett et al (Murray et al. , 2007) the corporate social responsibility has been defined in different ways, for instance: as concept; as term; as theory and / or as an activity or group of activities.

For the WBCSD in (Holme et al. , 2000), the concept associated to the corporate social responsibility will depend both of the country, of the economic section, and of the type of business where the organization is inserted. For instance, the concept associated to the corporate social responsibility used in Brazil is different from the concepts used at other countries of the world. These different visions of corporate social responsibility were developed in 1998, in the first international forum to discuss CSR issues, which was promoted at Netherlands in 1998 for WBCSD (see Figure 9).



*Figure 9: Surrounding regional definitions of corporate social responsibility according to World Business Council for Sustainable Development
Source: Adapted from Holme (Holme et al. , 2000)*

Systemic integration of the concept of Corporate Social Responsibility

Archie Carroll was the first one that worked with this concept of the corporate social responsibility in a integral or systemic way. In 1979 he developed a model called “Organizational Social Performance Model” (Carroll, 1979) in (Joyner et al. , 2002) (Figure 10), through which were integrated the socio-environmental pressures of the society, the forms of responsibility that the organization assumed, as well as the ways these responsibilities were accomplished.

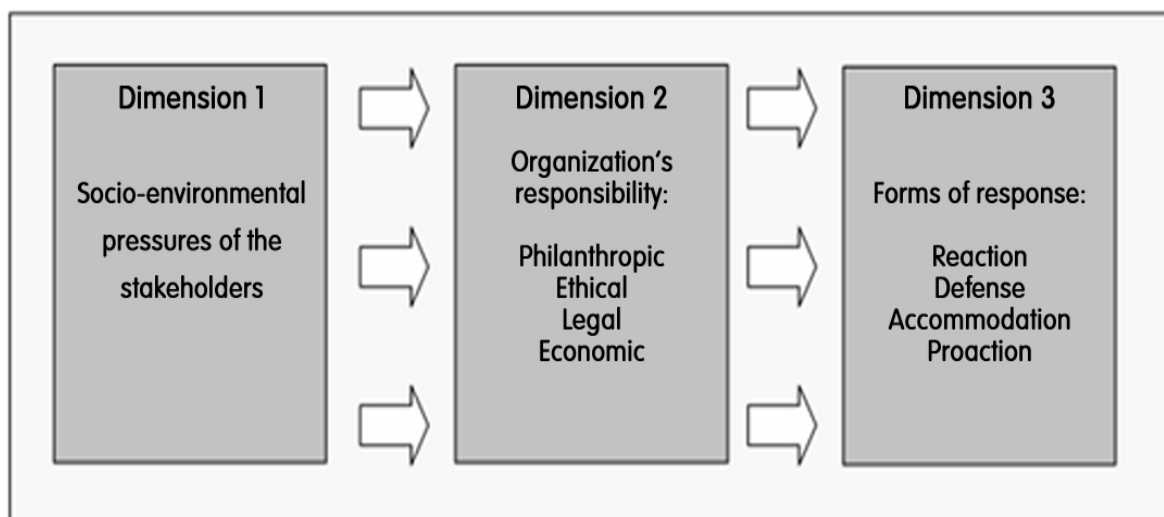


Figure 10: Organizational Social Performance Model

Source: (Carroll, 1979) in (Joyner et al. , 2002)

Wartick & Cochran (Wartick et al. , 1985) give an evolution of the Carroll's model (Figure 11). They argue that the organization corporate social responsibility performance model is one of the first models that look to the corporate social responsibility from an integral point of view. they propose an evolution in the Carroll's model indicating that the corporate social responsibility can be seen through 3 dimensions.

The model of Wartick & Cochran (Wartick et al. , 1985) develops the Organizational Social Performance Model, in relation to the concept associated to the dimension of the stakeholders' socio-environmental pressures. In this new proposal this dimension shall known as social politics or administration aspects, where the social problems, are identified and analyzed for a subsequent implementation in the different ways of response that the organization will implement.

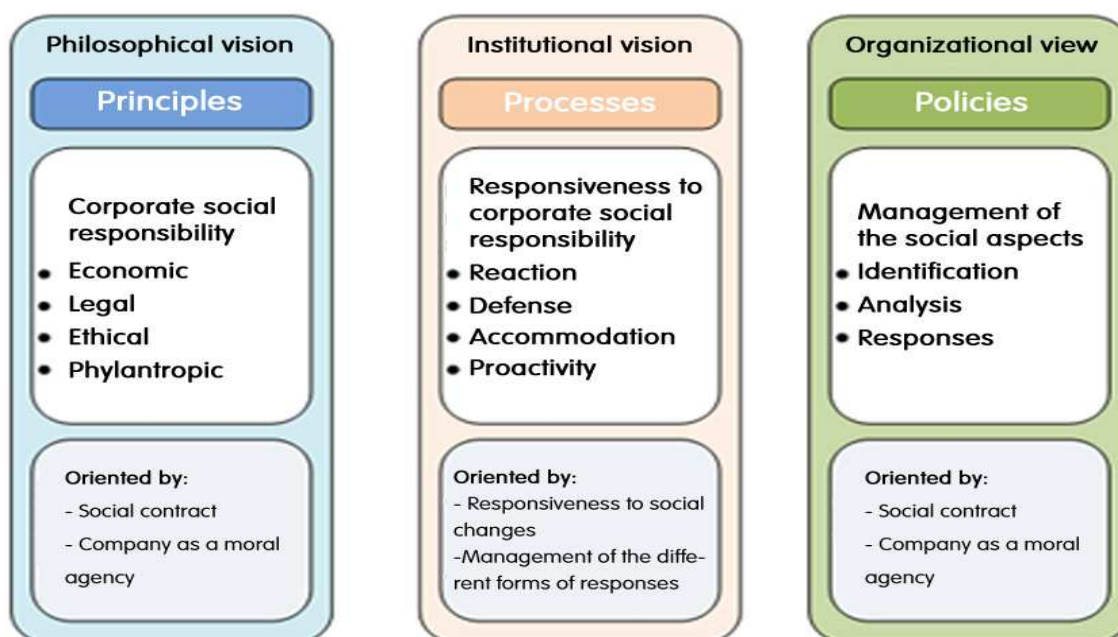


Figure 11: Corporate Social Responsibility Model of Wartick & Cochran

Source: (Wartick et al. , 1985)

Donna Woods (Wood , 1991) uses both the models definitions of Carroll and of Wartick & Cochran to propose an evolution of the social model of the organization's performance, arguing that the model to insert the social responsibility in the organization should possess 3 dimensions (see Figure 11): the first dimension of principles; the second, of processes and the third, of results. This third dimension of results may have a function similar to the social politics dimension defined for Wartick & Cochran. For Wood, the corporate social responsibility would be a consequence of the principles of the organization to its social responsibility. In this context, these principles will be reflected through the processes of the organization and might be analyzed through the results given by the organization.

Woods still increases this model proposal the relationships of the organization, in its different contexts of performance. These relationships are: the responsibility of the organization to the society (social contract), the responsibility of the organization to the products and services offered and, lastly, the responsibility of the organization to the individuals that work in it (Figure 12).

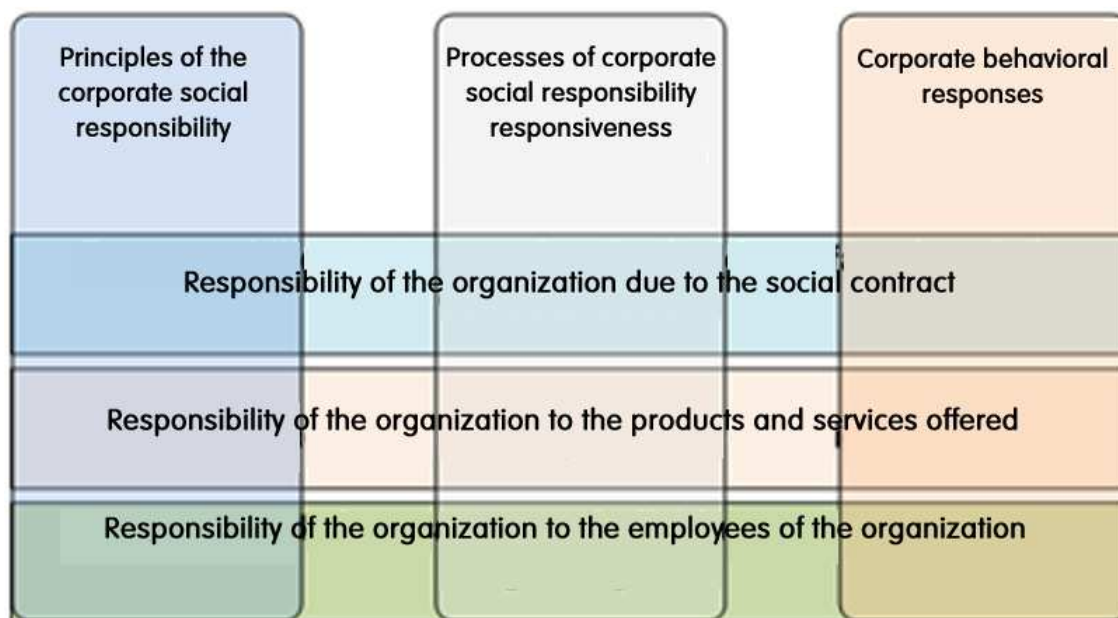


Figure 12: Woods' Model of Corporate Social Responsibility
 Source: (Wood , 1991)

Another model that complements this vision regarding the integral management of the corporate social responsibility is the integral model of Wilber (Wilber, 1997), (Varey , 2008), (Varey, 2008b), known as AQAL (All quadrants All Levels). This model indicates that the concepts and definitions used by the organization in relation to the corporate social responsibility has to include 4 performance quadrants (see Figure 13); these 4 quadrants have to be treated jointly so that the organization could put itself in the corporate social responsibility road.

		Interior	Exterior
Individual (Upper)	Individual or intentional stance	<ul style="list-style-type: none"> - Personal values - Needs fulfillment - Preservation of the life style 	Individual behavior <ul style="list-style-type: none"> - Climatic changes - Pollution levels - Use of the resources
	Collective (Lower)	Culture <ul style="list-style-type: none"> - Ethical and moral principles - Inheritance of preservation and sharing 	Structures, tools and apparatus <ul style="list-style-type: none"> - Norms - Certification - Reports - Indicators models

Figure 13: Wilber's Model

Source: (Wilber, 1997) (Varey , 2008), (Varey, 2008b)

Bill Varey (Varey , 2008) also shows that any concept of corporate social responsibility is pegged to the scoping, depth and temporality characteristics. Varey argues that all definitions of sustainability can be constructed through these 3 variables (Figure 14):



Figure 14: Aspects associated to the concepts of corporate social responsibility

Source: Adapted from Varey (Varey , 2008)

According to Varey, the definitions associated to each one of these concepts are the following:

- Depth: what will be valued – This concept is associated to the values that are related to the sustainability concept, identifying, thus, the foundations of the sustainability concept development.
- Scoping: who will be benefitted with these concepts implementation – Refers to the boundaries of the concept implementation, identifying who will be benefitted by the concept and which will be the borders of this concept expansion.
- Time: How far this concept can be visualized – It indicates the time in which this concept will be implemented.

For authors as Carroll (Carroll, 1979) in (Joyner et al. , 2002), Wartick & Cochran (Wartick et al. , 1985), Wood (Wood , 1991), Wilber (Wilber, 1997), Varey (Varey , 2008; Varey, 2008a; Varey, 2008b) and Wood (Wood , 1991), the corporate social responsibility has to be seen inside of the organization in an integral and holistic way. In first way, considering the CSR as an integral structure, in which the visions in long and short terms have to be included. Also has to be included the internal and external agents that are related with the organization, as well as the tools that will be developed and used.

Thus, the corporate social responsibility should be assumed by the organizations in an integrated way, showing that the organization possesses a corporate social responsibility to the society in which it is inserted, to the products and services that the organization offers, and to the people with which it interacts. (see Figure 15).

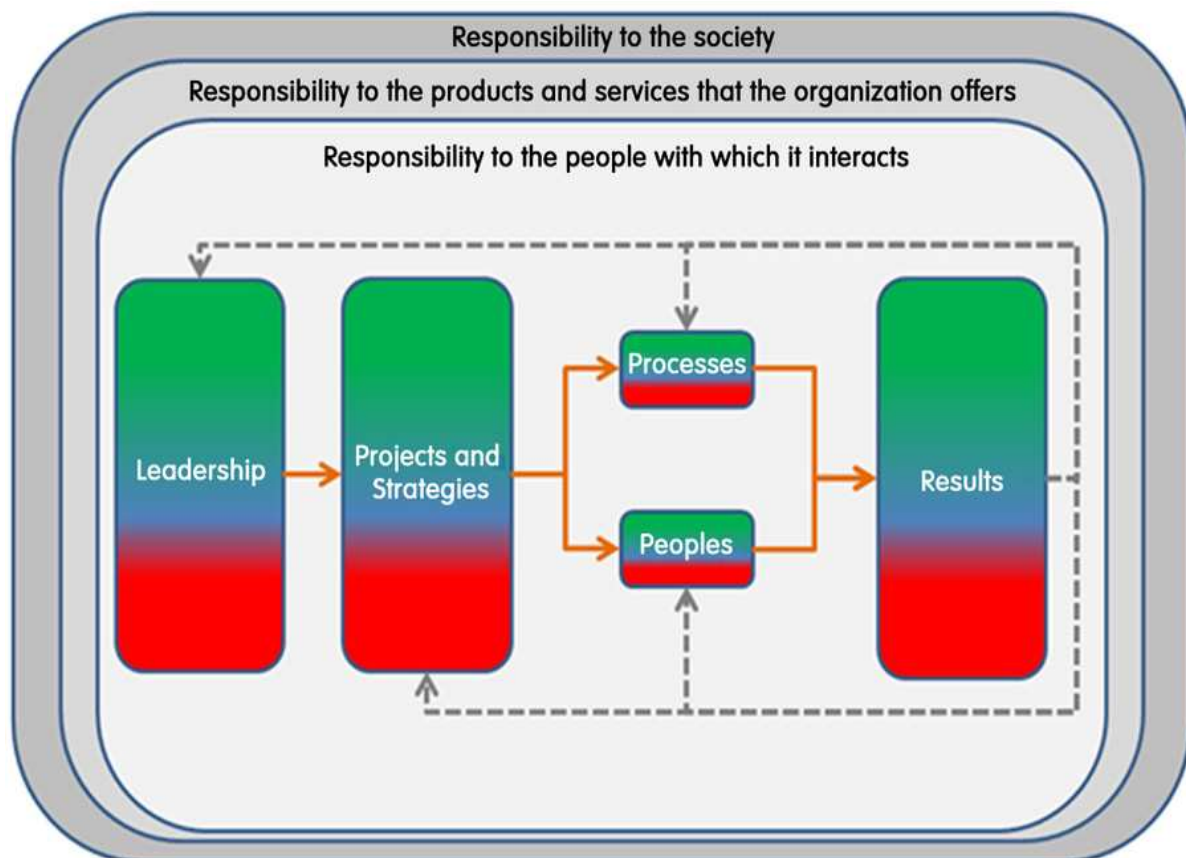


Figure 15: Model of sustainable excellence with the different levels of responsibility of the organization.

Source: The authors

Analyzing the Figure 15, we can notice that the themes of leadership, strategies and plans, as well as results, has a direct relationship with the three levels presented in the illustration (Responsibility to the society; Responsibility to the products and services that the organization offers; Responsibility to the people with which it interacts). However, the theme of processes is directly related with the responsibility for the products and services provided by the organization and the theme of people is directly related with the level of responsibility of the organization to the people that interact with it. As a result, it is possible to draw a new illustration (see Figure 16)

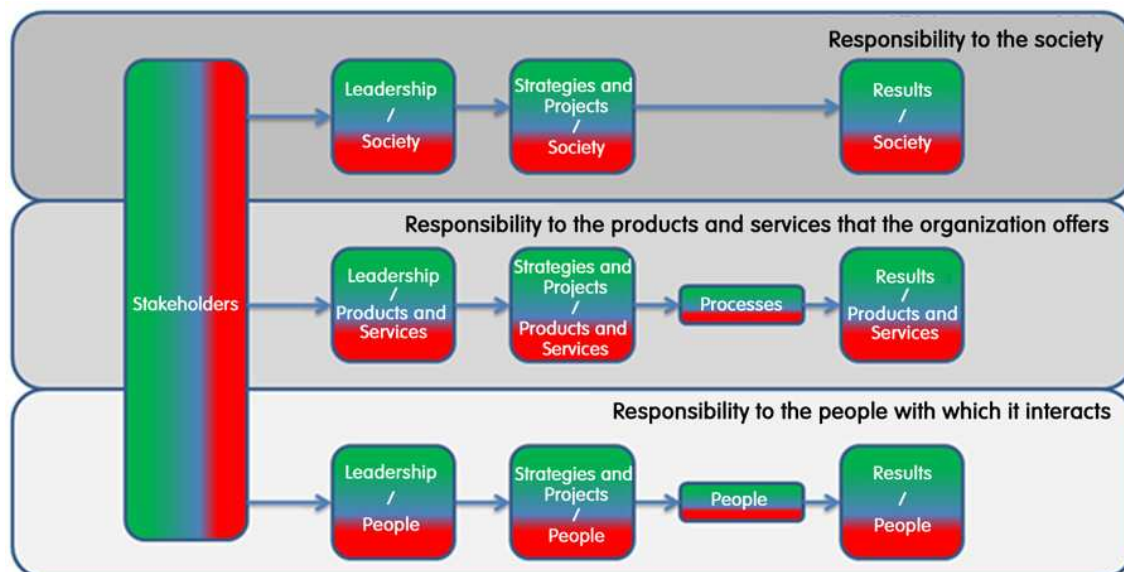


Figure 16: Model of Excellency and its relationships in a corporate social responsibility integrated vision.

Source: The authors

The third foundation indicates that the corporate social responsibility should be analyzed as a whole in the organization, from the leadership aspects, which are influenced by the individual and the organizational values, including all the organization chain, and even the results. These results should reflect the strategies defined by the leadership on each level of responsibility of the organization.

Model Specifications

The structure of the model of sustainable excellence is defined through these three foundations. The model aims to evaluate the economic, social and environmental excellence of the organization administration as an integrated set, considering the relationship of the organization with society, with the products and services offered, and with the stakeholders.

This evaluation should consider the different aspects that have been part of the organization (leadership, strategies, processes, people and results) and their responsible relations in their different operational levels.

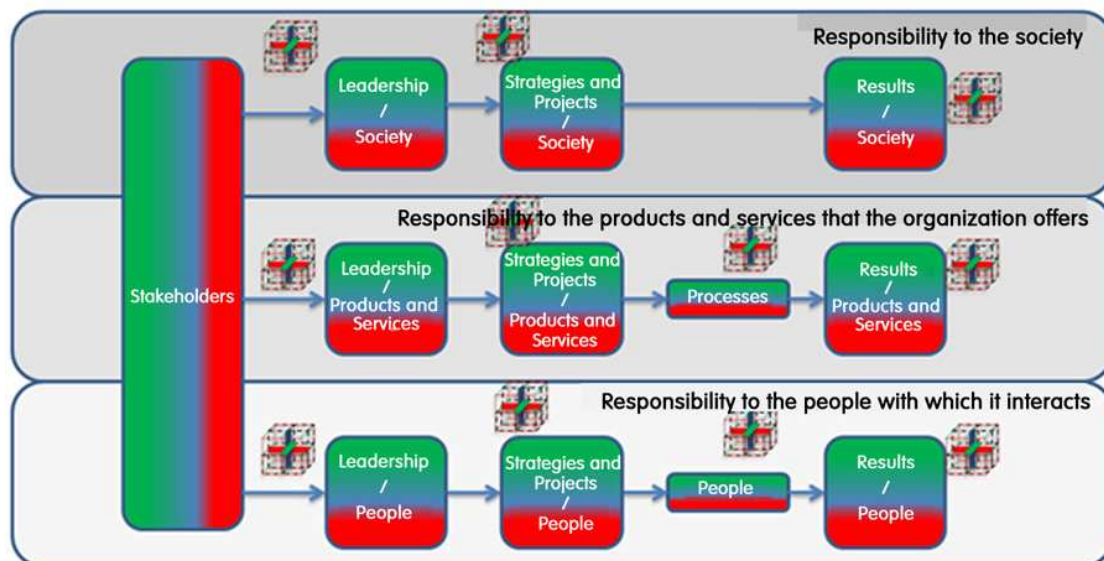


Figure 17: Proposal of model evaluation of sustainable management in the organizations.

Source: The authors

Conclusions and Final Considerations

This article presented a model proposal for evaluation of the sustainable management of the organizations. For the authors the evaluation of the organizational sustainability has to be seen as a whole, knowing that the company is an integral being who has several types and degrees of relationships. At the present time there are countless definitions of corporate social responsibility (organizational sustainability), but these definitions always treat the corporate social responsibility in an insulated way, treating only some aspects of the organization's relationship with its different types of responsibility.

The most used representation of the sustainable evaluation is known as 'Triple Bottom Line', in which the sustainability is the intersection of the economic, social and environmental aspects.

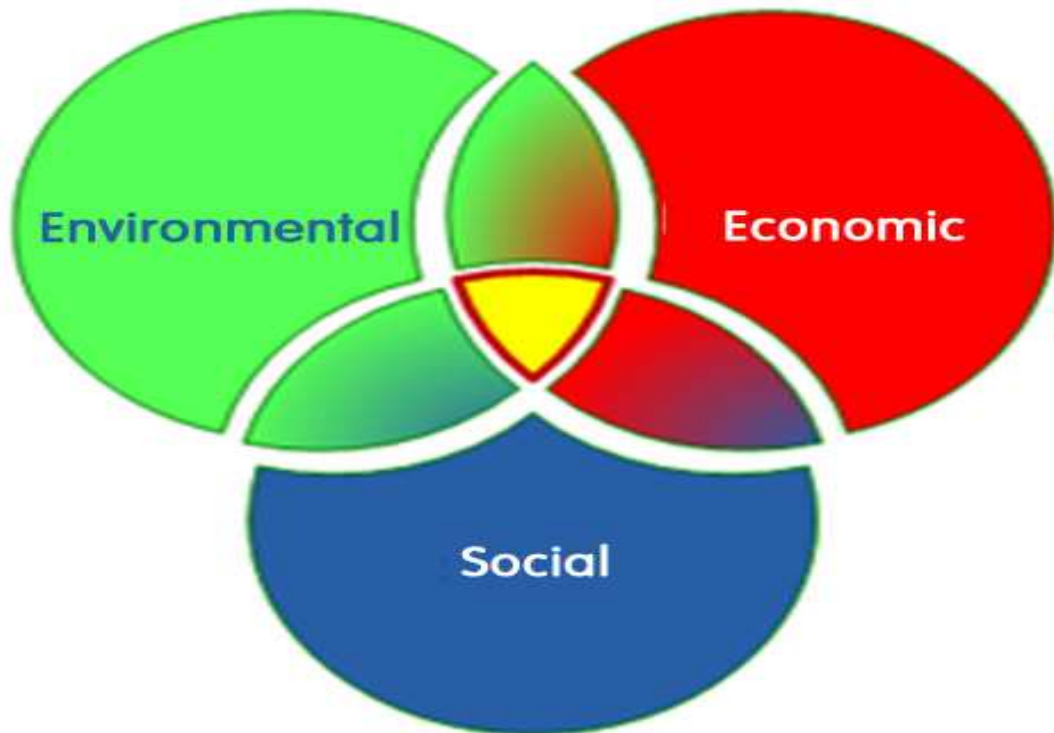


Figure 18: Sustainability

Source: Adapted from Elkington (Elkington, 2000)

According to the authors, the corporate social responsibility is characterized not only by the intersection of these three aspects but also by the different options of relationship existent among the three basic pillars of the sustainability (see Figure 19). Thus, the sustainability would have to be evaluated through the evaluation of these different relationships among these three pillars: economic, social and environmental.

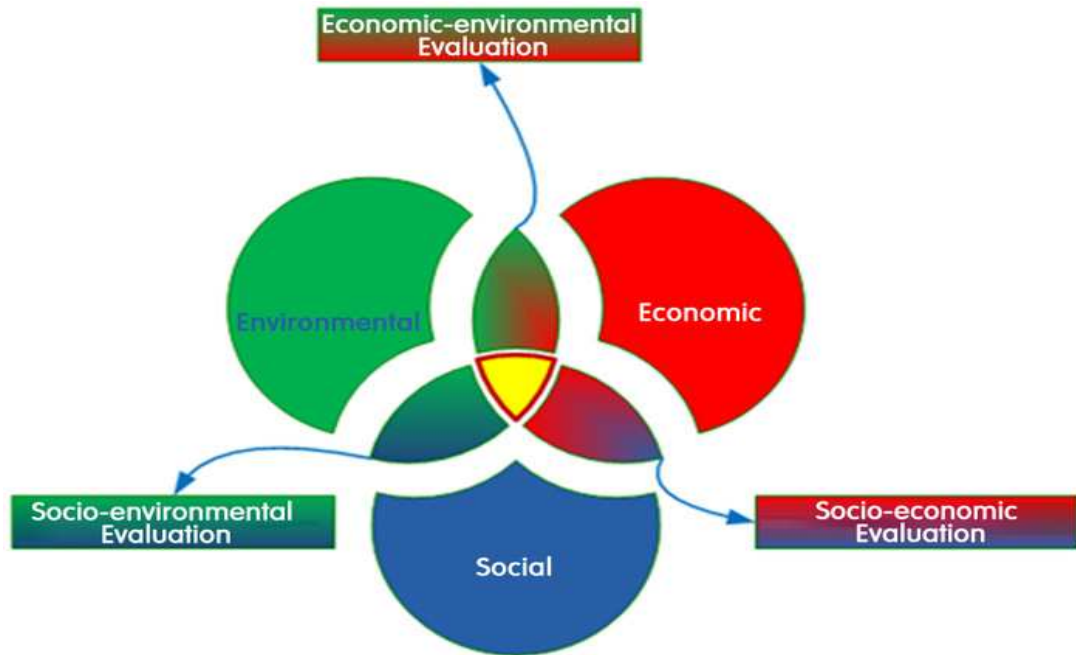


Figure 19: Relationships took into account for the organizational sustainability evaluation.

Source: The authors

This work is still developing the research instrument based on the model proposal. The following step of this work is the analysis and tabulation of the data obtained with the application of the research instrument.

References

- Agle, B. R. & C. B. Caldwell.(1999). Understanding Research on Values in Business: A Level of Analysis Framework. *Business Society* 38 (3): 326
- Carroll, A. B.(1979). A Three-Dimensional Conceptual Model of Corporate Performance.4(4): 497-505.
- Carroll, A. B.(1991). The pyramid of corporate social responsibility: toward the moral management of organizational stakeholders. (balancing economic, legal, and social responsibilities). *Business Horizons* 34 (4): 1-39.
- Carroll, A. B.(1998). The Four Faces of Corporate Citizenship. *Journal of the Center for Business Ethics at Bentley College* 100 (1): 1-7.
- Carroll, A. B.(2000a). A Commentary and an Overview of Key Questions on Corporate Social Performance Measurement. *Business & Society* 39 (4): 466
- Carroll, A. B.(2000b). Ethical Challenges for Business in the New Millennium: Corporate Social Responsibility and Models of Management Morality. *Business Ethics Quarterly* 10 (1): 33-42.
- Castka, Pavel, Christopher J. Bamber, David J. Bamber& John M. Sharp.(2004). Integrating corporate social responsibility (CSR) into ISO management systems – in search of a feasible CSR management system framework. *The TQM Magazine* 16 (3): 216-224.
- Edgeman , Rick L.(2000). Best business excellence: an expanded view.*Measuring Business Excellence* 4 (4): 15-17.
- Elkington, J.(2000). Cannibals With Forks: The Triple Bottom Line of 21st Century Business. *Journal of Business Ethics*; 23 (2):
- Erez, Miriam & Efrat Gati.(2004). A Dynamic, Multi-Level Model of Culture: From the Micro Level of the Individual to the Macro Level of a Global Culture. *Applied Psychology* 53 (4): 583-598.
- FNQ, Fundação Nacional da Qualidade. (2008). Critérios de Excelência 2009. Fundação Nacional da Qualidade.
- Hensler , Douglas & Edgeman , Rick L.(2002). Modeling BEST business excellence: The beginning. *Measuring Business Excellence* 6 (2): 49-54.
- Holme, R. & P. Watts. (2000). Corporate Social Responsibility: Making Good Business Sense. World Business Council for Sustainable Development.
- Jonker , Jan.(2002). Quality Beyond the Enterprise. *Measuring Business Excellence* 6 (3): 31-35.
- Joyner, B. & D. Payne. (2002) Evolution and Implementation: A Study of Values, Business Ethics and Corporate Social Responsibility *Journal of Business Ethics* 41 297-311.

- Jung, C. F. (2003). *Metodologia Científica: Ênfase em pesquisa tecnológica*. .available from World Wide Web: <URL <http://www.jung.pro.br> >.
- Karapetrovic , Stanislav.(2002). Strategies for the integration of management systems standards. *The TQM Magazine* 14 (1): 61-67.
- Karapetrovic , Stanislav.(2003). Musings on integrated management systems. *Measuring Business Excellence* 7 (1): 4-13.
- Ketola, T.(2007). A Holistic Corporate Responsibility Model: Integrating Values, Discourses and Actions. *Journal of Business Ethics* 1-17.
- Lantos, G. P.(2001). The boundaries of strategic corporate social responsibility. *Journal of Consumer Marketing* 18 (7): 595-630.
- March, Jacques. Laree.(1999). Applying Quality concepts to Community Issues. *Quality Progress* 32 (3): 49-56.
- Martins, G. (1996). "Manual para elaboração de monografias e dissertações." anonymous. São Paulo: Atlas.
- McAdam, R. & Denis. Leonard.(2003). Corporate social responsibility in a total quality management contex: opportunities for sustainable growth. *Corporate Governance* 3 (4): 36-45.
- McDonald, Paul. & Jeffrey. Gandz .(1991). Identification of Values Relevant to Business Research. *Human Resource Management* 30 (2): 217
- Murray, L., Hazlett,S.& McAdam,Rodney.(2007). From quality management to socially responsible organisations: the case for CSR. *International Journal of Quality & Reliability Management* 24 (7): 669-682.
- Oliveira, A. F. & A. Tamayo.(2004). Inventário de perfis de valores organizacionais. *Revista de Administração* 39 (2): 129-140.
- Oliveira, João. H. (2002). M.A.I.S.: método para avaliação de indicadores de sustentabilidade organizacional. Universidade Federal de Santa Catarina.
- Paarlberg, Laurie E. & James L. Perry. (2007) Values Management Aligning Employee Values and Organization Goals *The American Review of Public Administration* 37 387-408.
- Payne,Dinah., Raiborn, Cecily.& Jorn. Askvik. (1997) A global code of business ethics *Journal of Business Ethics* 16 1727-1735.
- Porter, M. E. & M. R. Kramer.(2006). Strategy and society: the link between competitive advantage and corporate social responsibility. *Harvard Business Review* 84 (12): 78-92.
- Raiborn, C. A. & D. Payne.(1990). Corporate codes of conduct: A collective conscience and continuum. *Journal of Business Ethics* 9 (11): 879-889.

- Rodrigues, Maria. (2006). Metodologia da pesquisa científica. Rio de Janeiro: Escola de Aperfeiçoamento de Oficiais.
- Rokeach, M.(1968). The Role of Values in Public Opinion Research. *The Public Opinion Quarterly* 32 (4): 547-559.
- Sachs, I. (1993). Estratégias de Transição para o Século XXI. São Paulo: Nobel.
- Schwartz, S. H. & W. Bilsky.(1987). Toward a universal psychological structure of human values. *Journal of personality and social psychology* 53 (3): 550-562.
- Schwartz, Shalom H.(1999). A Theory of Cultural Values and Some Implications for Work. *Applied Psychology* 48 (1): 23-47.
- Selltiz, C. (1997). Métodos de pesquisa nas relações sociais. São Paulo: Herder.
- Tamayo, A. & MGC Gondim.(1996). Escala de valores organizacionais. *Revista de Administração* 31 (2): 62-72.
- Tamayo, Alvaro., Mendes & Maria. Torres da Paz.(2000). Inventário de valores organizacionais. *Estudos de psicologia* 5 (2): 287-315.
- Valor, C.(2005). Corporate Social Responsibility and Corporate Citizenship: Towards Corporate Accountability. *Business and Society Review* 110 (2): 191-212.
- Van Marrewijk , Marcel.(2004). Concepts and Definitions of CSR and Corporate Sustainability: Between Agency and Communion. *Journal of Business Ethics* 44 95-105.
- Van Marrewijk, Marcell & Zwetsloot, Gerard.(2004). From Quality to Sustainability. *Journal of Business Ethics* 55 79-82.
- Varey , William. (2008). *Defining Sustainability: An Integral Triptych (A Picture in Three Parts)*. Internet Australia: EMRGMC. available from World Wide Web: <URL <http://www.emrgnc.com.au/sustainability.htm> >.
- Varey, William. (2008a). *Beyond Sustainability: The Emergence of a Sustainable World*. Australia: EMRGMC. available from World Wide Web: <URL <http://www.emrgnc.com.au/Beyond.Sustainability.pdf> >.
- Varey, William. (2008b). *Integral Sustainability Assessment: An Emergent Hierarchy of Principles*. Australia: EMRGMC. available from World Wide Web: <URL <http://www.emrgnc.com.au/Integral.Sustainability.Assessment.pdf> >.
- Waddock , Sandra & Bodwell , Charles.(2002). From TQM to TRM : Total Responsibility Management Approaches. *Journal of Corporate Citizenship* 7 113-126.
- Wartick, S. L. & P. L. Cochran.(1985). The evolution of the corporate social performance model. *Academy of Management Review* 10 (4): 758-769.

Werre, Marco. & Marcel. Van Marrewijk .(2003). Multiple Levels of Corporate Sustainability. *Journal of Business Ethics* 44 107-119.

Wilber, K.(1997). An integral theory of consciousness. *Journal of Consciousness Studies* 4 (1): 71 92.

Wilkinson, G & Dale , B.(1999). Integrated management systems: an examination of the concept and theory. *The TQM Magazine* 11 (2): 95-104.

Wilkinson, G & Dale , B.(2001). Integrated management systems: A model based on a total quality approach. *Managing Service Quality*; 11 (5): 318-330.

Wilsdon, J. (1999) Laying the foundations for a sustainable future Pp. 1 -11 in *Forum for the Future for The SIGMA Project*, anonymous. .

Wood Donna.(1991). Corporate Social Performance Revisited. *The Academy of Management Review*; 16 (4): 691-718.

PART SIX: SOCIAL ENTREPRENEURSHIP

THE CASE OF SOCIAL ENTERPRISES: ARE THERE OPEN QUESTIONS?

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Abstract

The present paper aims to review the state of the art in relation to social enterprises to identify the open issues to develop a PhD project.

The crisis which affected the welfare system, the recognised deficiency of international cooperation, and the credit crunch have opened new frameworks for the Social Enterprise (SE). However, at present, there is neither a shared concept nor even a common legislative framework. Just in Europe, there are different models and several legislative frameworks. For this reason, the paper deals the state of the art in Belgium, Italy; Finland, United Kingdom Community, Portugal, French.

Second, the paper tackles the concept of SE, highlighting that this debate may be reduced to two different perspectives: the narrow one and the expanded one.

The paper concludes discussing the need to define the main dimensions which characterize SE and to identify a performance measurement system to evaluate social performance

Keywords: Social enterprise, open questions, definition, legal framework, dimensions

Background and Context

The crisis which was effected the welfare system, the recognised deficiency of international cooperation, and finally the recent crisis effecting the pillars of the global economic system are currently opening new frameworks for the social enterprise widening their market positioning.

After World War two, in most developed countries, public bodies have been entrusted as the main actors entitled to supply general-interest services in the frame of traditional welfare regimes, leading to the deficiencies faced by for-profit enterprises in this field (Borzaga and Defourny, 2001). Despite the relevant and growing amount of resources spent, the traditional welfare state became increasingly unable to cope with the growing phenomena of inequalities and poverty and it contextually induced passive and opportunistic behaviours by the beneficiaries. Social exclusion became a widespread phenomenon and the resulting rising welfare

payments and expenses addressed to support the new policies aggravated the fiscal crisis of the welfare state.

The proclaimed un-sustainability of the welfare state was coupled with its incapacity of both identifying and meeting a growing demand for differentiated welfare protection. Hence, the difficulty of reaching consensus for withdrawing resources, necessary to maintain levels of social security, could no longer be reached (Borzaga and Defourny, 2001).

Following the failure of traditional policies, a strong revitalization of the role played by the citizens of advanced economies in influencing and regulating the economy had taken place at various geographical levels. The re-emergence of the economic and social commitment of third sector organizations was stimulated by the growing limitations of the traditional welfare state that gradually appeared. (Borzaga and Defourny, 2001).

Moreover, in this framework, on one side, in the developing countries the foreign and local policies of governments, the policy of the non-profit organizations and even the multilateral institutions (such as the World Bank and UN agencies) have often failed to resolve major social problems. On the other side, the same governments of "developed countries" are not yet able to provide a real response to the problem of equal access to basic services, real involvement and active participation of stakeholders and stable job opportunities and work conditions able to integrate also disadvantaged citizen. Finally the recent economic crisis has clearly underlined some critical aspects in the current economic system, which fails to provide long term and sustainable answer to the interdependency principles and social problems of global development.

This situation has highlighted the need of alternative economic, entrepreneurial and social development structures able to provide models and approaches to meet the needs of at least a part of the problem. A configuration with a high potential interest, probably not fully exploited up to date, is represented by the Social Enterprise (SE) even if the circulation of legislative models and concrete experiences developed at National level could lead to a partial convergence of models and common trends in Europe. The social enterprise may represent a sort of innovative approach to a new interpretation of the relationship between business and society with the objective to create, drive and support the change by managing critical economical, social or environmental issues.

At the basis of SE, there is the idea to transform the maximization of profit and wealth creation – the final goal in the classical theory - in the means by which the new social entrepreneurs achieve their business ideas to fulfil unmet social needs. As a consequence, SE tends to prevail in emerging or developing countries, where scarcity of resources and corruption have established the inadequacy of public and government agencies to improve social conditions and promote development. However, these models have been adopted also in developed countries, suggesting non-traditional and economically sustainable methods to social inequality realignments.

The present paper aims to review the state of the art in relation to social enterprises, analysing different legal frameworks and different definitions proposed. Based on such review, the paper seeks to identify the dimensions relevant to characterize social enterprises against other types of organizations and to perform a comparative analysis among European countries. Finally the paper formulates the research questions that will be developed during the PhD programme. The paper is articulated as follows: section 2 presents the legal forms of social enterprise. In European countries, section 3 discusses the social enterprise definition, section 4 try to define the dimensions of social enterprise and at the last session are proposed the key research questions.

Legal Form of Social Enterprise in European Countries

In the last 20 years, the debate about social enterprise in Europe increasingly focused on its specific aims and its role in the welfare systems. This also determined the emergence of a complex and diversified legislative framework.

At present, no specific legislation exists at the European Community level, though the directive and legislation on European cooperative societies may represent a starting point in this direction.

In Europe, there are very different concepts of SE and different legislative framework regulating its governance, activities, ownership...: even where a clear legal notion of social enterprises emerges, different legal systems balance entrepreneurship and social mission, and rank stakeholders' interests differently within the governance of the organisation (OECD 1999).

To provide a picture of the state of the art, I analyzed the legislative framework of : Belgium, Italy; Finland, United Kingdom Community, Portugal, French.

The analysis of the legal forms, lead to the identification of three different models developed in different legal system:

1. The "co-operative model", in which social enterprises are regulated by law as particular co-operative companies characterised by social goals.
2. The "company model", as derived from the form of a for-profit corporation though characterised by social outcomes and limited distribution constraints.
3. The "open form model", as legally defined with respect to social outcomes without a specific legal form being selected.

Each country examined cannot necessarily be associated with a single model: indeed in some cases two different laws in the same legal system regulate, respectively, two types of enterprise (for instance). This paragraph will compare the various models as outlined above and the laws which shape these models.(Table 2.1)

Table 2.1: Social enterprise in Europe

Country	Forms used	Profit distribution	Governance	Activities
Italy Law n. 118 of 13 June 2005	Associations; Foundations; Co-operatives; For-profit Enterprises	Direct and indirect distribution of profits prohibited	Participatory nature	Production or exchanges of services in the sectors of social and health assistance, education and training, environmental protection, social tourism, cultural services or work integration of disadvantaged persons independently from the field of activity of the enterprise
Portugal Co-operative code (Law n° 51/96 of 7 September 1996) and Legislative decree n° 7/98 of 15 January 1998	Social Solidarity co- operatives	Direct and indirect distribution of profits prohibited	Participatory nature	Work- integration of vulnerable groups
France Law of 17 July 2001	General-interest co-operative societies	Redistribution of profits is possible, but limited	Participatory nature	Production or provision of goods and services of collective interest

Belgium Law of 13 April 1995	Limited company; Limited liability co-operative society; private limited liability society	Redistribution of profits is possible, but limited	Participatory nature	Activities that are aimed at pursuing a social goal. What constitutes a social goal results from constitutive elements foreseen by the legislation.
United Kingdom Community Interest Company regulations 2005	Enterprises regulated by Companies Act 1985	Partial distribution of profits allowed	Participatory nature	Wide range of activities that correspond to the needs of communities. Social definition assessed by the Regulator
Finland Law n. 1351/2003	All enterprises regardless of their legal form and ownership structure	Distribution of profits allowed with no constraints	Participatory governance not envisaged	Social enterprises have to employ at least 30% of people with disabilities and long-term unemployed

In Italy, a new cooperative legal form – the ‘social cooperative’ (*cooperativa sociale*) – was introduced in 1991 with the purpose of recognizing and providing a legal framework for specific social entrepreneurial activities, namely the provision of social services and the employment of disadvantaged people. Social cooperatives have so far represented the main type of social enterprise in Italy.

Other countries followed the Italian example. Portugal, for example, created the ‘social solidarity cooperatives’ (*cooperativas de solidariedade social*). These organizations are designed to support vulnerable groups and socially disadvantaged communities, with a view to achieving their economic integration. However, unlike Italian social cooperatives, Portuguese social solidarity cooperatives are only weakly embedded in the social fabric; this can be accounted for by the top-down nature of the process that has led to their creation (EMES-UNDP 2008).

An example of social enterprises that are supposed to be the result of local dynamics is provided by the French ‘cooperative society of collective interest’ (*societe cooperative d’interet collectif*, or SCIC), which was introduced in 2001. The French

law prescribes the existence of at least three categories of members, each having a different relationship with the activity carried out; workers and users and volunteer.

Another trend has been raising a new interest since the last few years: introducing more general legal frameworks for different social enterprises. This trend first appeared in Belgium, where the ‘social purpose company’ (*societe a finalite sociale* in French, *vennootschap met sociaal oogmerk* in Dutch) was introduced in 1995. This legal framework can be used by any commercial company, including cooperative societies and private limited companies, provided they meet a numbers of requirements. However, this legal status has so far met only limited success, owing to the considerable number of requirements which add to those imposed on traditional companies; the ‘social purpose company’ label has been adopted by very few organizations so far and the previous associative model continues to prevail. More recently, Italy (Legislative Decree 24 March 2006, No 155) and the United Kingdom have followed a similar path.

This trend went in parallel with the expansion of the set of activities carried out by social enterprises, which are increasingly committed to supply general interest services other than welfare provisions, including cultural and recreational services; activities aimed at protecting and regenerating the environment; and services aimed at supporting the economic development of specific communities. In Italy the recently-enacted law on social enterprise widens the types of general interest services that can be supplied and makes a wider range of legal forms eligible for classification as social enterprises. According to the law, a social enterprise is defined as a non-profit private organization, which permanently and principally carries out an economic activity aimed at the production and distribution of goods and services of social benefit, and pursues general interest goals. Nevertheless, this legal framework has not proved to be very attractive so far for Italian organizations, which mainly continue to use the social cooperative form . Also Finland recently approved a law on social enterprise: no special legal form has been prescribed as preferential or mandatory, provided that the organisation is formed and operates as a social enterprise and therefore is called “open form model”.

Social Enterprise: Some Definitions

The literature provides several definition of SE, the most frequent ones are analysed as follows (Table 3.1)

Table 3.1 Social Enterprise: Some definitions

Source	Definition
EMES - UNDP Borzaga and All 2008	Social enterprises may be defined as private, autonomous, entrepreneurial organizations providing goods or services with an explicit aim to benefit the community. They are owned or managed by a group of citizens, and the material interest of capital investors is subject to limits. Social enterprises place a high value on their autonomy and on economic risk-taking related to ongoing socioeconomic activity. Social enterprises are either prohibited legally from distributing profits, or are structured in order to exclude profit as the main goal”
Perrini, 2006a	SE entails innovations designed to explicitly improve societal well-being, housed within entrepreneurial organizations, which initiate, guide or contribute to change in society
Canadian Centre for Social Entrepreneurship, 2005	Social entrepreneurship falls into two categories. First, in the for-profit sector it encompasses activities emphasizing the importance of a socially- engaged private sector and the benefits that accrue to those who do well by doing good. Second, it refers to activities encouraging more entrepreneurial approaches in the nonprofit sector in order to increase organizational effectiveness and foster long-term sustainability
Fuqua School, 2005	The art of simultaneously pursuing both a financial and a social return on investment
MacMillan, 2005	It’s a process whereby the creation of new business enterprise leads to social wealth enhancement so that both society and the entrepreneur benefit. These benefits include the creation of jobs, increased productivity, and enhanced national competitiveness and better quality of life
Mair e Martí, 2005	The main difference between entrepreneurship in the business sector and social entrepreneurship lies in the relative priority given to social wealth creation versus economic wealth creation [...]. In social entrepreneurship, social wealth creation is the primary objective, while economic value creation, in the form of earned income, is necessary to ensure the sustainability of the initiative and financial self-sufficiency
Said School, 2005	A professional, innovative and sustainable approach to systematic change that resolves social market failures and grasps opportunities
Schwab	Applying practical, innovative and sustainable approaches to

Foundation, 2005	benefit society in general, with an emphasis on those who are marginalized and poor
Dart, 2004	The changes and transformations from conventionally understood non profit to social enterprise are stark: from distinct nonprofit to hybridized nonprofit-for-profit; from a prosocial mission bottom line to a double bottom line of mission and money; from conventionally understood non profit services to the use of entrepreneurial and corporate planning and business design and concepts; and from a dependence on top-line donations, member fees, and government revenue to a frequently increased focus on bottom-line earned revenue and return on investment
Mort, Weerawardena e Carnegie, 2006	A multidimensional construct involving the expression of entrepreneurially virtuous behaviour to achieve the social mission [...]. The ability to recognize social value creating opportunities and key decision-making characteristics of innovation, proactiveness and risk taking
Johnson, 2000	Social entrepreneurship is emerging as an innovative approach for dealing with complex social needs. With its emphasis on problem-solving and social innovation, socially entrepreneurial activities blur the traditional boundaries between the public, private and non-profit sector, and emphasize hybrid models of for-profit and non-profit activities
United Kingdom (UK) government's Department of Trade and Industry (2002)	A business with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximise profit for shareholder and owners?

The analysis of the definitions of SE, presented in Table 3.1, highlights two main issues. First, the definition of the concept is clearly influenced by the frame of reference (profit, non-profit and public sector). Second, the concept of SE is linked to a perspective of innovation and change from the recognition of un-satisfied social needs.

The debate on the Social Enterprises to may be reduced to two different schools of thought. The first analyzes the SE from a narrow perspective on the sector of nonprofit organizations. The second is accompanied by an expanded perspective on the SE, where the key element is not the field of reference, but rather the contents of the business brought in a specific social context.

The Social Entrepreneurship According To a Narrow Perspective

Few authors identify the essence of the Social Enterprises with all initiatives promoted by non-profit organizations looking for alternative sources of funding or management skills to support the creation of social value (references). According to this perspective, SE consists mainly in the adoption of managerial and market-based approaches, typical of private and for profit sector, by the third sector in order to improve efficiency and effectiveness in the production of consumer goods and or in the delivery of social services.

Therefore, this definition tackles all the nonprofit organizations that, while not distorting their non-profit essence, undertake collateral private activities to integrate the income and support the core activities. The SE is, in this perspective, nothing but a means of "funding", in addition to public or private traditional opportunities (Perrini 2007).

The SE therefore emerges as a rational and strategic answer found by the organizations of the third sector to the challenges of a critical situation: scarcity of available resources, cuts of public funding, higher costs and more competitive pressure but also an increasing demand for social services, major privatization of public services and a generalized crisis of traditional welfare systems. In this sense the non-profit expectations of effectiveness in filling the gap left uncovered by the public, prompted the organizations operating in the social sector to reinvent their models of management. They aimed at an hybrid organizational model between profit and non profit.

The Social Entrepreneurship According To an Enlarged Perspective

Most recent contributions in the field of SE lead to an enlarged vision of the concept, not limited to the legal-organizational form chosen, but rather focused on the its content and activities.

The supporters of the expanded view of the SE (Borzaga, 2004, Johnson, 2000; Mair and Martí, 2004; Perrini, 2007) claim that the phenomenon should be considered as intersectorial and place emphasis primarily on the entrepreneurial / innovative content of activity and on social change that results. Consistent with this approach, SE's dominant feature is related to applying creativity and innovation in dealing with social problems, thus characterizing the business process (MacMillan and McGrath, 2000). For this reason, the legal form becomes less important than the objective of contributing to social change (MacMillan, 2005; Perrini, 2007). The expanded perspective on the SE seems to justify the use of the business term, and including in discussion a series of initiatives that do not belong to the third sector. These initiatives are projected to develop profit activities, while maintaining the specific objective of raising the social, cultural and economic environment in which they operate.

Social Enterprise as a Middle Way Between Two Extremes

Based on what we can say that the Social Enterprise represents a hybrid form composed of the traditional non-profit and for-profit organizations. The social enterprise retains the purpose to do good, but their vision, organization, and processes are quite different from those of non-profits. They strive to achieve goals that meld social, environmental, and financial objectives. That combination is referred to the triple bottom line (Pitta, D.A. and Kucher, H., 2009). Thus, social enterprises are profit-making businesses set up to tackle a social or environmental need. Unlike the traditional non-profits, social enterprises embrace business processes and are governed by managerial principles. For instance, marketing is a key process and social enterprises grasp its importance. Beyond many commercial businesses would consider themselves to have social objectives, but social enterprises are distinctive because their social purpose is central to their operation. These are traditional goals of profit seeking organizations and drive their direction and activities. In contrast, non-profits and governments seek to maximize social benefits. *Figure 1* details the traditional organizations and points the way toward the development of a new kind of firm: for-benefit organizations. These organizations are driven by a social purpose, they are economically self-sustaining and seek to be socially, ethically, and environmentally responsible. For-benefits occupy the fourth sector in *Figure 1*. Social enterprises are prime examples of for-benefit organizations (Pitta, D.A. and Kucher, H., 2009).

Alter (2004) presents a framework towards typologies of social entrepreneurship. She argues that any attempts to typify enterprises into different categories should take account broader dimensions including organisational settings, operational strategies, legal attributes, funding mechanism and clients groups served. To this scope, Alter (2004) proposes typologies of social entrepreneurship ranging from corporate social model to pure social ventures along a continuum based on mission-profit scale (*Figure 2*).

Figure 1 The blurring sectoral boundaries

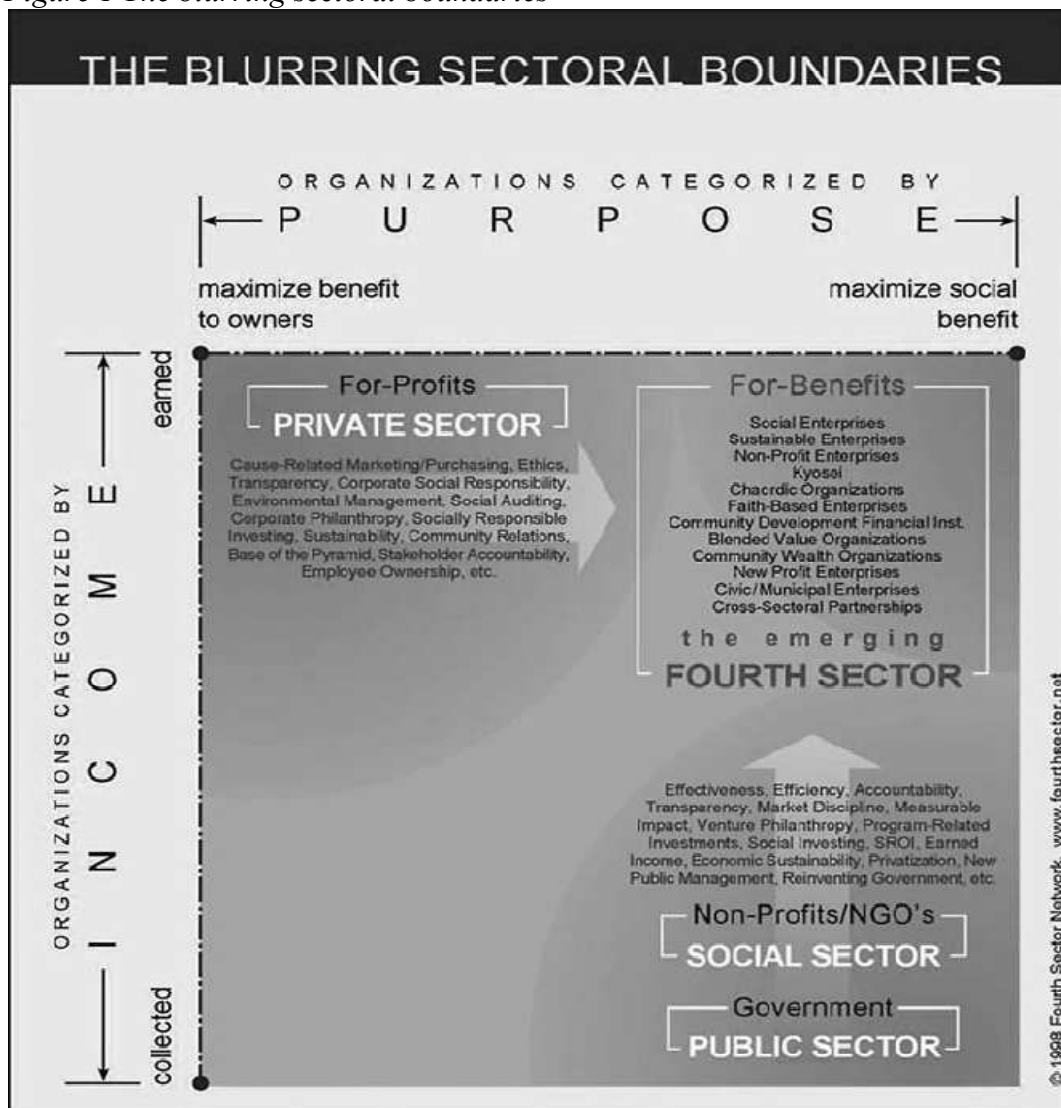
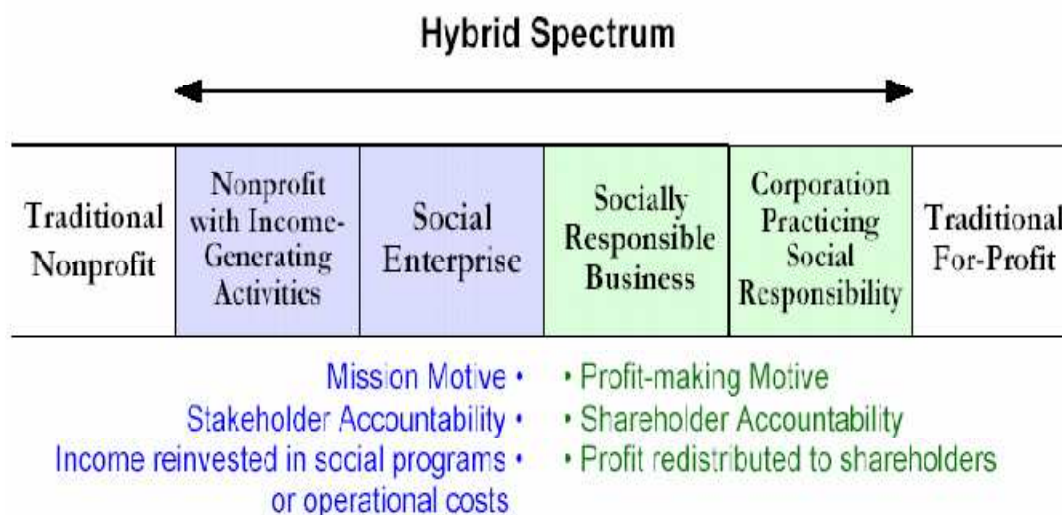


Figure 2: Hybrid Model of Social Entrepreneurship



Social Enterprise Dimension

This section analyses the relevant dimensions characterizing SE, based on the existing literature. Previous contributions have already addressed this problem, though, at present, there is not a shared framework of reference. The most important entity that explored this issue is EMES, the EMES definition distinguishes between, (1) economic dimensions and (2) social dimensions.

To reflect the economic and entrepreneurial dimensions of initiatives, four criteria have been define (a-d) and to reflect the social dimensions five criteria have been define (e-i):

a) *A continuous activity, producing and selling goods and/or services*

Social enterprises, unlike some traditional non-profit organizations, do not normally have advocacy activities or the redistribution of financial flows (as do, for example, grant-giving foundations) as their major activity, but they are directly involved in the production of goods or the provision of services to people on a continuous basis. The productive activity thus represents the reason, or one of the main reasons, for the existence of social enterprises.

b) *A high degree of autonomy*

Social enterprises are created by a group of people on the basis of an autonomous project and they are governed by these people. They may depend on public subsidies but they are not managed, directly or indirectly, by public authorities or other organizations (federations, for-profit private firms, etc.). They have the right to take up their own position ('voice') as well as to terminate their activity ('exit').

c) *A significant level of economic risk*

Those who establish a social enterprise assume – totally or partly – the risk of the initiative. Unlike most public institutions, their financial viability depends on the efforts of their members and workers to secure adequate resources.

d) *A minimum amount of paid work*

As in the case of most traditional non-profit organizations, social enterprises may combine monetary and non-monetary resources, volunteering and paid workers. However, the activity carried out in social enterprises requires a minimum level of paid work.

e) *An explicit aim to benefit the community*

One of the principal aims of social enterprises is to serve the community or a specific group of people. In the same perspective, a feature of social enterprises is their desire to promote a sense of social responsibility at local level.

f) *An initiative launched by a group of citizens*

Social enterprises are the result of collective dynamics involving people belonging to a community or to a group that shares a well defined need or aim; this collective dimension must be maintained over time in one way or another, even though the importance of leadership – often embodied in an individual or a small group of leaders – must not be neglected.

g) *Decision-making power not based on capital ownership*

This generally refers to the principle of ‘one member, one vote’ or at least to a decision-making process in which the voting power in the governing body with the ultimate decision-making rights is not distributed according to capital shares. Moreover, although the owners of the capital are important, decision-making rights are generally shared with the other stakeholders.

h) *A participatory nature, which involves the various parties affected by the activity*

Representation and participation of users or customers, stakeholder influence on decision-making and participative management are often important characteristics of social enterprises. In many cases, one of the aims of social enterprises is to further democracy at local level through economic activity.

i) *Limited profit distribution*

Social enterprises not only include organizations that are characterized by a total non-distribution constraint, but also organizations which – like co-operatives in some countries – may distribute profits, but only to a limited extent, thus avoiding profit maximizing behaviour.

Source: EMES

Key Research Questions

The last section of the paper formulates the research questions to be addressed during the PhD development of the thesis.

The objective of this article has been to define the social enterprises in our market system.

To give social enterprises a real identity as a business form it is necessary to design and implement tools for measuring the achievement of specific objectives and social and economic developments and the degree of corporate sustainable performance.

Then, the objective of the thesis is to establish a system of measurement and evaluation of social enterprises. In this article we have repeatedly emphasized that social enterprise takes on multiple forms, depending on socioeconomic and cultural circumstances. Assessing social performance and impact is one of the greatest challenges for practitioners and researchers in social entrepreneurship. The real

problem may not be the measurement per se, but how the measures may be used to “quantify” the performance and impact of social entrepreneurship. Many consider it very difficult, if not impossible, to quantify socio-economic, environmental and social effects. Yet it is necessary to make major efforts in this direction and to develop useful and meaningful measures that capture the impact of social entrepreneurship and reflect the objectives pursued. Clearly, more research and managerial practice is needed in order to establish social impact as an essential dimension of performance assessment. (Mair and Marti 2006).

Therefore, we must determine first what are the issues under evaluation, and the dimensions of Social Enterprise need to be analysed.

We conclude with a list of questions that we'll try to response during the PhD programme:

The first question is: how many interesting dimensions should the SE have ? (Background, Ownership, Governance , Funding, Types of activities, Size (number of people involved), Form independent (enlarged perspective) or Form dependent to third sector (narrow perspective), Salaries level...)

The second important question is: From these dimensions a classification of different models of social enterprise may be defined? And these dimensions are really characterizing factors for the SE? Finally , how to analyze the performance considering the economic and the social aspect? What are the trade-off? We can define a evaluation model?

References

Alter, S.K. (2004) Social Enterprise Typology, Virtue Ventures, LLC, [Referred 23.06. 2009]. Available from [http:// www.virtueventures.com/](http://www.virtueventures.com/),

Borzaga, C., Defourny, J. (2001). The Emergence of *Social Enterprise*

Borzaga, C. and Tortia, E.(2006) An Evolutionary Perspective on the Theory of Social Enterprise, Trento: Department of Economics, University of Trento

Borzaga, C.(2008) Un anno di Impresa sociale, Relazione introduttiva alla sesta edizione "Workshop nazionale sull'impresa sociale", Iris Network

Canadian Centre for Social Entrepreneurship (2001), "Strengthening the generational chain: engaging the next generation of social and civic leaders in Canada", June, [Referred to 13.11.2006] Available: www.bus.ualberta.ca/ccse

Dart, R., Grant, S (2004), The Social Construction of Social Enterprise, Trent University, Canada

Defourny, J., Nyssens, M. (2008), Social Enterprise in Europe: Recent Trends and Developments", EMES Working Papers Series, no 08/01. Liege: EMES European Research Network

Drayton, B.(2006), Everyone A Changemaker, Social Entrepreneurship's Ultimate Goal, MIT Press with Harvard University and George Mason University

EMES, UNDP (2008), Social Enterprise: A new model for poverty reduction and employment generation An examination of the concept and practice in Europe and the Commonwealth of Independent States

Fiorentini, G. (2009), Il paracadute del non profit-Il nuovo "ammortizzatore", Sole 24 Ore, 19 Gennaio 2009, 2

Gary, W., McPherson, W., Siddharth, M. (2009) THE PARALYMPIC MOVEMENT: A STRATEGIC SOCIAL ENTERPRISE! Canadian Centre for Social Entrepreneurship, School of Business, University of Alberta, Edmonton, Alberta, Canada.

Gregory, J.,(2001)The Meaning of Social Entrepreneurship Original Draft: October 31, 1998 Reformatted and revised: May 30, 2001

Johnson, S. (2000), "Literature review on social entrepreneurship", Canadian Centre for Social Entrepreneurship, [Referred to 13.11.2006] . Available: www.bus.ualberta.ca/ccse

Johnson, S. (2003), "Young social entrepreneurs in Canada", Canadian Centre for Social Entrepreneurship, May, [Referred to 13.11.2006]. Available : www.bus.ualberta.ca/ccse

- Karim, S (2003), A Successful Model of Social Entrepreneurship, The Canadian Centre for Social Entrepreneurship Edmonton, Alberta, Canada
- Kerlin, J.A. (2006), Social Enterprise in the United States and Europe: Understanding and Learning from the Differences, International Society for Third-Sector Research and The Johns Hopkins University 2006
- Leguizamón, F.(2003), SEKEN. Social enterprise knowledge network, Academia. Revista Latinoamericana de Administración, Universidad de los Andes Bogota, Colombia, 031, 15-22
- Low, C. UK (2006), A framework for the governance of social enterprise, International Journal of Social Economics 33 :5/6,. 376-385
- Mair, J., Marti, I. (2006), "Social entrepreneurship research: a source of explanation, prediction, and delight", *Journal of World Business*, 41, 36-44.
- Marí, A., Peredo, A., Murdith M. (2006) Social entrepreneurship: A critical review of the concept *Journal of World Business* 41, 56–65 b,1 a Faculty of Business, University of Victoria, 3800 Finnerty Drive, Victoria, BC, Canada V8P 5C2, Centre for Studies in Religion and Society, University of Victoria, 3800 Finnerty Drive, Victoria, BC, Canada V8P 5C2
- OECD (1999) *Social Enterprises*, OECD: Paris
- OECD (2003), *The Non-Profit Sector in a Change Economy*, OECD: Paris
- OECD (2005), Background Report: The Social Economy as a Tool of Social Innovation and Local Development, The Social Economy In Central East and South East Europe: Emerging Trends of Social Innovation and Local Development, 22-24 September, Trento-Italy.
- Ogliastri, E. (2003), An introduction to civic alliances and social enterprise, Academia. Revista Latinoamericana de Administración, Universidad de los Andes Bogota, Colombia, 031, 5-14
- Perrini, F (2007), Social Entrepreneurship, Cap 1-2
- Pitta, D.A. and Howard, K.J., University of Baltimore, Baltimore, Maryland, USA (2009), Social enterprises as consumer products: the case of vehicles for change. 18.: 2, 154–158
- Thompson, J. and Doherty, B. UK (2006), The diverse world of social enterprise: A collection of social enterprise stories, International Journal of Social Economics 33 :5/6, 361-375
- Weerawardena, J., Mort, G.S. (2006), "Investigating social entrepreneurship: a multidimensional model", *Journal of World Business*, 41, 21-35.

A DISCOURSE ANALYSIS OF THE FAIRTRADE MOVEMENT IN FRANCE AND THE UK.

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Abstract

In this paper we introduce the concept of Fairtrade, reviewing its goals. We argue that academics have oversimplified the phenomenon by considering Fairtrade from the opposing positions of utility maximization and ethical behaviour. The academic debate has been dominated by a ‘free market’ discourse (homo economicus) in opposition to a ‘collectivist’ one (homo sociologicus), both of which have long historical roots in economics. We then turn to the movement itself to see to what extent the same discourses can be found, and the extent to which Fairtrade as a discursive event transcends national boundaries. Data on four case firms are presented from secondary sources published in The UK and France. The discourses through which retailers of the North talk about their Southern producers were analyzed in depth. We find considerable cross-national differences and the emergence of a third discourse, that of ‘mainstreaming’.

Key words: Fairtrade – Discourse – UK - France

Introduction

Fairtrade was set up some 50 years ago as a mixture of charity and solidarity, although for the next 30 years it remained politically and economically marginal (Wilkinson 2007). This situation has changed dramatically over the last 15 years: “While still small in terms of total market share, sales [...] have grown exponentially and now constitute a multi-million dollar industry” (VanderHoff Boersma 2009: 2). While during the 1980s much of the Fairtrade initiatives were for the most part unplanned and largely improvised, in 1997 several organizations united to create the Fairtrade Labelling Organizations International (FLO). In brief, FLO’s mission is to “improve the position of the poor and disadvantaged producers in the developing world, by setting the Fairtrade standards and by creating a framework that enables trade to take place at conditions respecting their interest” (Hutchens 2007).

The Fairtrade movement is a complex web of consumer activism, NGO initiatives, for-profit and not-for-profit organisations, all of whom claim their actions can improve the lot of disadvantaged countries through international trade (Nicholls & Opal 2005). Yet despite this diversity, Fairtrade actors have converged on a common definition. According to FINE, an informal network that includes FLO Fairtrade should be defined as:

a trading partnership, based on dialogue, transparency and respect, which seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers - especially in the South. Fairtrade organizations (backed by consumers) are engaged actively in supporting producers, awareness raising and in campaigning for changes in the rules and practice of conventional international trade (Moore 2004: 73).

The idea behind the Fairtrade ‘trading partnership’ is clear: it proposes to use the market system to help/support/assist Third World countries to develop (Gendron et al. 2008). In this definition, Fairtrade is positioned as an alternative to the traditional trading system, which is characterized by selfish motives, oligopolistic practices and inequitable foundations (Gendron et al. 2008). What the alternative market is not is charity, relief work, or any other form of aid (VanderHoff Boersma 2009). To use a slogan popularized in the 1970s, it is about “Trade not Aid” (Nicholls 2002); it aims at changing the rules of international trade to enable producers to become capable of competing in the market (VanderHoff Boersma 2009).

Criticisms of Fairtrade are also evident. For example, various economists argue Fairtrade attempts to set a price floor for a good that is in most cases above the market price, encouraging existing producers to produce more and others to enter the market. Following the law of supply and demand, the new equilibrium price (over time) should therefore decrease. And yet in the case of Fairtrade, as the prices are underwritten, the equilibrium will include an excess in supply (Bhagwati 2002; Sidwell 2008). Critics reject the notion that the free market can be artificially made more ethical – and in fact, insist that the most ethical course of action is to allow the free market to prevail.

As this introduction to Fairtrade suggests, the debate on both sides is marked by strong claims and bold discursive strategies. Accordingly, in this paper we investigate the discursive construction of a ‘Fairtrade identity’. In particular, how has the Fairtrade movement positioned itself discursively? Has it reinforced the dualism between free and fair, or has it sought to reconcile profit-seeking and ethical behaviour? Can we even talk about a single movement, or are there a variety of discursive practices to be found within the movement? This paper is organized as follows. First, it will provide a brief overview of the general concept of discourse and discourse analysis, and the specific approach used in this paper. We then examine the dichotomy that dominates commentary about the movement. In a third section, it will outline the methodology and method used before discussing the findings.

Discourse

In its most general sense, discourse is defined as being concerned with how language is used in specific social contexts (Dick 2004). Fairclough (1992: 28), however, argues that in the social sciences, “‘Discourse’ (...) is more than *just* language use: it is language use, whether speech or writing, seen as a type of social practice”. However it is not just that language is social; rather, Fairclough sees discourse as

constituting the social (Fairclough and Wodak 1997 quoted in Wodak & Meyer 2009: 5). While definitions of discourse are manifold, we will in this paper, understand the meaning of discourse as argued by Philips, Lawrence and Hardy (2004), who draw on Parker's definition of discourse as "a system of statements which constructs an object" (1992: 5 quoted in Philips et al. 2004: 636).

In other words, discourse is concerned with understanding how a piece of text is constructed. Discourses, Philips et al. argue (2004: 636), "(...) are structured collections of meaningful texts"; at the analytical level discourse is concerned with examining the context of text production (Dick 2004). We understand texts here as referring to a variety of forms such as, but not limited to: written documents, transcribed interviews, verbal reports but also spoken words and dialogues, art work symbols, pictures (see Fairclough 2003 and Philips et al. 2004). We are, in this paper, specifically interested with what is referred to as 'natural' texts: "the products of mundane interactions or everyday text production" (Dick 2004: 207).

At the analytical level, we are influenced by Fairclough's work and critical approach to discourse analysis seeing texts as social practices. Discourse is a method enabling the examination of language use to produce explanations of the world we live in, of how individuals use language to make sense of their reality (Dick 2004). Discourse is said to be critical in the sense that the language is not seen as reflecting the nature of individuals per se but as actively constructing their identity (see Dick 2004 and Fairclough 1992). While different discourse analysis styles are available, we felt that the context surrounding the use of a Fairtrade discourse as well as the discourse used by retailers to talk about their producers was essential, and there have followed the critical discourse analysis (CDA) approach.

CDA, as Wodak and Meyer (2009: 5) argue "consider the 'context of language use' to be crucial". CDA sees a dialectical relationship emerging between discursive events and the social structures in which they evolve. While CDA argues that the discursive event under investigation is shaped by the social structures in which it is framed, it also argues that these structures are in turn influenced by this specific event (Fairclough & Wodak 1997 as in Wodak & Meyer 2009). "That is, discourse is socially constitutive as well as socially conditioned – it constitutes situations, objects of knowledge, and the social identities of and relationships between people and group of people" (Fairclough & Wodak 1997: 258 as in Wodak & Meyer 2009: 6). We consider in this paper Fairtrade as both influencing and influenced by social structures, and more specifically Fairtrade as a discursive event constructing a new social identity in which different actors take part.

The Dichotomy: Free Market vs Fair Trade?

The academic literature on Fairtrade is diverse and spread across fields such as economics, ethics, development studies, marketing and politics. This literature, however, is very polarized: on the one side lies the rational motives of *homo economicus*, with their roots in neo-liberalism and utility maximization; and on the other side lies the concept of a collectivist 'alternative market' whose origins lie in communitarian philosophies and research into ethical consumerism. While it is

beyond the scope of this paper to investigate the emergence of these two discourses in detail, we will provide a brief overview of each.

Homo Economicus

The free market discourse of Fairtrade opponents is best characterised by Marc Sidwell, of the UK Adam Smith Institute, in *Unfair Trade* (2008). Sidwell's (2008) central argument revolves around the contention that Fairtrade is simply unfair as it does not follow the free market principle. Fairtrade, he argues (Sidwell 2008: 3), "(...) does not aid economic development. It operates to keep the poor in their place, sustaining uncompetitive farmers on their land (...)" or again that "free trade is the most effective poverty reduction strategy the world has ever seen. (...) The evidence is clear, fair trade is unfair but free trade makes you rich". Sidwell's report can be seen as drawing on a neo-liberal 'free market' discourse. Putting this discourse of free trade opponents to Fairtrade into its historical perspective, it is worthwhile pointing out that such a discourse and views are consistent with neoclassical liberalism.

Neo-classical market ideologies assert that everything in the marketplace has a price: "All things desired or valued – from personal attributes to good government – are commodities" (Radin 1996: 2). Through defining commodities as their market value and assuming that everything has a price, they have conceptualized all social interactions as free market exchanges: "All commodities are fungible and commensurable—interchangeable with every other commodity in terms of exchange value" (Held 2006: 112). They fervently maintain that more democratic and just vision of economic development is impractical. To neo-liberals there is no alternative (MacEwan 1999). By restricting the scope of human behaviour in society as typically dominated by self-interest, economic theories have largely participated in narrowing down the view on human activity in the business field. The term *homo economicus* captures these concepts of the rational human behaviour according to economic theory.

Homo Sociologicus

Many academics have disputed the utility maximising view of human behaviour (Belk 1988, Galbraith 1958/1998, Mintzberg et al. 2002). Damasio (1994) argues emotions are inexorably a part of our decision-making and true being, Toennies (1887/2001) differentiates *Gesellschaft*, or the economic, from *Gemeinschaft*, the social or community. This collectivistic research perspective argues that morality cannot be removed from exchange (as it is by Homans 1961 and Blau 1964) as the social exchange subject is *not* reducible to the whims of supposed rational motives of self interest (Mitchell 1978). The self-regarding nature of the economic mind in most social settings can be questioned as it is argued that individuals adopt a behaviour characterised by other-regarding, therefore contradicting the generalization of human selfishness (Daly & Cobb 1994).

Once economic behaviour is no longer seen through the lens of economic man, value tensions have arisen out of morality and economic motives. The concept of Fairtrade seeks to reconcile these motives by enabling ethically driven value creation. In a nutshell, the idea behind the Fairtrade movement is that of a fairer and more human market (VanderHoff Boersma 2009). Fairtrade goes against the rationalization of economic man and call on a more other-oriented behaviour (Moore 2004). More than just an entrepreneurial organization defending legitimate humanistic and ethical ideologies, or a new trend responding to consumers' philanthropic needs, some have elevated Fairtrade to the rank of an alternative market (see VanderHoff Boersma 2009; Steinrucken & Jaenichen 2007 and Gendron et al. 2008). VanderHoff Boersma (2009) defends the idea that the alternative market should not be thought of as a niche market, nor does it seek to co-exist as an option to traditional market, but fervently argues that the alternative market will correct and create, step by step, new conditions and new norms within the dominant market.

These collectivist assumptions can be found in the Fairtrade definition quoted in the introduction. First of all, it is important to point out that despite the reference to producer/consumer and trade in the definition, the focus is non-economic, probably not surprising as the network is dominated by NGOs. This non-economic focus is reinforced by the use of words such as rights, dialogue, transparency, respect, equity, sustainability, implying the importance of values other than profit and competition as defended by a free market's view. The definition clearly stipulates political activism as being an integral part of the movement through, for example, using the word 'campaigning', and positioning the movement as opposing 'conventional' trade. The definition also identifies an alliance between consumers and Fairtrade organisations, recognizing consumers as significant actors.

While a stark dichotomy (free market versus fair trade) between opponents and proponents of Fairtrade has been identified, the question then emerges as to how the movement has been able to discursively navigate the demands of profit and ethics, of self-regarding and other-regarding behaviour, especially now that the movement has broadened from its NGO base and now includes large for-profit players. Has a coherent and uniform Fairtrade discourse emerged that transcends national boundaries and the different interests of the many actors involved in the movement?

Methodology

Case Study and Case Selection

While there exist diverging approaches to the case study, in this paper we recognize the fundamental necessity of generating context specific theories and therefore favour case-oriented explanations, rather than a variable-oriented approach (Ragin 1992, 1997). We will therefore follow Ragin's approach to casing and emphasize the importance of context specific results (Ragin 1992, 1997) as opposed to a more conventional positivistic view. We examine context by contrasting Fairtrade actors in France and the UK. The UK is regarded as a leader in terms of the Fairtrade movement and the country in which Fairtrade products have achieved greatest adoption. In 2005, the *Grocer* reported the UK to be "(...) the biggest Fairtrade

market with year-on-year sales growing 51% and topping the £140m mark”, and retained this position ever since.

France is similar to the UK in terms of level of economic development, has been involved in the FLO from the beginning and has a market of similar size to that of the UK. However, even Fairtrade activists in France concede that the Fairtrade movement lags behind that of the UK: *“bien que la France soit encore loin derrière ses voisins européens comme l’Angleterre par exemple (...)”* (Although France is still far behind its European neighbours, like the UK, for example).

Contrasting cases of retailers from France and England were selected, using newspaper articles as our data source. In the UK we selected Tesco (UK’s largest grocery and general merchandising retail store) and Traidcraft (and more specifically Traidcraft plc, a specialised retailer of Fairtrade products); for France: Carrefour (Tesco’s equivalent) and Artisans du Monde (ADM – Traidcraft’s equivalent). Retailers were selected both for their significant involvement in the Fairtrade market in England and in France as well as for their opposed retailing philosophies: both Tesco and Carrefour are considered mass market retailers while Traidcraft and ADM are specialised retailers, only selling Fairtrade products. The rationale behind choosing contrasting cases is the production of context rich conclusions. However, while ADM is the closest equivalent to Traidcraft in France it is also worthwhile pointing out that ADM’s and Traidcraft’s structure are fundamentally different. Traidcraft is built around two entities: The Traidcraft charity (“Traidcraft Exchange”) and the trading company (“Traidcraft plc”). Traidcraft Exchange ensures its values are respected by Traidcraft plc. ADM, however, is an “association” staffed mostly by volunteers. This difference needs to be noted as the goals of a trading company and an association might differ significantly.

Method

Data Collection and Analysis

Newspaper articles were collected on-line, with the same method being followed for both France and the UK. In the UK, 2006 was a pivotal year because Marks & Spencer converted all its tea and coffee to Fairtrade, leading the way to an increasing competition among retailers. The number of articles available for this year is almost 14 times what was available in 2000 and kept on rising until 2008, when they then dropped again. The period 2005-2007 allows us to compare the period before and after this event. In France, Carrefour introduced a variety of Fairtrade products, including teas, coffees and fruit juices under their own label, “Carrefour Agir Solidaire” (“Carrefour Solidarity Act”). In both countries, there was a spike in interest in Fairtrade in the period under analysis, as measured by the number of newspaper articles published on the topic (see Appendices 1a and 1b).

A search on Factiva was therefore conducted for this period for Tesco, Traidcraft, Carrefour and ADM. Articles that were related to our topic of interest were then selected. We eliminated the following articles: those less than a 100 words as they were not context rich, in which there only was an accumulation of very short daily news, in which only the name of the searched retailer was mentioned without any

link to Fairtrade, in which Fairtrade was mentioned without any linked to the retailer, and ‘op-ed’ pieces. Following this first level of sampling, the selected articles were then imported into NVivo - a qualitative software enabling the deep analysis of content rich data text. In order to facilitate a deeper level of sampling, a text search was carried out. Only articles mentioning the words producer(s), grower(s) or farmer(s) (respectively “producteur(s), paysan(s) and artisan(s) for our French sample) were selected and retained for our analysis. We focused on representations of producers as a way of investigating the extent to which discourse was self- versus other-regarding. We also ran a search on ‘competition’ as this evokes the traditional concern of free market actors.

Each article imported into NVivo was coded one by one using a specific set of nodes developed as we were coding the articles. Each article has been coded to the same set of nodes. Once coded, a set of queries were run using text searches, word frequencies as well as matrix coding. These queries were then reviewed in the textual context of the full articles as to make sure the context in which the words were used was taken into account.

In analysing our data we have been influenced by Fairclough’s work on CDA and more specifically the dialectical relationship existing between a discursive event and the social structures it evolves in as well as the important of taking the context into account. The critical component of CDA suggests our endeavour of improving the understanding of society. We would however like to acknowledge – as indicated by Wodak & Meyer (2009) – that by being critical we are also embedded into established social structures and that therefore our critical analysis is itself integrated within and framed by the social structures surrounding us.

National Context

Before discussing our findings, we wish to briefly contrast the national contexts for Fairtrade in the UK and France. The UK features well defined institutions, due to the existence of the Fairtrade Foundation, which was formed in 1992 by a coalition of NGOs, and its introduction of the nationally accepted Fairtrade Mark. The Fairtrade label in France is not seen as having such widespread acceptance; an ADM volunteer told a journalist, “*on nous reproche un peu notre manque de clarté*” (“We lack clarity” – our labelling scheme lacks clarity) or again as highlighted by an article titled “*le commerce équitable se développe en France dans la cacophonie*” (“Fairtrade has developed in France in a cacophony”). Because of this lack of transparency around the meaning of Fairtrade in France, the French government, together with the French Association of Normalisation (AFNOR) have since 2005 been working on creating national norms, to elaborate a common national label for Fairtrade products: “*pour éviter que chaque marque invente son propre standard*” (“to avoid that each brand creates its own standards”).

In the UK, the first article mentioning Fairtrade and at least one of our selected retailers appeared in 1992 (coinciding with the launch of the Fairtrade Foundation), although only 2 articles on the topic were published that year. In 1993, the concept of the Fairtrade mark was launched but the number of articles published stayed very

low. 1994 was the first year a product carried the Fairtrade mark. From this event forward, the numbers of articles available gradually increased.

In the UK, supermarkets became involved very early on. The first product to carry the Fairtrade label was a Green & Black drinking chocolate that was sold in Sainsbury, a British grocery retailer. By 1996, the number of articles available for Tesco overcame the ones for Traidcraft, clearly emphasising that supermarkets had sensed an opportunity in the Fairtrade market and were now moving in to take advantage of it. The year 2000 saw the appearance of the first supermarket-owned Fairtrade branded product, with the Co-op starting its own-brand Fairtrade milk chocolate bar.

While in France we had to wait until 1997 to find an article mentioning both Fairtrade and at least one of our selected retailers, a significant increase in the number of articles available seemed to follow the same pattern as in the UK. However, while in the UK the number of articles is through the years greater for Tesco than for Traidcraft, in France, over the entire period 1996-2009 the number of articles is greater for ADM than for Carrefour. This highlights the different way in which the Fairtrade market has evolved at in France and in the UK.

Findings

France: Militant vs Profit-Seeking Discourse

ADM casts itself in the militant role of ‘changing the rules of international trade’: “(...) *Ce n'est pas que payer un bien à un prix juste, c'est aussi une tentative de changer les règles du commerce international*” (“ (...) It's not only paying a good at a fair price, but also an attempt to change the rules of international trade (...)”). The idea of a militant discourse is reinforced by ADM's opposition to the involvement of supermarkets in the Fairtrade market: one of ADM's employees stated that “*il n'est pas question d'être dans le même référentiel que la grande distribution (...). Nos boutiques sont des lieux citoyens, avec des point d'information et un accompagnement de la clientèle*” (“Being in the same referential as large retailers is out of the question (...). Our stores are a place of exchange and sharing, with information points and a follow up of customers”); or again “*Équité et supermarchés ne vont pas de paire. (...).*” (“Equity (fairness, justice) and supermarkets do not go well together. (...)”). Again in 2007, a volunteer of ADM stated: “*Vendre n'est pas notre principal leitmotiv, nous sommes là aussi pour éduquer au commerce équitable et faire pression sur les décideurs pour changer les règles actuelles du commerce international*” (“Selling is not our main leitmotiv, we are here also to educate to an equitable trade and pressure those who make decisions to change the present rules of international trade”).

It should, however, be noted that while ADM is against supermarkets' involvement other organizations, such as Alter-Eco and Max-Haveelar (two big names of Fairtrade organizations in France), are however favourable to such involvement: “*pour permettre a beaucoup de producteurs de bénéficier de ces échanges*” (“to enable many producers to benefit from these exchanges”).

France: Producers and Competition

A stark division can be seen in the discourse of ADM (militants) vs Carrefour (traditional profit-seeker) regarding their references to producers and competition. In articles specific to Carrefour, references to producers were used only 5 times, against a total of 23 times by ADM. Moreover, in articles referring to Carrefour, not only is the word is mentioned without being linked at any time with generating profit and benefits to the producers, but is also used in a context irrelevant and unrelated to Carrefour. Sentences such as the following best illustrate our point: “(...) *Elle a félicité le groupe Carrefour de « faire preuve de responsabilité sociale » en s'engageant sur ce secteur qui assure aux petits producteurs des pays en voie de développement des prix de vente permettant leur survie*” (“She congratulated Carrefour for “being socially responsible” by engaging itself in a sector that ensures small producers of developing countries prices allowing them to survive”). What we first need to notice in this sentence is that ‘She’ here refers to Christine Lagarde, the French minister for International Trade and the allusion on producers is not directly linked to Carrefour. Second, the use of the word ‘socially responsible’ refers to Corporate Social Responsibility, rather than Fairtrade specifically. Third, the word ‘survive’ contains in itself quite a negative connotation, while the discourse on Fairtrade is usually very positive using words such as ‘empowering producers’, ‘development’, ‘fair price’, ‘decent lives’.

In contrast, there are multiple references to producers in our ADM sample. We shall first of all consider some examples: Monique Le Minter, president of an ADM’s product branch states that: “*Grâce au commerce équitable, les producteurs disposent de salaires justes et durables. Et les villages peuvent investir dans des projets de développement. Comme ce village d'Intouchables, en Inde, qui peut maintenant envoyer ses filles à l'école !*” (“Thanks to Fairtrade, producers have fair and sustainable salaries. And the villages can invest in projects of development. Like this village of Untouchables in India, where they can now send their daughters to school”). In this first example, the discourse used is typical of Fairtrade: the words ‘fair’, ‘sustainable’ ‘development’ directly refer to the core goals of the Fairtrade movement. The words used are not only positive but they are used in an optimistic, constructive and encouraging way, leading to the conclusion that Fairtrade is bringing about positive changes in the lives of producers.

The other element is that producers are recast as active partners rather than passive recipients. An employee of ADM (2005) was reported as saying: “*Notre objectif, c'est bien de permettre à ces producteurs, artisans ou paysans des pays du sud, qui sont défavorisés de vivre le plus dignement possible et aussi d'être acteurs de leur développement*” (“Our objective is to enable these producers, framers or growers of Southern countries to live the most decently possible and also to be the agent of their own development”). Here the use of the term ‘agent’ is most emblematic of a Fairtrade discourse, evoking the connotation of producers’ empowerment and direct engagement.

To summarise, vocabulary used throughout ADM’s references to producer is unequivocally representative of the Fairtrade discourse. Words such as ‘better living conditions’, ‘decent’ ‘decently’ and ‘dignity’ are used throughout the references and

reveal the positive change ADM through Fairtrade is willing to bring. But also: “trading relationships based on dignity”, “decent salaries”, “living decently”; ‘fair’ and ‘sustainable’ when talking about producers remunerations and trading relationships.

When it comes to competition, although ADM and Carrefour only occasionally refer to a competitive retailing environment, they both nonetheless acknowledge its existence. To illustrate, ADM in 2005 stated that, “*Face à la grande distribution qui se met à vendre des produits équitables (...), les bénévoles veulent être encore plus dynamiques, encore plus rigoureux*” (“Faced with mass market retailers starting to sell Fairtrade product (...), volunteers want to be even more dynamic and even more rigorous”). In this example, it is quite clear that supermarkets have now entered the Fairtrade market and that ADM has to find a way to be competitive; however, it seems that in doing so it is trying to maintain its distinctiveness. However, although the Fairtrade market grew rapidly in this period, competition was not a dominant theme.

UK: The Emergence of a ‘Mainstreaming Discourse

In the 2005-2007 the word ‘mainstream’ appears 10 times in a context meaningful to our research in 8 of our selected articles all coming from our UK sample. In 2006, Fairtrade’s move into mainstream is emphasised by Harriet Lamb, the executive director of the Fairtrade Foundation, who was reported as seeing “(...) the increasingly stylish image of Fairtrade clothing as being part of a general mainstreaming of Fairtrade goods”. Similarly, an employee of Traidcraft stated that: “(...) the company has been seen as being outside the mainstream of business in the UK. But now it believes its campaigning and commercial success are at last making the world realise Fairtrade can be part of “normal”, everyday business practice”.

This mainstream discourse in the UK is also emphasised by the acceptance of supermarkets’ involvement by Fairtrade actors: Harriet Lamb was reported saying that: “We need to look at the motivation of why companies are doing it but that is a good news story as well. Companies are doing it because their customers want it. And you can argue to what extent it's the role of business to take on the role of sustainable development. I would say it's an essential part of their business. Others might disagree but no one would disagree it's the business of business to do what customers want”; or again she stated that “we would never say to a company: you can't do Fairtrade. There are 25 million coffee farmers in the world, we have to get the big boys in and they come with baggage. But we don't let them off the hook. Also, the public are canny. They can tell when it is just for show”. Thus, the ethical orientation of the consumer is seen as providing a counterweight to the supermarket retailer. Supermarkets in the UK are an integral part of the Fairtrade market. Proponents of their involvement are, in the UK voiced by representatives of Fairtrade organizations, while these very same Fairtrade organizations in France are fighting over the need or not for supermarkets involvement.

UK: Producers and Competition

While articles mentioning ‘producer’ were easy to find for ADM, direct quotes in British newspapers for the word ‘producer(s)’ are very scarce. Running a frequency search using the words producer(s), farmer(s) or grower(s) in our Tesco and Traidcraft sample carries approximately the same results in terms of quantity; however this does not take into account the context in which the word is being used. A deeper analysis surrounding the context in which the word producer(s) is used reveals a very different discourse produced by Tesco and Traidcraft in the UK.

First of all, it is important to mention that there are almost no direct quotes whatsoever mentioning producers neither in articles related to Tesco nor for those related to Traidcraft. In articles referring to Tesco, the word producer(s) is usually mentioned very briefly. Illustrating our point are sentences such as: “(...) helping five million people across 49 developing countries”, or again used in a context of market trends: “community Foods has launched the basmati rice in 500g packs under its Crazy Jack brand. The rice, which is grown in the foothills of the Himalayas, is produced through a partnership of 572 growers. It will be distributed to 150 Tesco stores across the country”. In 2007 there was a discernable shift and we were able to see sentences such as: “Last year we also converted all the tea and coffee we sell to Fairtrade, which meant more than GBP340,000 in Fairtrade premium went directly back to our farmers to invest in their communities”. While the reference to producers here is still tied to market growth and profit, the sentence nonetheless links profit and producers’ well-being, as well as containing the word ‘communities’ – vocabulary very specific to the Fairtrade discourse. But even more interestingly, we can notice the use of the possessive pronoun ‘our’, suggesting a recognition of increasing corporate responsibility from Tesco.

Traidcraft, on the other hand, makes a very different use of the word producer(s), although it is again important to stipulate that most sentences are not direct quotes from Traidcraft’s employees or representatives. The following sentences best illustrate our point: “Traidcraft plc’s sales are now worth more than pounds 12m a year, providing vital income for producers in more than 30 countries”. While reporting how much profit was made, this profit is associated with helping producers in developing countries, therefore connecting profit and ethics. Lastly, Traidcraft’s motives are best summarized by this sentence: “We shall carry on doing what we do best: gently trying to persuade folk that it really is a good thing to help the poorer producers overseas, that Traidcraft is one of the best ways of achieving this and, at the same time, giving folk the opportunity to taste very high-quality produce”. Here, helping producers is cast at the forefront, although while not losing the sight of consumers and supplying quality products. But here it is also worth noting that Traidcraft is positioning itself against competition, as judged by words such ‘what we do best’, ‘persuade’, ‘one of the best ways of achieving this’.

This oblique reference to competition is, however, the only one for Traidcraft, while there are 19 references to competition from Tesco. In 2005, newspapers are comparing, for example, Tesco’s and Sainsbury’s lines of Fairtrade products. In 2006, Marks & Spencer, a major competitor of Tesco, ‘became the first major British retailer to sell coffee and tea that carries only the Fairtrade mark’. Other

supermarkets, including Tesco, promptly accelerated their Fairtrade initiatives in response.

While we have seen the competition dramatically increasing through the years in the British market for Fairtrade we have also been able to appreciate the diverging approaches both retailers, Tesco and Traidcraft, have taken, which also tells us a lot about the kind of identity as a retailer they have built for themselves. While the discourse surrounding Tesco's overall stance on Fairtrade does not place producers at the forefront, Traidcraft clearly position itself as a Fairtrade advocate, although use a less oppositional discourse than the one suggested by FINE's Fairtrade definition.

Contributions and Conclusions

While both Tesco and Carrefour are operating in different national contexts, the discourse surrounding the Fairtrade identity they have built for themselves does not suggest a genuine stance toward other-regarding behaviour - although we have noticed a slight change in the language Tesco uses in 2007. Overall, while Carrefour and Tesco publicize their Fairtrade products, their discourse remains that of a free trade stance. Kant and his vision on the "purity of motives" can inform our analysis of the Fairtrade values exhibited through both Carrefour and Tesco's public statements. Central to Kant's moral philosophy is the belief that individuals' actions are only truly moral if they are morally motivated and uncontaminated by motives of self interest (Bowie 2002). From this perspective, Tesco and Carrefour's actions cannot be classified as being moral and ethical given the self-interest that still dominated their discourse.

The theory of utilitarianism, on the other hand, is a consequentialistic theory and is concerned with ethics in the sense that it aims at determining whether human actions are right or wrong (Snoeyenbos & Humber 2002) by looking at the consequences of such involvement. Looking at Tesco's and Carrefour's actions from this perspective, even if motivated by profit they result in helping third world producers and therefore in a moral outcome.

At the other extreme, ADM is unambiguously a defender of Fairtrade principles, the discourse it uses is particular to the Fairtrade discourse set out by the FINE's definition. ADM positions itself as a militant campaigning for changing the rules of international trade and positioning itself against conventional economic principles. As such a fervent advocate of Fairtrade principles, ADM is strictly against supermarkets' involvement and competes by keeping its distinctiveness as opposed to competing directly with supermarkets.

Traidcraft, however, although also a specialised Fairtrade retailer, displays a different strategy. Traidcraft does not position itself as a militating for Fairtrade values, but as willing to do whatever it can to integrate Fairtrade into the mainstream. While ADM wants to change the rules of international trade, Traidcraft, and more generally the British Fairtrade movement as supported by Fairtrade organizations, support the view

that for Fairtrade to work it has to integrate into the mainstream and therefore use these mainstream's institutional settings as opposed to radically changing them.

We have therefore uncovered a multiplicity of discursive positions taken by Fairtrade actors. Reasons for this would, we suggest, lie in the historical, cultural and the institutional context of the Fairtrade movement in different countries. We therefore believe national institutional contexts should be taken into account in future research in order to further investigate the extent to which national characteristics influence Fairtrade identities. The emergence of a 'mainstream' discourse that is comfortable with the involvement of large retailers, in line with the increasing strength of the British Fairtrade market, seems grounded in consequentialist assumptions: large retailers may be self-interested, but this does not prevent them from doing good. Our findings suggest that a single Fairtrade discourse should not be assumed, that current academic debate on 'free versus fair' does not capture the diversity of social and discursive practices, and that as scholars we should be alert to the creation of new norms, new rules, new ways of doing things.

APPENDIX 1a - Sample France

SEARCH 1 Commerce Equitable AND Carrefour Region: limited to France Exclude: Republished new				SEARCH 2 Commerce Equitable AND Artisans Du Monde Region: limited to France Exclude: Republished news				SEARCH 3 Commerce Equitable Region: limited to France Exclude: Republished news		
Date Range	Search 1	SAMPLE* SAMPLE**	Date range	Search 2	SAMPLE* SAMPLE**	Date range	Search 3	Date range	Search 3	
01/01/1996 31/12/1996	0		01/01/1996 31/12/1996	0		01/01/1996 31/12/1996	1	01/01/1996 31/12/1996	1	
01/01/1997 31/12/1997	1		01/01/1997 31/12/1997	4		01/01/1997 31/12/1997	5	01/01/1997 31/12/1997	5	
01/01/1998 31/12/1998	1		01/01/1998 31/12/1998	4		01/01/1998 31/12/1998	4	01/01/1998 31/12/1998	4	
01/01/1999 31/12/1999	3		01/01/1999 31/12/1999	8		01/01/1999 31/12/1999	31	01/01/1999 31/12/1999	31	
01/01/2000 31/12/2000	6		01/01/2000 31/12/2000	9		01/01/2000 31/12/2000	39	01/01/2000 31/12/2000	39	
01/01/2001 31/12/2001	10		01/01/2001 31/12/2001	8		01/01/2001 31/12/2001	98	01/01/2001 31/12/2001	98	
01/01/2002 31/12/2002	13		01/01/2002 31/12/2002	16		01/01/2002 31/12/2002	157	01/01/2002 31/12/2002	157	
01/01/2003 31/12/2003	8		01/01/2003 31/12/2003	55		01/01/2003 31/12/2003	338	01/01/2003 31/12/2003	338	
01/01/2004 31/12/2004	42		01/01/2004 31/12/2004	256		01/01/2004 31/12/2004	1119	01/01/2004 31/12/2004	1119	
01/01/2005 31/12/2005	41	2	01/01/2005 31/12/2005	352	17	01/01/2005 31/12/2005	1773	01/01/2005 31/12/2005	1773	
01/01/2006 31/12/2006	64	5	01/01/2006 31/12/2006	431	14	01/01/2006 31/12/2006	2205	01/01/2006 31/12/2006	2205	

01/01/2007 31/12/2007	53	1	1	01/01/2007 31/12/2007	400	15	6	01/01/2007 31/12/2007	2169
01/01/2008 31/12/2008	40			01/01/2008 31/12/2008	409			01/01/2008 31/12/2008	2107
01/01/2009 31/12/2009	20			01/01/2009 31/12/2009	222			01/01/2009 31/12/2009	1116

*Number of Articles manually SELECTED from search

**Number of Articles SELECTED from the articles manually selected using a text search in Nvivo to refine the samples (producer*
OR farmer* OR grower*)

APPENDIX 1b – Sample UK

SEARCH 1 Fairtrade AND Tesco Region: limited to the UK Exclude: Republished new			SEARCH 2 Fairtrade AND Trairaft Region: limited to the UK Exclude: Republished news			SEARCH 3 Fairtrade (context only) Region: limited to the UK Exclude: Republished news			
Date Range	Search 1	SAMPLE SAMPLE*	SAMPLE REFINED**	Date range	Search 2	SAMPLE* SAMPLE*	SAMPLE REFINED**	Date range	Search 3
01/01/1992 31/12/1992	0			01/01/1992 31/12/1992	2			01/01/1992 31/12/1992	3
01/01/1993 31/12/1993	1			01/01/1993 31/12/1993	4			01/01/1993 31/12/1993	12
01/01/1994 31/12/1994	4			01/01/1994 31/12/1994	8			01/01/1994 31/12/1994	32
01/01/1995 31/12/1995	2			01/01/1995 31/12/1995	4			01/01/1995 31/12/1995	14
01/01/1996 31/12/1996	6			01/01/1996 31/12/1996	3			01/01/1996 31/12/1996	42
01/01/1997 31/12/1997	5			01/01/1997 31/12/1997	4			01/01/1997 31/12/1997	29
01/01/1998 31/12/1998	7			01/01/1998 31/12/1998	4			01/01/1998 31/12/1998	48
01/01/1999 31/12/1999	9			01/01/1999 31/12/1999	5			01/01/1999 31/12/1999	86
01/01/2000 31/12/2000	20			01/01/2000 31/12/2000	13			01/01/2000 31/12/2000	146
01/01/2001 31/12/2001	11			01/01/2001 31/12/2001	15			01/01/2001 31/12/2001	158
01/01/2002 31/12/2002	29			01/01/2002 31/12/2002	31			01/01/2002 31/12/2002	311

01/01/2003 31/12/2003	39				27			01/01/2003 31/12/2003	484
01/01/2004 31/12/2004	73				54			01/01/2004 31/12/2004	2305
01/01/2005 31/12/2005	100	13	8	80	13	7		01/01/2005 31/12/2005	1520
01/01/2006 31/12/2006	278	20	10	110	11	5		01/01/2006 31/12/2006	2495
01/01/2007 31/12/2007	441	42	12	116	4	3		01/01/2007 31/12/2007	3780
01/01/2008 31/12/2008	337			147				01/01/2008 31/12/2008	3604
01/01/2009 31/12/2009	132			59				01/01/2009 31/12/2009	1663

*Number of Articles manually SELECTED from search

**Number of Articles SELECTED from the articles manually selected using a text search in Nvivo to refine the samples (producer*
OR farmer* OR grower*)

References

- Becchetti, L. & Huybrechts, B. (2008). The Dynamics of Fair Trade as a Mixed-form Market. *Journal of Business Ethics* 81:4, 733-750.
- Belk, R. W. (1988). Possessions and the Extended Self. *The Journal of Consumer Research*. 15:2, 139-168.
- Bhagwati, J. (2002). *Free Trade Today*. Princeton, New Jersey: Princeton University Press.
- Blau, P. M. (1964). *Exchange and Power in Social Life*. New York, USA: John Wiley & Sons.
- Bowie, N. E. (2002). A Kantian Approach to Business Ethics. In R. E. Frederick (Ed). *A Companion to Business Ethics*. Malden, Oxford, Carlton: Blackwell Publishing.
- Daly, H. E., & Cobb, J.B. (1994). *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future*. Boston: Beacon Press.
- Damasio, A. (1994). *Descartes' Error*. London: Vintage Books.
- Dick, P. (2004). Discourse Analysis. In C. Cassell & G. Symon (Eds). *Essential Guide to Qualitative Methods in Organizational Research*. London, California, New Delhi: Sage Publications.
- Fairclough, N. (1992). *Discourse and social change*. Cambridge: Polity Press.
- Fairclough, N. (2003). *Analysing Discourse: Textual analysis for social research*. London, New York: Routledge.
- Galbraith, J. K. (1958/1998). *The Affluent Society*. Boston: Mariner.
- Gendron, C., Bisailon, V., Otero Rance, A. I. (2008). The Institutionalization of Fair Trade: More than Just a Degraded Form of Social Action. *Journal of Business Ethics* 86: supplement 1, 63-79
- Held, V. (2006). *The Ethics of Care: Personal, Political, and Global*. New York, Oxford: University Press.
- Homans, G. C. (1961). *Social Behavior: Its Elementary Forms*. London: Routledge and Kegan Paul.
- Hutchens, A. (2008). *A little Divine intervention*. The Sydney Morning Herald.

Jaworski, A. & Coupland, N. (1999). Perspectives on Discourse Analysis. In A. Jaworski & N. Coupland (Eds). *The Discourse Reader*. London, New York: Routledge.

MacEwan, A. (1999). *Neo-liberalism or democracy? : Economic strategy, markets, and alternatives for the 21st century*. London, New York: Zed Books.

Mitchell, J. N. (1978). *Social Exchange, Dramaturgy and Ethnomethodology: Toward a Paradigmatic Synthesis*. New York, Oxford: Elsevier.

Mintzberg, H., Simons, R. & Basu, K. (2002). Beyond Selfishness. *MIT Sloan management review* 44:1, 67-74.

Moore, G. (2004). The Fair Trade Movement: Parameters, Issues and Future Research. *Journal of Business Ethics* 53:1-2, 73-86.

Nicholls, A. J. (2002). Strategic options in fair trade retailing. *International Journal of Retail & Distribution Management* 30:1, 6-17.

Nicholls, A. & Opal, C. (2005). *Fair Trade: Market-Driven Ethical Consumption*. London, New Delhi, Singapore: Sage Publication.

Philips, N., Lawrence, T.B. & Hardy, C. (2004). Discourse and Institutions. *Academy of Management Review* 29: 4, 635-652.

Radin, M. J. (1996). *Contested Commodities: The Trouble with Trade in Sex, Children, Body Parts, and Other Things*. Cambridge, Mass: Harvard University Press.

Ragin, C. C. (1992). "Casing" and the Process of Social Inquiry. In C. C. Ragin and H. S. Becker (Eds). *What is a Case? Exploring the Foundations of Social Inquiry*. Cambridge, New York: Cambridge University Press, 217-226.

Ragin, C. C. (1997). Turning The Tables: How Case-Oriented Research Challenges Variables-Oriented Research. *Comparative Social Research* 16, 27-42.

Sidwell, M. (2008). *Unfair trade*. London: Adam Smith Institute.

Snoeyenbos, M. & Humber, J. (2002). Utilitarianism and Business Ethics. In R. E. Frederick (Ed). *A Companion to Business Ethics*. Malden, Oxford, Carlton: Blackwell Publishing.

Steinrucken, T. & Jaenichen S. (2007). The Fair Trade Idea: Towards an Economics of Social Labels. *Journal of Consumer Policy* 30:3, 201-217.

Toennies, F. (1887). *Gemeinschaft und Gesellschaft*. Michigan: Michigan State University Press.

Toennies, F. (2001). *Community and Civil Society*. England: Cambridge University Press.

VanderHoff Boersma, F. (2009). The Urgency and Necessity of a Different Type of Market: The Perspective of Producers Organized Within the Fair Trade Market. *Journal of Business Ethics* 86: supplement 1, 51-61

Wempe, J. (2005). Ethical Entrepreneurship and Fair Trade. *Journal of Business Ethics* 60:3, 211-220.

Wilkinson, J. (2007). Fair Trade: Dynamic and Dilemmas of a Market Oriented Global Social Movement. *Journal of Consumer Policy* 30:3, 219-239.

Wodak, R. & Meyer, M. (2009). Critical Discourse Analysis: History, Agenda, Theory and Methodology. In R. Wodak & M. Meyer (Eds). *Methods of Critical Discourse Analysis*. London, California, New Delhi, Singapore: Sage Publications.

**PART SEVEN: PUBLIC - PRIVATE
PARTNERSHIPS**

CORPORATE PHILANTHROPY AND GOVERNMENT INVOLVEMENT: PRELIMINARY INSIGHTS INTO THEIR SIGNIFICANCE IN SINGAPORE

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Abstract

Corporate philanthropy is the act of corporations donating a portion of their profits and resources to mainly non-profit organizations. Today, the world is facing a global financial crisis. This seems an opportune time to examine this subject in the context of government involvement in the case of Singapore, particularly between corporate giving and Singaporean universities.

Corporate philanthropy can assist an organization to achieve its social objectives (philanthropy) and financial goals (profit). In this paper, corporate philanthropy is reviewed and discussed in the light of how it can be combined to maximum effectiveness for both the donor (corporations) and the benefactor organizations (universities).

The paper also focuses on government involvement in encouraging corporate philanthropy in Singapore. The Singapore government plays a pivotal role in promoting and supporting philanthropy. In fact the Singapore example of government involvement stands out as it involves a tripartite approach involving the government, private sector and labor movement in partnership to drive the Corporate Responsibility agenda.

Keywords: Corporate Philanthropy; Singapore universities; societal marketing; corporate social responsibility; responsible leadership

Introduction

Corporate philanthropy is the act of corporations donating a portion of their profits and resources to mainly non-profit organizations. The concept of corporate giving dates back to the turn of the 20th century and the rise of the modern corporation (Useem 1987). Today, almost a century later, the world is facing a global financial crisis, unprecedented in terms of its scale and wide-reaching impact. This seems an opportune time to examine this subject in the context of government involvement in the case of Singapore, particularly between corporate giving and Singaporean universities.

Corporate philanthropy can assist an organization to achieve its social objectives (philanthropy) and financial goals (profit). In this paper, corporate philanthropy is discussed in the light of how they can be combined to maximum effectiveness for both the donor (corporations) and the benefactor organizations (universities).

It also examines the applicability of societal marketing and corporate philanthropy in the context of the educational institutions in Singapore. Educational institutions can be suitable alliance partners with organizations who engage in corporate philanthropy.

Background Literature

Corporate philanthropy can assist an organization to achieve its social objectives (philanthropy) and financial goals (profit). According to Varadarajan & Menon (1988), this can be considered as a component of a wider concept called Corporate Social Responsibility (CSR).

Although a familiar management buzzword these days, CSR varies in terms of its underlying meanings. The term "corporate social responsibility" is often used interchangeably with corporate responsibility, corporate ethics, social enterprise, corporate citizenship, sustainability, sustainable development, triple-bottom line and in some instances corporate governance (Harvard Kennedy School Corporate Social Responsibility Initiative 2009). Though these terms appear different, they actually have a similar underlying implication and that is CSR encompasses not only what organizations do with their profits but also how they make them. Ultimately, there is a need for organizations to undertake activity that is regarded as socially responsible. As Moir (2001) points out, "the primary role of business is to produce goods and services that society wants and needs; however there is an interdependence between business and society".

There is much cross-national evidence that the varying definitions of CSR are because the meanings and practices of business responsibility are different for different countries (Matten & Moon 2008). For example, in developed countries there may be a social emphasis on environmental issues, however, in developing countries, there may be a stronger economic emphasis in terms of financial aid or educational scholarships. The differing schools of thought regarding CSR can be seen to have oscillated between the two extremes of the free market concept (classical economic theory) and the socially-oriented approach (Bronn & Vrioni 2001). For the purpose of this paper, the explanation of CSR should include both the social and the economic (including financial) aspects. It must be inclined towards a socially-oriented approach but not without economic gain by the concerned parties, the donor and the benefactor. In fact, Moir (2001) highlighted the stakeholder theory to analyze and examine the various "concerned parties". In the stakeholder theory, the organization deals with a series of connections of stakeholders that the managers of the organization attempt to manage. Stakeholders include shareholders, investors, employees, customers and suppliers, governments and communities and individuals who influence or are affected by the organization.

Corporate philanthropy may be viewed as socially responsible giving by corporations (Sasse & Trahan 2007) and may include cash gifts, product donations, and employee volunteerism. Generally, it refers to the giving by a commercial organization directly to charitable organizations or to individuals in need with the intention of improving the overall quality of life.

Various literatures have listed traditional philanthropy as the original form of CSR or as CSR at its most basic level (Bronn & Vrioni 2001; Seitanidi & Ryan 2007). In fact, there exists a continuum in terms of the degree of involvement in CSR, where corporate philanthropy is at one end of the spectrum and corporate community involvement and partnerships are listed at the opposite end. In what is being referred to as a new paradigm in CSR (Seitanidi & Ryan, 2007), there appears to be a movement away from an indirect form of corporate involvement such as corporate philanthropy, to a more direct form of involvement or interaction such as cause related marketing. Seitanidi & Ryan (2007) noted that the trend has been for organizations to be more receptive to the idea of corporate community involvement or community relations. In fact, this trend was first mooted sometime ago by Varadarajan & Menon (1988), where they had noted that corporate involvement in social well-being began as a voluntary response to social issues and problems, but then evolved into a phase in which social responsibility was viewed as an investment by corporations.

Overview of Motives for Corporate Philanthropy

Several motives for corporate philanthropy can be identified. From the literature, it can also be seen that there are various studies that agree and disagree with each of these motives. In this section, the salient motives are briefly discussed.

The economic motive of corporate philanthropy is that it maximizes shareholder wealth through increasing profits for the organization. The underlying principle here is that through giving, the organization benefits from being socially responsible and in the long term, that can help build sales, energize the workforce and develop trust in the organization as a whole. In addition, the role of government in encouraging philanthropy through attractive incentives such as tax deductible donations further supports this view. Conversely, the other view is that there is a negative relationship. In Wang et al. (2008) study, the authors provided examples for those who agree that financial performance and corporate philanthropy are positively associated, and also examples to show that corporate philanthropy diverts valuable corporate resources and inhibits corporate financial performance. A study was carried out by Godfrey (2005) cited in Sasse & Trahan (2007), that summarized the research findings of various scholars on the link between financial performance and corporate philanthropy. The conclusion was a “decidedly mixed picture”.

Another motive argues that corporate philanthropy influences stakeholders’ (as defined earlier) perception of the organization (Brammer & Millington 2005). Through corporate giving, organizations enhance their reputations. These positive images in turn induce stakeholder support and enable the organization to secure

critical resources controlled by the stakeholders. In Brown et al (2006) study, the conclusion was that charitable giving may be a way for firms to enhance their public reputations and to create goodwill with customers, employees and regulators. The benefits accrued to the profit-oriented commercial organization are obvious. The most apparent link to overall performance is the reputation effect (Bronn & Vrioni 2001). While there have been doubts about the real effect of this (Azlan et al. 2007), there is sufficient empirical evidence to suggest that the greater an organization's philanthropy, the better its reputation or corporate image (Bronn & Vrioni 2001; Kelly 1991; Mullen 1997). This favorable reputation can ultimately benefit an organization in many ways. It could allow organizations to charge premium prices; change attitudes of customers; attract and retain talent; maintain good ties with the community and publics; and enhance their access to capital markets and attract investments.

The other motive is that corporate philanthropy can be used as a marketing tool to enhance an organization's image through strategic public relations, extensive media coverage and publicity and supported through advertising and promotional campaigns. This aspect is further discussed later in the next section of the paper.

Last but not least, there is the "internal effect" of corporate philanthropy that organizations may take into consideration and which is related to the other motives mentioned above (Collins 1993). It is about the future investment in the workforce of the organization, where a good corporate image would attract high quality recruits. In a service-oriented organization, this becomes the competitive edge an organization has over its competitors.

Link Between Corporate Philanthropy and Societal Marketing

Corporate philanthropy according to Bennet (1998) as cited in Azlan et al. (2007) is a product and like any product it can be marketed to the public. Collins (1993) also alluded to corporate philanthropy being a "potentially valuable marketing tool". It is therefore not surprising that corporate philanthropy initiatives are often handled by the corporate communications or public relations department in an organization. Is there a link between corporate philanthropy and societal marketing?

The origins of societal marketing date back to the 1960s (Collins 1993), when marketing scholars realized that the matching of consumer needs and wants at a profit alone does not imply protection of their interests. Hence, societal marketing grew from this concern that products or services needed to be marketed in a socially responsible manner and also takes into consideration the ethical, environmental, legal and social context of marketing. Hence societal marketing is often referred to as social responsibility marketing. As defined by Kotler, et al. (2006), "the organization's task is to determine the needs, wants and interests of target markets and to deliver the desired satisfactions more effectively and efficiently than competitors in a way that preserves or enhances the consumer's and society's well-being".

This takes into account both consumers' and society's long-term interests as part of the organization's marketing strategy. Therefore, the challenge for the organization is to be both profitable and socially responsible.

As discussed earlier in the paper, corporate philanthropy can contribute to the various stakeholders in many ways and at the same time creating a return for the organization. Through carefully targeted and marketing driven philanthropic programs, organizations can achieve both commercial and societal objectives. There are obvious financial costs in making contributions as well as the time spent by management in administering these initiatives, however, if corporate philanthropy can be used as marketing tool, then these costs are no different than marketing expenses.

Looking at this from another angle, Collins (1993) points out that there is a growing cost to be considered for organizations which do not practice any form of philanthropy. In the long term, the negative consequences could be detrimental not only to the corporate image but also falling sales revenue and the "lack of goodwill could have untold repercussions to future operations".

Corporate Philanthropy And Singapore Educational Institutions

Evidences of corporate philanthropy can be traced back in history. For example, in the case of Singapore, the origins of philanthropy or donating to causes, goes as far back as the 19th and early 20th century (Note: Singapore was only founded in 1819) when wealthy Chinese entrepreneurs contributed money and land towards the building of schools. Some examples include the Anglo-Chinese School (founded in 1886); Nanyang Girls High School (founded in 1917); Chinese High School (founded in 1919) and Nanyang University (currently the Nanyang Technological University, which was founded in 1955). Today, this tradition of giving is still evident and is part of the value system that is still grounded in a very Asian and Confucianism-based culture in Singapore society.

However, since the 1950s, the government has taken on an increasing role as promoter and practitioner of CSR initiatives (Tan 2008). In fact the Singapore example of government involvement stands out as it involves a tripartite approach involving the government, private sector and labor movement in partnership to drive the CSR agenda. In May, 2004, the National Tripartite Committee on CSR was established to provide strategic direction and overall coordination for various CSR programs, and in particular, involving more local Small & Medium Enterprises (SMEs). In January, 2005, the Singapore Compact for CSR was set-up to provide a forum for collaboration, support and information sharing on good CSR practices (Tan 2008). Recently, in March 2008, the Community Foundation of Singapore was set-up by the National Volunteer & Philanthropy Centre (NVPC), a Non-governmental Organization (NGO), as a new initiative to encourage and facilitate philanthropy and to provide professional advice on various philanthropic causes (National Volunteer & Philanthropy Centre 2009).

In October 2008, NVPC launched a New Initiative Grant worth up to US\$140,000 for each new initiative involving a strong and sustainable volunteerism and/or philanthropy component which will benefit the community at large in Singapore.

The Singapore government plays a pivotal role in encouraging and supporting philanthropy. According to Tan (2008), “the state prefers to use persuasion in accord with Singapore’s political and cultural values which emphasize ethical leadership and the promotion of social responsibility, cohesion and stability in a multiracial and multilingual society”. Hence, the government encourages private organizations to return a fair share of their profits back to society.

In Singapore, corporate philanthropy involving private sector organizations and publicly-funded educational institutions is often limited to charitable donations. The three local universities, National University of Singapore (NUS), Nanyang Technological University (NTU) and Singapore Management University (SMU), accept all forms of donations from both individuals and organizations. In 1991, the government established a University Endowment Fund to attract donations as an alternative source of funding for the universities instead of government grants and tuition fees. For every S\$1 raised by the universities, the government pledged S\$1. The matching fund proved to be very effective in cultivating a culture of philanthropy for university education in the local community (Lee 2002; Lee & Gopinathan 2003).

Until December 1996, the universities drew from the Universities Endowment Fund, but this was dissolved to create separate fund-raising programs. In 1997, the third university, Singapore Management University (SMU) was set-up and the government announced that it would contribute S\$3 for every S\$1 raised for SMU. At present, the government has adjusted its priorities and gifts to universities and donations are now being matched on the basis of dollar for dollar. One reason for this change could be that donations to non-profit organizations (including IPC and non-IPC) by individuals have been increasing, from US\$226 million in 2006 to US\$636 million in 2008 (Individual Giving Survey 2008). The survey also indicated that donor participation increased to 91% in 2008 from 89% in 2006. Since the whole purpose of the University Endowment Fund was to cultivate a culture of philanthropy for university education, it would seem that this has served its purpose well. Moreover, as highlighted by Lee & Gopinathan (2003), the Singapore government’s intention is to take a preventive approach to avoid the over reliance of universities on the government as the sole source of its funding needs.

In 2004, the combined figure for all three universities was about US\$1.3 billion in endowment funds. The donations are for the pursuit of academic excellence and research purposes are mainly channeled to fund scholarships, professorships, student bursaries, research grants and also for building-expansion projects. As a further boost to encourage donations to support charitable entities, the government announced in January 2005, that all Singapore tax residents(both individuals and companies) qualify for a double tax deduction on all such donations from their assessable income (These apply to donations to Institutions of a Public Character (IPC) which includes the universities). Moreover, if the allowable tax deduction exceeds the assessable income, then the unused deductions can be carried forward for up to five years (Inland Revenue Authority of Singapore (IRAS) Circular 2006).

Given these generous government incentives, it is no surprise that corporate philanthropy towards educational institutions in Singapore has been on a growth trend in recent years. It makes perfect sense for organizations to direct corporate philanthropy towards educational institutions as the Singapore Government matches dollar for dollar, all donations made by individuals and organizations. This effectively doubles the overall value of the donation to the educational institution and also enhances the reputation effect for the organization and enhances its corporate image. For FY2007/2008, NUS received a total of US\$74,555,900 in donations (NUS Annual Report 2008), while NTU received a total of US\$42,365,391 in donations for FY2006/2007 (NTU Annual Report 2007). SMU received the lowest with donations amounting to US\$19,982,725 for FY2007/2008 (SMU Report to Stakeholders 2008).

In practicing corporate giving and engaging in social responsible marketing practices, corporations enhance their image and reputation amongst these universities. Endowments and scholarships benefit top talents which in turn provide good publicity for the corporation. As mentioned earlier, universities are a huge market in themselves and also producers of potential employees and also consumers for corporations. Take the example of the National University of Singapore. Based on 2008 figures, the total population of students (undergraduate/postgraduate/research), faculty and staff, is just over 40,000. This figure does not include the university's alumni which have been listed as another 186,000, which would include many in overseas markets (NUS Annual Report 2008).

In the recent 2008 Individual Giving Survey by the NVPC, it was revealed that only 27% of the respondents indicated that they had donated money towards the education sector (See Fig. 1). This ranks "Education" as fifth on the list of types of organizations receiving donations. The same survey also reported that the average donation amount for individuals has also increased to US\$200 from US\$83 in 2006. In addition, 21% of those surveyed indicated that they will continue to give in the next twelve months (i.e 2009). Given the current and expected economic climate, it seems unlikely that this scenario will actually happen. In the US, university endowment funds and other donor-funded investments have suffered with the stock market and corporations have become a smaller piece of the philanthropic pie at local colleges and universities (Halcom & Asci 2008) Harvard University had reported a loss of 12% on its US stock portfolio and 12.1% on its foreign equity portfolio last year (Siow 2008). In Singapore, it was reported that Singapore university endowment funds are also struggling to cope with the financial meltdown and credit crises. However, in the case of the local universities, endowment investing is not widely practiced and not all funds have been committed. Hence, this has provided some protection from the financial turmoil (Siow 2008).

With the impending decline in philanthropic donations from the corporate sector, there may be a need for the Singapore government to step-in and increase funding to universities. The current 2009 budget does not address this (Budget Speech 2009), but eventually there may be a need for the government to reassess its budget provisions for tertiary education. With corporations reporting losses, tax deductions will have little effect. The government may need to consider reinstating the S\$3 for

S\$1 policy but perhaps other more innovative financial and fiscal solutions to encourage corporate giving will need to be considered.

One avenue yet to be explored by Singapore Universities is to emulate what has been tried and practiced in other countries, such as Hong Kong. Apart from relying on government grants, some Hong Kong universities derive extra financial resources from spin-off companies (Lee 2002). City University of Hong Kong, for example, even listed one of its spin-off companies, TeleEye Holdings Limited, on the Hong Kong Stock Exchange.

Perhaps the fundamental approach to ensure financial stability and self-sufficiency is for universities to deliver market-driven courses and programs. By focusing on the market, both students and industry, universities can deliver programs that will ultimately benefit themselves through increased student enrollment, both local and foreign students. There is even the option of eventually “exporting” academic programs overseas, as practiced successfully by many American, British and Australian universities in Singapore.

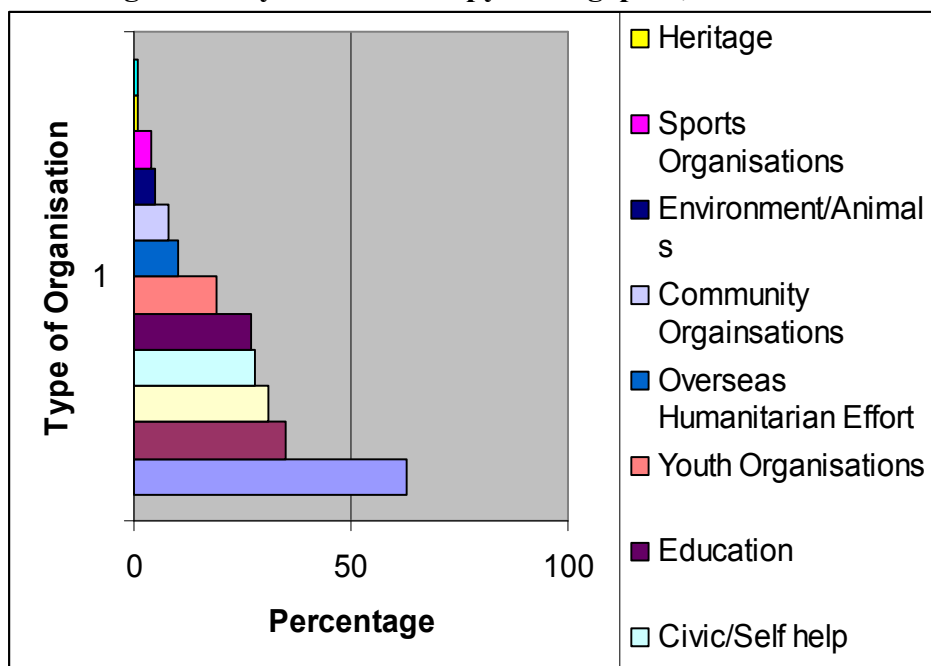
Limitations And Future Research

The limitations in this paper highlight potential topics for further investigation and research. The impact of the current financial meltdown on corporate philanthropy would prove an interesting topic to be explored in the context of universities in Singapore. Research in this area would be helpful in understanding what government and organizations could do and how this would increase contributions to the universities. Next, there should be further research into the relation between corporate sponsorship and corporate philanthropy and how sponsorship has had any impact on corporate giving.

Conclusion

This paper has reviewed a broad understanding of what is CSR and how through corporate philanthropy, socially responsible organizations might undertake such behavior. Whether CSR or corporate philanthropy leads to direct financial gain for stakeholders still remains an open question. However, in the context of Singapore and support from the government, this paper has shown that both corporations and Singapore universities have much to gain from corporate philanthropy. Despite the current economic climate, there is still a belief that government support will not waver and this will enable both donor and benefactor to benefit.

Fig. 1 Survey of Philanthropy in Singapore, 2008



Source: From the National Volunteer & Philanthropy Centre's "Individual Giving Survey 2008"

Note: Figures do not add up to 100% as multiple answers were allowed

References

- Azlan A, Lim LL, Yahya S. (2007). A study of corporate philanthropic traits among major Malaysian corporations. *Social Responsibility Journal* 3 (4): 21-30.
- Bennet R. (1998). Corporate philanthropy in France, Germany and the UK. *International Marketing Review* 16 (6):458-475.
- Brammer S, Millington A. (2005). Profit maximization vs agency: an analysis of charitable giving by UK firms. *Cambridge Journal of Economics* 29:517-534.
- Bronn PS, Vrioni AB. (2001). Corporate social responsibility and cause-related marketing: an overview. *International Journal of Advertising* 20:207-222.
- Budget Speech (2009). Singapore Budget 2009 [Online]. [Referred to 1.2.2009]. Available: www.singaporebudget.gov.sg.
- Collins M. (1993). Global corporate philanthropy – marketing beyond the call of duty?. *European Journal of Marketing* 27 (2):46-58.
- Godfrey P. (2005). The relationship between corporate philanthropy and shareholder wealth: a risk management perspective. *Academy of Management Review* 30(4):777-798.
- Halcom C, Ascii S. (2008). Corporate donations to college down, expected to keep falling. *Crain's Detroit Business* 24 (43):20.
- Harvard Kennedy School Corporate Social Responsibility Initiative. (2009). [Online]. [Referred to 4.1.2009]. Available: www.hks.harvard.edu/mrcbg/CSRI/init_approach.html.
- Individual Giving Survey (2008). National Volunteer & Philanthropy Centre. [Online]. [Referred to 15.11.2008]. Available: www.nvpc.org.sg/Library/Documents/ResearchReports/08IGS_SURVEY%20FINDINGS.pdf.
- Inland Revenue Authority of Singapore (IRAS) Circular (2006) – Tax Treatment on Donations with Benefits. [Online]. [Referred to 24.11.2008]. Available: [www.iras.gov.sg/irasHome/uploadedFiles/Other_Taxes_and_Services/Charities/etaxguideondonationswithbenefits\(3\).pdf](http://www.iras.gov.sg/irasHome/uploadedFiles/Other_Taxes_and_Services/Charities/etaxguideondonationswithbenefits(3).pdf).
- Kelly B. (1991). Cause-related marketing: doing well while doing good. *Sales & Marketing Management* 143(3):60-65.
- Kotler P, Keller KL, Ang SH, Leong SM, Tan CT. (2006). *Marketing Management: An Asian Perspective*. Singapore : Prentice Hall
- Lee MH. (2002). A tale of two cities: comparing higher education policies and reforms in Hong Kong and Singapore. *Australian Journal of Education* 46(3):255-286.

Lee MH, Gopinathan S. (2003). Hong Kong and Singapore's Reform Agendas. *International Higher Education* 32:8. [Online]. [Referred to 25.9.2008]. Available: www.bc.edu/bc_org/avp/soe/cihe/newsletter/News32/text008.htm.

Matten D, Moon J. (2008). Implicit and explicit CSR: a conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review* 33(2):404-424.

Moir L. (2001). What do we mean by corporate social responsibility?. *Corporate Governance* 1(2):16-22.

Mullen J. (1997). Performance-based corporate philanthropy: how "giving smart" can further corporate goals. *Public Relations Quarterly* 42(2): 42-48.

National Volunteer & Philanthropy Centre (2009). [Online]. [Referred to 9.1.2009]. Available: www.nvpc.org.sg.

NTU Annual Report 2007. Nanyang Technological University (2009). [Online]. [Referred to 9.1.2009]. Available: www.ntu.edu.sg.

NUS Annual Report 2008. National University of Singapore (2009). [Online]. [Referred to 9.1.2009]. Available: www.nus.edu.sg.

Sasse CM, Trahan RT. (2007). Rethinking the new corporate philanthropy. *Business Horizons* 50:29-38.

SMU Report to Stakeholders 2008. Singapore Management University (2009). [Online]. [Referred to 9.1.2009]. Available: www.smu.edu.sg.

Seitanidi MM, Ryan A. (2007). A critical review of forms of corporate community involvement: from philanthropy to partnerships. *International Journal of Non-Profit & Voluntary Sector Marketing* 12:247-266.

Siow LS. (2008). Varsity endowment funds weather market storm. *The Business Times*. 1 December 2008.

Tan, E. (2008). Moulding the Corporate Social Responsibility Agenda in Singapore. A working paper in *Knowledge@SMU*. [Online]. [Referred to 14.11.2008]. Available: knowledge.smu.edu.sg/article.cfm?articleid=1119.

Ussem M. (1987). Corporate philanthropy. In *The Nonprofit Sector: A Research Handbook*, Powell WW (Ed). New Haven:Yale University Press, 340

Varadarajan PR, Menon A. (1988). Cause-related marketing: a coalignment of marketing strategy and corporate philanthropy. *Journal of Marketing* 52:58-74.

Wang H, Choi J, Li J. (2008). Too little or too much? Untangling the relationship between corporate philanthropy and firm financial performance. *Organization Science* 19(1):143-159.

**PART EIGHT: CORPORATE RESPONSIBILITY
AND GOVERNANCE**

SOCIAL RESPONSIBILITY AS A DRIVER FOR LOCAL SUSTAINABLE DEVELOPMENT

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Abstract

The increased interconnection among local and global players induced by globalization, as well as the need for a complete application of the “subsidiarity principle”, calls for a re-thinking of the “corporate social responsibility” concept. This new concept broadens the perspective of the single company interacting with its own stakeholders in relation to specific social and environmental impacts, to a network of organizations, with different aims and natures, collaborating on relevant sustainability issues.

In this paper, the authors will provide a definition of “*Territorial Social Responsibility*”, sustaining the multi-stakeholder approach as a driver toward local sustainable development. Firstly, theoretical approaches to sustainable development at the territorial level will be examined, identifying the most innovative ideas about governance, network relation and development theories.

The idea of development focuses not only on the economic aspects, but on the structural and institutional factors. The existence of cooperative territorial networks is essential to fulfill the creation of tangible and intangible assets at the local level. At the same time, the effectiveness of the decision-making and rules’ system can stimulate and empower territorial networks to tackle sustainable development.

An analytical framework, scheme-shaped, will be set in order to identify the main aspects, indicators and practices characterizing the territorial social responsibility concept. It will represent a first attempt to create a feasible instrument aimed at understanding how cooperative social responsible actors, operating in the same territory, could direct the path toward sustainable development.

Keywords: Local sustainable development, territorial social responsibility, participation, local governance, accountability, sustainability reporting, multi-stakeholder approach, networks

Introduction

The idea that local sustainable development can be better achieved with a governance solution based on “network coordination” as well as the progressive involvement of stakeholders in sustainable development strategies of organizations, calls for a re-thinking of the “corporate social responsibility” concept. This new concept broadens the perspective of the single company interacting with its own stakeholders in relation to specific social and environmental impacts, to a network of

organizations, with different aims and natures, collaborating on relevant sustainability issues.

In this paper, a definition of local sustainable development is firstly provided, focusing on the territorial component of sustainable development and multi-level governance solutions. The then paper presents the changing paradigm from Corporate Social Responsibility to Territorial Social Responsibility, reflecting the acknowledgment of the multi-stakeholder approach. Finally a set of indicators is presented, with the aim of evaluating the capability of a territory to be “socially responsible” in a multi-stakeholder perspective.

Local Sustainable Development

Sustainable development is a dynamic concept, “dealing with different temporal and spatial scales and with multiple stakeholders” (Van Zeijl Rozema et al. 2008). The intergenerational dimension, focusing on the temporal scale and explicitly recognized within the definition of sustainable development, is accompanied by an intragenerational dimension, characterized by the spatial interaction of different individuals at the same specific time. Such a spatial dimension introduces the idea of territorial equity as “the equity that is internal to a given territory, but also and in particular equity among diverse territories” (Zuindeau 2006).

Territorial equity, compared to intergenerational equity, has been considered a marginal aspect in the literature on sustainability. As outlined by Zuindeau (2006), some important attempts have been realized by Camagni et al. (1998), who sought to establish efficacy at a local (or regional) level in the implementation of sustainable development, focusing on the concept of ‘locality theorem’. Local sustainable development emphasizes the territorial component of sustainable development.

The definition of “territory” can differ depending on a traditional or progressive view. According to the traditional view, territory corresponds to the whole of natural resources and changes men-driven; according to the progressive view, territory reflects its related uses, in time and space (Peraro & Vecchiato 2007). In this study, territory is conceived as the geographical place with its natural resources endowment, urban transformations, public and private organizations, acting there; in local sustainable development, local community assumes an increasing relevance.

Local development, in neoclassical theories, has been typically linked to economic variables such as capital, labour and technological progress; whereas acknowledged, the idea of sustainability plays an instrumental role: environmental and social assets are measured in monetary value in the market system. Marginal monetary changes are the typical measures and the “rational agent” is the main assumption acknowledged by such theories.

Within the humanitarian paradigm (Pearce & Turner 2000) the idea of perfect rationality has to be integrated with that of global justice, where the preferences are determined by individual as well as altruistic interests, changing over time, due to appraisal processes, and in space, due to their mutual influence. According to a progressive idea of sustainable development, the acknowledgement of values of justice, fairness, equality, equity, cohesion, democracy, unity, cohesion, solidarity and internationalism (Pike et al. 2007) as determinants of the behaviour of microeconomic actors, characterize the holistic view of local sustainable development.

“The holistic approach sees development as necessarily broader than just the economy and encourages wider and more rounded conceptions of well being and quality of life” (Pike et al. 2007).

The role of the State and of civil institutions and the inclusion of social actors, such as trade unions and community associations is emphasized, within the holistic approach. At the same time, the debate about the feasibility of decision making processes, integrating economic, social, cultural and environmental concerns, remains active.

In such uncertainty, some aspects seem to encounter an extensive agreement. Governance is recognized as a means of fostering the process of sustainable development. Sustainable development cannot be achieved without governance (Zeijl Rozema et al. 2008) whether in a hierarchical, market-based or coordinated approach. From a territorial perspective, governance is defined as the way to solve coordination problems among the economic actors of a system, finding a common definition of the socio-economic objectives (Fadda 2003). Following the classification proposed by Fadda (2003), among the wide variety of governance models, hierarchical and market-based categories represent, respectively, a top-down and laissez-faire approach. Within the hierarchical approach, individual choices are determined by a recognized leader, while in the laissez-faire approach the coordination results from the spontaneous behaviour of each independent agent. The network coordination category (Fadda 2003) surpasses such a dichotomy, proposing a dynamic interaction involving, vertically or horizontally, the companies or all the actors within the economic system.

Nowadays, “network coordination” is the governance solution that better satisfies the holistic approach to sustainable development. The establishment of local partnerships between public authorities, business companies and the third sector, as well as representatives of the community, arises in response to the perceived inadequacies of an excessive market-based and state-dependent policy measures (Chatterton & Style 2001).

Finally, the implementation of a governance model of sustainable development and its effectiveness in local development depends on a variety of aspects. A unique formula doesn't exist: it must be calibrated to the cultural, socio-economic characteristics of a territory and to the idea of sustainable development.

Decentralization and local governance are nowadays identified as necessary precursors towards an effective territorial development. The introduction of the principle of subsidiarity in sustainable development is linked to the spatial policy approach as a means of achieving cohesion and integration (Roberts 2003).

Subsidiarity, emphasising the role of local communities, represents a key issue of the sustainability movement in Europe (Pallemaerts & Azmanova 2006). At a European level, the principle of subsidiarity is defined in Article 5 of the Treaty establishing the European Community; it is intended to ensure that decisions are taken as close as possible to the citizens.

Multi-Stakeholder Approach In Social Responsibility

Corporate Social Responsibility” theories and approaches have grown significantly in the past decades and a new trend is emerging on the horizon. Since the second half of the 20th century, when the debate on Corporate Social Responsibility took place, different theories have been developed. They could be summarized according to the classification given by Garriga et al. (2004).

- 1) *Instrumental theories*, in which CSR is seen as a strategic tool to achieve wealth creation, in accordance with the well-known statement of Friedman (1970) “*the only responsibility of business towards society is the maximization of profits to the shareholders*”.
- 2) *Political theories*, in which corporations agree to accept social rights and duties.
- 3) *Integrative theories*, developed from the idea that business has to integrate social demands.
- 4) *Ethical theories*, where the main idea is that the relationship between business and society is embedded with ethical values.

The European Union, by itself, defines CSR as the “*voluntary integration of social and ecological concerns*” (European Commission, 2001), recommending companies to assume a socially responsible behaviour.

Today, CSR represents not only a practice, but a necessity for an enterprise’s development and competitiveness. CSR could become a powerful instrument for sustainable development, focusing on employment, social cohesion and environmental protection. Even if the majority of CSR theories have been developed in the business field, nowadays the concept of “Social Responsibility” seems to better represent the variety of organizations which contribute to local development. Private companies, public agencies and the third sector are engaged in sustainability issues with different purposes and approaches.

Urged by pressures from the stakeholders and concerned for the environmental and social impacts related to business, the private sector – multi-national companies as well as small and medium enterprises – is adopting *ad hoc* management and communication measures.

CSR requires companies not only to consider the impacts of business activities but also to work with communities to ameliorate those impacts (Garvin et al. 2009).

Public agencies, pursuing the 'common good', started thinking about their role in the field of social responsibility, having been asked to be more accountable for their actions and for the use of public resources (Tanese 2004). The adoption of reporting tools, such as the social report, is a way of using communication to fill information gaps between citizens and local governments. Since the degree of consensus on stakeholders' involvement in sustainable development processes is increasing (OECD & UNDP 2002), public agencies should open their decision making processes to related stakeholders (Marconi 2006). Moreover, with the acknowledgment of the subsidiarity concept, public agencies operating at a local level face new commitments.

Ethical and socio-environmental concerns represent the core business of the organizations operating within the third sector. Accounting for a proper use of financial, social, environmental and cultural resources, for the decision making process and its outputs, is a moral imperative for these organizations (Pucci & Vergani 2002).

The crisis of public government and its inability to ensure a sustainable development without the cooperation of 'non-state actors', such as companies or entities of the third sector, have led to the formulation of new strategies at a local and international level. In order to carry out an effective local sustainable development, the socio-economic actors are asked to work together, sharing common values of social welfare, thus fulfilling the Lisbon Agenda and the European principle of subsidiarity. Since the concept of governance is more and more about "*balancing the roles, responsibilities, accountabilities and capabilities of different levels of government and different actors in society*" (Nelson & Zadek 2003), partnerships could represent a good way of reaching new sustainable development goals, in a multi-stakeholder approach. Various public and private actors progressively assume common responsibilities for the development and growth of the territories in which they operate (Donolo 2007). In this perspective, business, public agencies and third sector - constituting a "*sustainable development triad*" as OECD & UNDP (2002) call it - create partnerships as a way of bringing into collaboration different, but potentially complementary, skills and experiences, with the aim of realizing joint projects able to establish positive externalities on the communities (Bottani 2009).

Through analysis of the evolution of the CSR concept, the importance of multi-sector and multi-stakeholder based partnerships or 'new social partnerships' emerges, defined by Nelson and Zadek (2003) as "*people and organisations from some combination of public, business and civil constituencies who engage in voluntary, mutually beneficial, innovative relationships to address common societal aims through combining their resources and competencies*". The joined action of these multiple actors is supposed theoretically to be able to create an added value or 'alchemic effect', strengthening the partnership and, consequently, producing a substantive push to sustainable development.

When multiple actors involved in social partnerships adopt a common ‘social responsible path’ toward sustainable development, then a ‘social responsible network’ is established (Citterio & Lenzi 2005). Among these actors there is an overlap of responsibilities and stakeholders: to manage this complexity the social responsible network adopts a multi-stakeholder approach.

In this paper, the expression ‘multi-stakeholder approach’ replaces the classical idea of a single organization as the focal point of a stakeholders network (Rowley 1997). Social responsible networks always encompass multiple focal points. In fact, in a social responsible network, the different organizations composing it represent the various focal points of several stakeholder networks. Stakeholders within a multi-stakeholder network are assumed to represent the integration of every organization’s stakeholders’ network or, to use the definition given by Roloff (2008), “*any group or individual who can affect or is affected by the solution of the problem addressed by the network*”. In addition, network actors – such as companies, public agencies, third sector organizations – are mutual stakeholders.

Territorial Social Responsibility

The changing paradigm, from Corporate Social Responsibility to Social Responsibility in the Territory (TSR), reflects the acknowledgment of the multi-stakeholder approach. As outlined by Peraro and Dorigatti (2007), in a social responsible territory, actors share values and the idea of sustainability. The network of socially responsible actors is directed to reach a mutual engagement and common decisions with respect to a common issue. Such decisions could be strategic-based or field-based, being related to, for example, plans, programs or projects.

Such an innovative concept is built on three pillars: local community, sustainability, deliberative democracy. Within the local community, actors – as representatives of the business, the public authorities, the third sector and citizens – are knots of a network directly or indirectly related to a same territory. Sustainability and related values of equity, justice, altruism is the lifeblood that feeds and strengthens the network; in a sustainability perspective, local community is composed of social responsible actors. Finally, deliberative democracy highlights the decision making power, equally assigned to the social responsible local networks.

The co-existence of the three pillars is essential for realizing an effective Territorial Social Responsibility. The borders of TSR can differ within a same or among distinct contexts, because of the features characterizing the networks of social responsible actors and the issue at the stake. The network’s features essentially depend on the quantity and quality of the actors involved and the strength of the relations existing among them. The issue is the specific objective pursued by the network, deriving from the needs of the territory. Following a holistic approach, the existence of a social responsible territory – based on the aspects outlined – represents an essential condition to the effectiveness of local sustainable development. TSR could be implemented in a territory where a social responsible network operates in a framework of multi-level and multi-stakeholder governance influencing in a positive way the path towards sustainable development.

The Analytical Framework

The concrete implementation of the TSR concept changes according to the diversity of needs and features of each local context. The paper doesn't focus on the steps characterizing a TSR process, but suggests a specific indicator set, in order to provide a useful tool of evaluation and monitoring of such a process.

Aim

The aim of the indicator set presented is to evaluate the capability of a territory to be "socially responsible" in a multi-stakeholder perspective. Every indicator can provide a static or dynamic view; in the static view, a state of the art of the territory's sustainable development capacity is provided; in the dynamic view, its trend toward social responsibility is highlighted over the years. Therefore, this indicator set could be a useful instrument for a general analysis of the sensitiveness of a territory toward social responsibility and, afterwards, for assessing the improvements achieved by local multi-stakeholders networks engaged in a sustainable development process.

Methodology

The indicators are based on a conceptual framework, which is composed of different levels of analysis. The first level is represented by the seven issues characterizing the Territorial Social Responsibility concept; at the second level, the themes composing every issue have been identified; on the third level, all the relevant indicators within each theme have been collected together.

Issues (first level)
Governance
Economy
Social capital
Human capital
Natural environment
Artificial environment
Cultural environment

Table 1: issues related to Territorial Social Responsibility concept

Governance, economy, social capital, human capital, natural environment, artificial environment and cultural environment represent the various aspects characterizing a territory. ‘Governance’, ‘Social Capital’ and ‘Economy’ are the key issues to be analysed in order to assess the multi-stakeholder and cooperative dynamics of Territorial Social Responsibility. While ‘Human Capital’, ‘Natural’, ‘Artificial’ and ‘Cultural Environment’ represent the set of dynamic resources characterizing each territory, ‘Governance’, ‘Social Capital’ and ‘Economy’ issues are the driving forces through which a social responsible network expresses its mutual commitment toward sustainable development.

The indicators have been identified by analysing the literature. At this stage, the study is focused more on the theoretical conceptualization than on the effective measurement; that is why the relative set of indicators does not provide an articulated standardized formula, but focuses on the aspects considered as relevant for a comprehensive representation of each theme.

The set of Indicators

Governance

Within a local sustainable process driven by a multi-stakeholder approach, governance can be defined as the shared modalities to realize a common goal. In such a perspective, governance allows for the solving of problems of coordination among actors, through the implementation of rules and processes based on the concept of “network”. Indicators related to territorial governance are, in the literature, predominantly formulated on a government perspective. Despite the increasing acknowledgement of concepts such as decentralization, multi-level governance, cooperation and participation, national and local governments seem to be considered as the main actors of a good territorial governance.

Table 2: list of references examined within the “Governance” issue

Bottani (2009)
U.S. Agency for International Development (2000)
Fadda (2003)
Kaufmann (1999)
Marconi (2006)
Nelson and Zadek (2003)
OECD (2005)
Transparency International (2009)
Van Zeijl Rozema et al. (2008)

The list of indicators presented is built upon a set of themes focusing on the aspects considered as relevant for a complete analysis of the governance system characterizing a territory.

Accountability

The degree of accountability measures the responsiveness of the network toward their stakeholders. Together with transparency, accountability implies the evaluation of the quantity and quality of the information transmitted to stakeholders. The existence of a sustainability reporting process is considered as a step forward to systematically communicating and managing the information.

Voice

This is aimed at monitoring the progress of a local context with respect to freedom of speech and expression. The recognition of civil liberties and political rights, the freedom of press, the independence of media, the chance to express concerns over changes in law and policies, the characteristics of the political system, are all considered.

Political instability and violence

As with the theme “Voice”, this area is aimed at delineating the ‘state of the art’ of a territory in relation to political instability and violence. The existence of the military in politics and/or wrenching changes in government provides useful suggestions concerning the ease of implementing a network coordination governance.

Government effectiveness

Indicators in this section are designed to ‘take a picture’ of the quality of the civil service system in its different elements – processes, products and human resources – through the measure of the efficiency of bureaucracy, the independence from political pressures, the existence of complaints mechanisms, the perception of the quality of public services, the competence and training of civil servants, the existence of a performance system, the efficacy of internal and external audits.

Regulatory burden

In our study, the existence of market unfriendly policies and the perception of the burden of excessive regulation have been considered as indicators of the predominance of government intervention over network coordination initiatives realized on a voluntary basis.

Corruption

Corruption is defined as “*the abuse of entrusted power for private gain*” (Transparency International 2009). The existence of corruption among public and private bodies doesn’t encourage the creation of effective multi-stakeholder networks oriented to sustainable development, the latter being focused on the idea of “common good”.

In this sense, analysing a territory's capability to be "Socially Responsible" it is relevant to consider the perception of corruption, the government efforts and all the measures undertaken for tackling corruption.

Multi-level governance

The monitoring of 'Multi-level governance' theme, together with 'Participation' and 'Partnerships', is aimed at defining the existence of some form of network coordination. Firstly, the degree of decentralization and the main characteristics of the local governance system are examined. Moreover, the definition of the modes of governance – hierarchical/market-based/network-based – and the modes of coordination – among a same or different typology of actors – is essential to delineate the type of multi-level governance.

Policies

This section is aimed at identifying the strength and the predominant approaches of policies: the political will (strong/moderate/weak), the perspectives on sustainable development (ecological sustainability/well-being), the policy's approach in local and regional development (participatory/mandatory) and the existence of policies promoting participation and social cohesion.

Participation

Participative processes within a region can be realized through different conditions depending on the nature of the process – voluntary/mandatory, formal/informal -, of the typology of stakeholders involved, the depth and width of stakeholder participation, the effectiveness of the process.

These are some of the aspects outlined in the section.

Partnerships

Partnerships express the degree of cooperation among the actors operating in a same territory. Such cooperation can be assessed either quantitatively, through the number of active partnerships, or qualitatively, through their wideness and complexity (different typology of organizations). While a public-private partnership focuses on a 'one to one' relation, the cross-sector partnership highlights multi-sector and multi-stakeholder based relations.

Table 4: “Governance” indicators

Themes (<i>second level</i>)	Indicators (<i>third level</i>)
Accountability	<ul style="list-style-type: none"> - Degree of accountability - Degree of transparency - Sustainability or social reporting
Voice	<ul style="list-style-type: none"> - Civil liberties - Political rights - Free press - Independent media - Business has a voice to express its concerns over changes in laws or policies - Political process
Political instability and violence	<ul style="list-style-type: none"> - Military in politics - Wrenching changes in government
Government effectiveness	<ul style="list-style-type: none"> - Perception of the quality of public services provisions - Efficiency of bureaucracy - Competence of civil servants - Independence of the civil services from political pressures - Civil servants completing relevant skills training, and evidence of use of that training - Existence of a citizen complaint mechanism - Response time to citizen complaints - Documented performance standards and internal information systems - Internal and external auditing - Post-audit actions taken - Efficiency of the economic management system
Regulatory burden	<ul style="list-style-type: none"> - Market unfriendly policies - Perception of the burden of excessive regulation
Corruption	<ul style="list-style-type: none"> - Perception of corruption - Government efforts to fight corruption - Measures for tackling corruption
Multi-level governance	<ul style="list-style-type: none"> - Degree of decentralization - Local governance tradition - Modes of governance (for sustainable development) - Modes of coordination
Policies	<ul style="list-style-type: none"> - Political will - Perspectives on sustainable development - Policies' approach in local and regional development - Policies promoting participation - Policies promoting social cohesion
Participation	<ul style="list-style-type: none"> - Inclusive decision making processes/Stakeholder consultation (or engagement) processes - Innovative approaches and technologies to participation - Stakeholder consultation approaches

	<ul style="list-style-type: none"> - Stakeholder typology - Depth and width of stakeholder participation - Effectiveness of participatory initiatives - Portion of annual budget related to inclusive decision making processes - Mutual perception of participation effectiveness
Partnerships	<ul style="list-style-type: none"> - Public-private partnerships - Cross-sector partnerships

Social Capital

The origins of social capital rest upon an idea of development as a "qualitatively qualified" growth: it is the glue that holds societies together and without which there can be no economic growth or human well-being (The World Bank 1999). Within this perspective, social capital, together with the economic and financial capital, plays an important role in providing the best conditions for development.

It is possible to identify a link between territorial social responsibility and social capital in the ways the different actors interact within a given territory. Moreover, the concept of social capital is multidimensional and allows to grasp the dynamics of change of an area; it embraces institutions, relationships and customs which found the quality and quantity of social interactions.

In order to highlight the contribution of social capital to sustainable development, it has been broken down into three themes: networks, trust, civic sense; the related set of indicators is built upon structural/tangible and cognitive/intangible aspects (Coleman 1988).

Table 4: list of references examined within the “Social Capital” issue

Callosi and Aubert (2005)
Coleman (1990, 1998)
Fukuyama (1995)
Granovetter (1973)
Putnam (1993)
Trigilia (2001)
World Bank (1999, 2009)

Table 5: “Social Capital” indicators

Themes (second level)	Indicators (third level)
Networks	<ul style="list-style-type: none"> - Family bonds - Informal relations among friends and acquaintances - Intercultural relations - Strength of the relationship among networks
Trust	<ul style="list-style-type: none"> - Trust in other people - Confidence in institutions - Confidence in public service - Fear of crime - Perception of safety
Civic Sense	<ul style="list-style-type: none"> - Shared norms and values - Civic participation - Active political participation - Voluntary organizations - Cooperation degree among organizations

Networks

A network represents a social structure made of individuals and/or organizations, linked by relationships of multiple levels, of different nature and aims, such as family ties, informal relations among friends and acquaintances, intercultural relations, etc. The definition of networks within a territory and the analysis of relationships' nature and ways are key steps toward the measurement of social capital. Finally the strength of a network expresses the ability of a community to work together toward common goals (Trigilia 2001, Granovetter 1973).

Trust

Trust, according to Fukuyama (1995) is ‘the expectation that arises within a community of regular, honest and cooperative behaviour, based on commonly shared norms, on the part of other members of that community’. Trust is at the foundation of relationships and represents an essential component of the social cohesion. Although it represents an intangible issue, it may be possible to detect some indicators able to measure the level of trust within a territory: trust in other people, confidence in institutions or in public services, perception of safety and fear of crime.

Measuring trust allows to understand how people feel integrated into a community, the quality of the welfare system and the degree of wellbeing.

Civic Sense

Social capital and the ethical and political background within a territory are related in a mutual way. Shared norms and values, deriving from the ethical and political framework and being part of the social capital, are relevant drivers to stimulate collective action, social cohesion and inclusion towards the “common good”.

The level of civic participation and active political participation, the existence of voluntary organizations and the cooperation degree among different type of organizations depict at different grounds the civic sense within a territory.

Economy

Typically, the economy represents the whole range of activities put in place by people, organizations and institutions within a territory in order to satisfy individual and collective needs with limited resources. With the attempt to represent the economy on a sustainable development perspective, a set of well-being indicators are presented, together with the ‘mainstreaming’ economic indicators. With respect to the issue “Economy”, main statistical and economic indicators have been outlined, specifically related to:

- economic development and competitiveness;
- employment;
- innovation;
- well-being.

Table 6: list of references examined within the “Economy” issue

Eurostat (2007)
ESPON (2007)
Guenno and Tiezzi (1997)
ISTAT (2008)
OECD (2009)

Economic Development and Competitiveness

This section analyses the economic growth of a region as a whole (GDP) and its main variables. The added value produced by every economic sector is monitored. The private/public investments are measured also in percentage of the GDP. Households’ savings are considered, in absolute and relative terms (with respect to the households’ incomes). Poverty rate, the education level the dependence of the workforce by elderly population are relevant variables which complete the analysis of the economic development and competitiveness of an area. Moreover information technology capacity is an interesting additional variable.

Employment

The rate of employment and unemployment, as a whole or by sex, age and education, are typical measures of the wellness and peculiarities of an economy.

Innovation

Innovation represents the degree of progress and ‘forward looking’ perspective of an economy. Some typical measures are presented: R&D activities, R&D expenditure, jobs in R&D, patent application, skilled labour force and higher education attainment.

Well-being

Well-being indicators proposed in our study, derive from the literature on well-being indexes, like the Index of Sustainable Economic Welfare (ISEW). They are aimed at monitoring the width and depth of health, education and safety services within a region, its wealth and the quality and protection of the environment.

Table 7: “Economy” indicators

Themes (<i>second level</i>)	Indicators (<i>third level</i>)
Economic development and competitiveness	<ul style="list-style-type: none"> - Growth - Added value by economic sector - Investments - Households saving - Poverty - Distribution of population and area across predominantly urban, intermediate and predominantly rural regions - Elderly dependency rate - Education - Information Technology Capacity
Employment	<ul style="list-style-type: none"> - Employment - Unemployment - Long-term unemployment
Innovation	<ul style="list-style-type: none"> - R&D activities - R&D expenditure - Jobs in R&D - Patent application - Skilled labour force - Higher education attainment
Well-being	<ul style="list-style-type: none"> - Access to health services - Public expenditure on health - Access to education services - Public expenditure on education - Access to safety services - Facilities in the area - Leisure - Consumption expenditure by private households - Income/Wealth distribution - Consumer durable services - Services of households' labour - Services of streets and highways - Change in net international position

	<ul style="list-style-type: none"> - Quality of the environment - Cost of urbanization - Cost of water pollution - Cost of noise pollution - Loss of wetlands - Loss of agricultural land - Long-term environmental damage - Exhaustible resources depreciation
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Conclusion

In this paper the multi-stakeholder network is considered an essential condition for realizing the idea of Social Responsibility as a driver for local sustainable development. The multi-stakeholder network is defined as a '*socially responsible network*' implemented through a multi-stakeholder approach. As outlined, the concept of Territorial Social Responsibility (TSR) reflects the acknowledgment of the multi-stakeholder approach and is built on three pillars: local community, sustainability, deliberative democracy.

Nowadays TSR is mainly a theoretical concept; whereas when really implemented, the effective coexistence of the three pillars is the first challenge to face. Specifically, the implementation of a deliberative democracy process within the social responsible network is difficult to realize: the actors with a stronger political and economic power could prevail over those in a weaker position. Therefore, some empirical analysis needs to be carried out in order to evaluate the feasibility of TSR as a way of effectively underpinning local sustainable development.

At the same time, the proposed indicator set can be considered both as a useful analytical tool of evaluation and a guideline for addressing local multi-stakeholders accountability processes; nevertheless, it still needs to be tested and improved, while enlarging the spectrum of issues considered besides 'Governance', 'Social Capital' and 'Economy'.

Finally, by recognizing that CSR still encounters difficulties to be strategically integrated into organizations' governance and production processes, some questions emerge about the effective implementation of such a challenging concept as TSR. Does the effectiveness of 'Territorial Social Responsibility' rely on the degree of CSR implementation of the organizations within the multi-stakeholder network? Or vice versa, can TSR stimulate or strengthen social responsible practices in the organizations within the multi-stakeholder network?

References

- Bagnasco, A., Piselli, F., Pizzorno, A. e Trigilia, C. (2001). *Il capitale sociale. Istruzioni per l'uso*. Bologna, Il Mulino.
- Bobbio, L. (2002) *I governi locali nelle democrazie contemporanee*, Bari, Laterza
- Bottani, G. et al. (2009). *Corporate Social Responsibility e gli approcci alle partnership pubblico/privato*. [Online]. Available: <http://www.i-csr.org>.
- Camagni, R., Capello, R., Nimpamp, P. (1998). Towards sustainable city policy: an economy- environment technology nexus. *Ecological Economics* 24, 103-118.
- Chatterton, P., Style, S. (2001). Putting Sustainable Development into Practice? The role of local policy partnership networks. *Local Environment* 6:4, 439-452.
- Citterio, A., Lenzi, I. (2005). *Reti di territori, reti di responsabilità sociale*. Rapporto sullo Sviluppo Sostenibile Fondazione Eni Enrico Mattei, 8. [Online]. Available: www.feem.it
- Coleman, J. (1988) *Social Capital in the Creation of Human Capital*. In *American Journal of Sociology*, vol. 94.
- Donolo, C. (2005). *Dalle politiche pubbliche alle pratiche sociali nella produzione di beni pubblici? Osservazioni su una nuova generazione di policies*. *Stato e mercato* 73, 34-65
- Donolo, C. (2007), *Sostenere lo sviluppo. Ragioni e speranze oltre la crescita*, Milano, Mondatori
- European Commission (2001). *Green Paper - Promoting a European framework for corporate social responsibility* [Online]. Available: www.eu-lex.europa.eu
- European Spatial Planning Operation Network (2007). *Feasibility study on monitoring territorial development based on ESPON key indicators* [Online]. Available: www.espon.eu
- Eurostat (2007). *Measuring progress towards a more sustainable Europe*. [Online]. Available: www.ec.europa.eu
- Fadda S. (2003). Governance territoriale e Progettazione Integrata. In D. Deidda (Ed). *Governance e sviluppo territoriale*. Rome: Formez.
- Friedman, M. (1970), *The social responsibility of business is to increase its profits*, *New York time magazine*, September 13th, 32-33, 122,126.
- Garriga, E., Melé, D. (2004). Corporate social responsibility theories: mapping the territory. *Journal of Business Ethics* 53, 51-71.

Garvin, T. et al. (2009). Community–company relations in gold mining in Ghana. *Journal of Environmental Management* 90, 571-586.

Granovetter, M. (1973) The Strength of Weak Ties. *American Journal of Sociology*, 78.

Guenno, G., Tiezzi, S. (1998). The Index of Sustainable Economic Welfare (ISEW) for Italy. *FEEM Working Paper* 98:5.

ISTAT (2008). *Sistema di Indicatori Territoriali*. [Online]. Available: www.sitis.istat.it

Kaufmann, D. et al. (1999). Governance Matters. *World Bank Policy Research Working Papers* 196:2.

Lee, M.P. (2008). A review of theories of corporate social responsibility. Its evolutionary path and the road ahead. *International Journal of Management Review*.

Marconi, P. (2006). *Processi decisionali inclusivi e sussidiarietà orizzontale*. *Notizie di Politeia* XXII - 82, 290-293

Mutti, A. (1998). *Capitale sociale e sviluppo. La fiducia come risorsa*. Bologna: Il Mulino.

Nelson, J., Zadek, S. (2003). Partnership alchemy, new social partnership in Europe. The Copenhagen Centre & AccountAbility, Copenhagen.

OECD (2005). *Evaluating Public Participation in Policy Making*. Paris: OECD Publications.

OECD (2009). *OECD Regions at a Glance 2009*. [Online]. Available: www.oecd.org

OECD, UNDP (2002). *Sustainable Development Strategies: A Resource book*. London, Earthscan Publications.

Pallemaerts, M., Azmanova, A. (2006). *The European Union and Sustainable Development. Internal and External Dimensions*. Brussels: Institute for European Studies, Vrije Universiteit Brussels.

Pearce, D.W., Turner, R.K. (2000). *Economia delle risorse naturali e dell'ambiente*. Bologna: Il Mulino.

Peraro, F, Vecchiato, G et al. (2007). *Responsabilità sociale del territorio. Manuale operativo di sviluppo sostenibile e best practices*. Milan: Franco Angeli.

Pike, A., Rodriguez-Pose, A., Tomaney, J. (2007). What Kind of Local and Regional Development and for Whom? *Regional Studies* 41:9, 1253-1269.

Pucci, L., Vergani, E. (2002). *Il bilancio sociale nel terzo settore*. Milano: Egea.

- Putnam, R. (1993). *La tradizione civica nelle regioni italiane*. Milano: Mondadori
- Roberts, P. (2003). Sustainable Development and Social Justice: Spatial Priorities and Mechanisms for Delivery. *Sociological Inquiry* 73:2, 228-244.
- Roloff, J. (2008). A life cycle model of multi-stakeholder networks, *Business ethics: a european Review* 17:3, 311-325
- Rowley, T.J. (1997). Moving beyond dyadic ties: a network theory of stakeholder influences. *Academy of management review*, 22:4, 887-910 [Online]. Available at <http://www.jstor.org/stable/259248?cookieSet=1>
- Sen, A. (2000), *Lo sviluppo è libertà*, Milano, Mondadori
- Tanese, A. (2004) A chi e perché rendere conto. In A. Danese (Ed). *Rendere conto ai cittadini*.
- The World Bank Social Capital Thematic Group (TG) [Online]. [Referred to July 2009]. Available: <http://go.worldbank.org/VEN7OUW280>
- Transparency International (2009). *Global Corruption Barometer 2009*. [Online]. Available at: www.transparency.org
- U.S. Agency for International Development (2000). Decentralization and democratic local governance programming handbook. *USAID Technical Publication Series*.
- UNEP (1994). *Partnerships for sustainable development. The role of business and industry*, London, Prince of Wales Business Leaders Forum
- Van Zeijl Rozema, A., Corvers, R., Kemp, R., Martens, P. (2008). Governance for Sustainable Development: a Framework. *Sustainable Development Review* 16, 410-421.
- Zuindeau, B. (2006). Spatial Approach to Sustainable Development: Challenge of Equity and Efficacy. *Regional Studies* 40:5, 459-470.

THE EFFECTS OF “DEPENDENCY” ON MANDATORY CSR: CASE STUDY OF IRELAND.

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Abstract

This paper addresses the potential resurgence of post imperial “dependency theory” of the 1960s and 1970s. Suggesting that the initial premise of the theory was just – the article proposes the reworking of the theory in order to incorporate globalisation processes – namely the importance of global capital generated by Multi National Corporations. By considering that capital is now the “core” we have the idea of a much wider catchment of states “dependent” on global capital. Using Ireland as an example therefore, the article pursues the idea that a dependent state’s ability to implement CSR legislation is inhibited by the constraints of capital.

Key Words: Dependency, “new” dependence, transnational capitalist class, CSR

Introduction

Dependency theory was briefly fashionable in the 1960s and 1970s as an alternative theory of development. Problems associated with dependency, such as its failure to provide a solution for “dependence” has meant that the theory has become obsolete in recent times. This paper argues that in modifying dependency theory – “new” dependency emerges – providing an alternative assessment of the global order and questioning the power of the nation – state to control or regulate transnational capital. This paper focuses on Ireland - a relatively wealthy state, which falls within “new” dependency. Dependence is reflected in the failure of the Irish government to act independently in issues pertaining to regulation, which therefore considers that the Irish government cannot influence an effective CSR policy for Ireland due to its dependence on foreign capital. The first section in this paper addresses traditional dependency enabling a second section to consider the emergence of “new” dependence - that of dependence on foreign capital generated by Multi National Corporations [MNCs]. From this, a section on Ireland will ensue, reflecting on past examples of how dependence on capital has influenced government decision and policy, allowing a further section to consider the unlikelihood of a mandatory CSR policy in Ireland as a result of said dependence.

Dependency Theory

Dependence is best described by Dos Santos as “a conditioning situation in which the economies of one group of countries are conditioned by the development and expansion of others” (Dos Santos, 1973). Relationships of dependence exist “when some countries can expand through self impulsion, while others being in a dependent

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position, can only expand as a reflection of the expansion of the dominant countries, which may have positive or negative effects on their immediate development” (Dos Santos, 1973). Therefore, a dependent state is one where, economic development, policies, and to a certain extent social policy, are dependent on the input, investment and interest of others.

Dependency theory emerged following the failure of Keynesian economics in accounting the effects of imperialism on social structures and patterns of economic development in countries of the third world (Roxborough, 1979) and, as a reaction against neo – classical theories of development such as modernisation.³³ Dependency theorists criticised modernisation for ignoring the historical nuances particular to the country, which, they believed, cemented its underdevelopment (Frank, 1991).

A number of core beliefs exist in dependency literature. Dependency advocates a centre of wealthy “developed” states relying on the appropriation of profit from a periphery of poorer “underdeveloped” states in order to increase the centre states’ capital accumulation (Prebisch, 1950 & Frank, 1967). There is a focus on historical aspects of “development” and/or “underdevelopment”(Frank, 1991) with theorists such as Frank arguing for the interrelation of economic, political and social aspects within a development theory (Frank, 1967).

Criticism of dependency focuses on the failure to provide; expert knowledge of Marxist theories – particularly exploitation (Kay, 1975), concrete typologies of “cores” and “peripheries” (Leys, 1977 & Booth, 1975), a solution to dependence (Toye, 1993, Schurmann, 1993 & Booth 1985)³⁴ and its existence as a critique of modernisation (Leys, 1977 & Cueva 1976). To these, I add another. Traditionally, dependency is concerned with the nation-state, and instances of dependence between individual states. Given the systematic shift towards globalisation, it is no longer viable to consider only nation-state transactions. The next section of this paper suggests the need to consider dependency on a transnational level, and, particularly, dependence on foreign capital generated through the MNC, as well as the impact of globalisation and the rise of the transnational capitalist class (TCC).

New Dependency

This paper is concerned with the ability of dependent states to implement mandatory CSR legislation. This section, in modifying dependence, proposes new dependency, and, in order to illustrate the case of dependence – focuses on Ireland, to highlight the existence of “new” dependence, as well as enabling further assessment later, on

³³ Modernisation theory believed that capital invested in a nation (through technological advances) could develop a nation socially and economically. It became the way which the USA addressed the transformation of the colonies of Britain and France and how they could survive on the world market.

³⁴ I don’t agree that this is a major issue. It is sufficient that the theory can be used as a means of describing certain phenomena. For example, it is enough to apply to the theory to a country or region and thereby providing an alternative unit of analysis in an assessment of that region’s development. Ireland’s development and economic advancement is generally measured using traditional economic theory. However, the re-reading of Ireland’s success through the lens of dependency, previous “successes” can be reappraised.

how, this dependence inhibits effective influence on CSR policy by any Irish government.

New dependency suggests that peripheral countries are no longer dependent on core countries for economic growth. Instead, it suggests that transnational capital is the “core” with the majority of nation-states being considered “peripheral” in the extent to which they depend on foreign capital through MNC investment for “wealth”. By reclassifying dependency in this way, I address criticisms of the theory (Leys, 1977 & Booth, 1975) as well as incorporating developments such as increasing globalisation and the dominance of the TCC (Sklair, 2001).

This is not a shift in the paradigm, as, prior to this proposal of a “new” dependence, literature existed regarding the relationship between dependency and the MNC (Jackman, 1982, Müller, 1973 & Biersteker, 1987). However, the difference is that whereas traditional dependence suggested that the MNC was a powerful agent *of* a “core” country (O’Brien, 1975) – usually the USA, new dependence suggests that the MNC *is* the “core” or at least an agent of the TCC (Sklair, 2001).

This approach provides an alternative assessment of the situation in small open globalised economies today, like Ireland. The role of MNCs and the corresponding TCC questions some issues of governance. How can the borderless MNC, and in turn global capital, be regulated by an - inferior by comparison-domestic state which is, on some level, dependent on said global capital for prosperity? This is the dilemma which globalisation, viewed via dependency, poses. Global capital’s answer to this dilemma are methods of self regulation, such as Corporate Social Responsibility (CSR), as means of regulating companies, whilst ensuring return to the people in the countries where they are based. As ensuing sections illustrate, dependence on foreign capital makes it unlikely that nation-states will be able to influence the direction of said CSR policies in ways best fitting their specific requirements.

Ireland, prior to the Celtic Tiger, fulfilled all conditions of dependence, and, much literature exists describing the incidence of this dependence (Jacobsen, 1994, Gibbons, 1988, Breathnach, 1988 & Crotty 1986). However, with the Celtic Tiger, Ireland has gone from a despondent, stagnant economy to “Europe’s shining light” (The Economist, 1997). Is it the case that modernisation methods of capital infusion (Bernstein, 1971, Valenzuela & Valenzuela, 1978) worked for Ireland? Has the Irish case provided a solution to dependency, or has dependency today merely adapted to globalisation and in doing so, manifested itself accordingly? The latter is the case- as the global economy has developed, so too have the theories used to describe it. This incorporates dependence, which, rather than being removed by global change, has become more ingrained.

Globalisation enabled Ireland to move from the periphery towards the centre of the new global economy (Murphy, 2000). Murphy (2000) describes “a predominately pre – industrialised economy” like Ireland, which has managed to “leap – fro[g] to a post industrial high tech economy” in a very short space of time. He suggests that the absence of an industrial sector was beneficial to Ireland, initially, as, it allowed the government to introduce a significant number of tax breaks, which would have been difficult, if not impossible had there been a large industrial base. This in turn

attracted companies from the Silicon Valley to use Ireland as a European base for their production (Murphy, 2000).³⁵ Part attracted by fiscal and tax breaks and the activities of the Industrial Development Authority (Thomas, 2007)³⁶ as well as the benefits of an English speaking workforce and geographical benefits around time zones, MNCs began to set up bases in and around the East and South West of the island, providing indirect and direct employment to the Irish people (Murphy, 2000 & Gorg & Ruane, 2000).

Deeper integration with Europe also aided Ireland's transformation from a stagnant economy to a vibrant cosmopolitan trading region. Ireland, with its full commitment to Europe, and the only English speaking nation fully committed to the EMU, was "ideally positioned to act as the pontoon linking US companies to the EU" (Murphy, 2000). Ireland was indeed in the right place at the right time and has, under traditional measures of economic growth, benefitted enormously as a result from the MNC, in its attempt to have a foothold in Europe.

But, Ireland is still dependent. Despite the fact that the limited indigenous industrial sector facilitated MNC investment on such a large scale, it is the absence of said sector which highlights Irish dependence. The Irish economy today, in continuing to foster MNC investment – at the expense of domestic industry – ensures that the Irish are almost wholly dependent on transnational capital. Therefore, those conditions which helped attract investment are the very conditions which secure Irish dependence. This in turn leaves Ireland susceptible to fiscal dumping, transfer pricing³⁷ and the need to retain its comparatively low tax rate in order to avoid capital flight. Faced with the prospect of capital flight, will the Irish government shape policy in areas that concern the MNC? No. The next section addresses how the case of the DCS illustrates the unlikelihood of a government influenced CSR policy in Ireland – due to fears of capital flight.

Dependency and Regulation

Focussing on Ireland, and how Ireland falls within "new" dependency, the previous section noted how, in being dependent – Ireland could be constrained in regulating

³⁵ Pg. 15, particularly high tech industries such as computers, computer software, pharmaceuticals and chemicals. MNCs are beginning to relocate elsewhere - e.g. Fortell, Q. & Scheck, J. 2009. Dell moving its Irish operations to Poland. Wall Street Journal. <http://online.wsj.com/article/SB123141025524864021.html> Sourced 30/06/2009.

³⁶ In the late 1950s, Ireland's economic development strategy revolved around attracting foreign MNCs, the main attraction being Export Sales Relief (ESR), which exempted all export profits from corporation tax. In 1973, the Commission insisted that ESR be terminated because it was an export subsidy, and "state aid law does not permit export subsidies on intra-Community trade." To provide a similar incentive to encourage investment, the Commission allowed a 10 per cent manufacturing corporate income tax rate. Therefore, the Competition Directorate, in drawing up its original "Surveys" on state aid in the late 1980s, deemed this tax rate to be part of the "general macroeconomic framework" of the country and not state aid. However, "in 1998 the Commission reversed its position, ruling that not only was the manufacturing tax rate a state aid, it was an "operating aid" and, as such, had to be terminated. Competition Directorate policy has long deemed operating aid to be far more likely to distort competition than investment aid, and much harder to justify under the provisions of the Treaty of Rome." Corporate tax was increased to 12.5%

³⁷ Transfer pricing is the pricing of contributions transferred within an organisation to areas of the organisation where gains can be most profitable. Ireland has a very low tax regime. Therefore, corporations with bases in Ireland may use "creative accounting" procedures in order to attribute more profits to Ireland than was actually the case.

the MNC effectively. This section through the DCS highlights the inability of the Irish government to influence capital, and instead, the idea of Ireland effectively influencing CSR policy in any respect is questionable.

“Ireland is now so dependent on foreign borrowing that the entire economy would collapse overnight and the polity would disintegrate if foreign credits ceased to be available” (Crotty, 1986). It has become increasingly difficult for the government to legislate and regulate in an uninhibited manner. Instead, fear of business retaliation looms in the face of innovation – preventing the government from initiating measures to expedite a higher degree of independence from foreign capital. By focussing on the government initiated proposed DCS, this can best be understood. By 1999, Ireland was suffering a series of banking scandals (Knights and O’Leary, 2005 & Appleby, 2005).³⁸ Lack of effective regulation and enforcement meant that those “tempted to make serious breaches of company law have little reason to fear detection or prosecution” (Working Group, 1998).

The DCS arose from a specific recommendation of the Review Group on Auditing, requiring directors of major companies to make public statements of compliance with respect to their tax, company law and any other relevant enactments that could affect the company’s financial statements which in turn would be assessed by a group of auditors (Appleby, 2005).³⁹ The DCS marked a change in direction for Irish regulation as under the Anglo system of governance, regulation in Ireland was limited. Despite Irish attempts to innovate however, the ensuing paragraphs show how capital prevented this innovation.

Business reaction to section 45 was predictable. Senior figures at the International Financial Services Centre said that “Ireland may lose out on future foreign investment if the government does not water down plans to make directors personally responsible for ensuring companies comply with all forthcoming legislation.(The Times, 2003)” In the same report (The Times, 2003), it was suggested that “the US can afford to lead in this type of legislation but Ireland cannot. We are an acceptor of standards. We should be looking to benchmark what we do rather than going out on a limb.” Another report states that: “reaction from the business community to the Bill ... has been quite negative...As breach of the proposed provisions of the Bill, in most instances, will result in an offence being committed, emphasis will shift from one of concern over corporate compliance and personal exposure rather than promoting and developing competitive business” (Dispatch, 2003).

A Company Law Review Group designed to address the contentious issues of the DCS stated that “[a] clear majority of the CLRG considered that it was simply not feasible to commence 45/2003 because of the additional unnecessary costs it causes for companies and the negative and disproportionate effect on national competitiveness and the likelihood of dysfunctional behaviour that would see companies registering outside of Ireland and so unaccountable to the Irish authorities” (CLRG Report).

³⁸ This ranged from issues regarding improper conduct between government officials and the banking community, banks overcharging customers on foreign exchange transactions and the use of bogus non – resident accounts in order to reap tax benefits for a few of a bank’s customers.

³⁹ Section 45. Companies (Auditing and Accounting) Act 2003.

Reversing their decision was necessary if the Irish government was to avoid capital flight. Ireland is faced with the choice of relative prosperity or an impressive regulatory regime. Dependence forbids their co-existence. Ireland's dependence is now so ingrained that compromises in the field of regulation are being made in order to retain capital in the ever increasing race to the bottom by MNCs: government cannot dictate the direction of compliance. Article X replaced the DCS but, "will no longer require auditors to opine if the DCS is fair and reasonable. Overall, the provision represents in aggregate a reduction in its scope and effect compared with the original DCS" (ODCE).⁴⁰ What are the implications for any Irish CSR policy? Is it to be left solely to the TCC – which has loyalties to no people, state or culture – to design socially responsible measures in Ireland? The next section will consider this – and in doing so, poses the premise that, countries as dependent on foreign capital are unlikely to ever enforce mandatory CSR policy.

What are The Implications of Dependence on CSR?

Ireland, along with the UK, is an advocate of the Business in the Community (BitC) approach to CSR. Whereas the UK complements this model with the centralisation of CSR, a Minister for CSR and discretionary legislation, Ireland has not. This section aims to discuss the reasons for this, believing that Irish dependence on foreign capital means that innovation is limited to the retention of capital as opposed to fostering social development beyond the requirements of legislation. Furthermore, evidence from the DCS, suggests that facing the prospect of capital relocation, the Irish government will back down rather than lose capital. The section will consider that the Irish government can never implement CSR legislation under the current status quo. It acknowledges the system that is in place – the Business in the Community model. Whether or not this meets the needs and requirements of an Irish approach to CSR will be called into question.

Ireland's dependence indicates that Ireland systematically cannot implement CSR legislation. The manner in which the Irish government, in the past, has attempted to legislate upon business regulation i.e. the DCS, illustrates the systematic failures of the Irish case. As the last section shows, the DCS emphasises the Irish government's inability to innovate regarding business legislation, due to the pressures of the business community, and, how this, in effect, is enough to condemn Ireland to a sentence of continued dependence on foreign capital – without being able to channel any benefits into the local communities beyond that of business initiative. The response to the introduction of the DCS exemplifies how dependence on capital can prevent positive development for the Irish communities such as CSR legislation.

The government's volte face, which, has called into question the government's ability to not only regulate the corporation, but also to shape MNC modes of self

⁴⁰ See Conroy, B. 2009. Revolutionising Irish Company Law – The proposed new Companies Consolidation and Reform Act. In, O'Neil, A. and Keane, R. (Eds.), *Corporate Governance: an Irish Perspective*. Dublin: Roundhall. - he looks at how the proposed watered down article X has even further been compromised in order to apply to even less companies

regulation via CSR policy, which, could help alleviate some of the implications of dependency, has been the legacy of the DCS. What this case has illustrated is not that the Irish government does not *want* to innovate – it systematically can't. Ireland's innovation is limited to the design of MNCs operating in Ireland. Irish concerns are limited to strategically “keeping” capital without exposing said capital to other requirements... intense regulation etc. The systematic nature of Irish dependence is so severe that the government cannot dictate the direction of compliance.

As the DCS illustrates, an Ireland unable to legislate on this type of issue is more than likely going to be an Ireland that cannot legislate upon the shaping, or direction of a CSR policy best suited to Ireland's needs. The *volte face* of the Irish government with regards to Article 45 of the DCS highlights that; the threat of capital flight holds the Irish government hostage and the level of control the business community collectively has over the Irish government. Will the government always back down in the face of adversity from the business community? It seems yes, as to the government, there is no alternative. The governance structure in Ireland could theoretically become significantly weaker and looser in coming years, as the government attempts to retain their tenuous hold over foreign investment, to the detriment of other sections of the community.

Can CSR be promoted in Ireland if dependence inhibits CSR legislation? The beginning of this section stated how Ireland, along with the UK is an advocate of the BitC model. The concept of BitC refers to the way governments and societies understand the role of enterprise in society, with regards the resolution of social challenges, and the part played by business in community development (Lozano, Albareda & Ysa, 2008, pg 93). Lozano et al (2008) acknowledge nine key elements of this model ranging from the use of CSR to solve the problems of social governance, to support for social action initiatives by enterprise through employee volunteering and secondment of staff.

Of significant relevance to this paper is the fact that BitC allows for the “voluntary” approach to CSR. However, as recent advances in the UK system illustrates, the UK government is moulding the BitC model and supplementing it with advances in soft and more direct legislation together with the establishment of a ministerial office for CSR (Lozano et al, 2008, 93 – 114). This, in total is augmenting the benefits of the BitC system to the point where the UK model is considered to have “comparatively well developed and institutionalised CSR” standards (Lozano et al, 2008, 93 – 114). However, Ireland has not displayed the same enthusiasm for complementing the pre-existing BitC model with legislation, centralisation of services etc. Within the Irish model, this organised approach to CSR is absent. In its place the Department of Enterprise, Trade and Employment which has the lead responsibility for coordinating policy in CSR. However, it is the Department of Community, Rural and Gaeltacht Affairs which “contributes to the development of CSR in a community and local development context...” (An Roinn Gnóthaí Pobail, Tuaithe agus Gaeltachta). Furthermore, the Irish government “especially welcomes the voluntary approach” to CSR (Lozano et al, 2008) and, has not “been so active in developing a national CSR framework” (Lozano et al, 2008). This again can be attributed to the systematic failures within the Irish case. Irish dependence has inhibited, or perhaps even prohibited, the potential for CSR legislation.

Is it the case that CSR in Ireland is restricted to the design of those MNCs operating within its borders? The BitC model advocates the Corporate Community Involvement (CCI) approach to CSR in Ireland. This approach to CSR could be potentially ideal for the Irish case. But, not without legislation promoting this process. The UK has been effective in this area. It may be the case though, that the UK has merely been effective in implementing the infrastructure which supplements CSR – i.e. the institutionalisation of CSR in a ministerial capacity, the drive from discretionary regulation toward more direct regulation in the shape of article 176 etc⁴¹ – but that the UK government’s designs on CSR are cosmetic. However, the UK has advanced considerably since the advent of the Bullock Report (Bullock, 1977) culminating today in the ministerial post on CSR and Article 176. Yet, whether or not the UK government’s commitment to CSR is cosmetic or a committed attempt to foster CSR within its borders is unclear. In considering the Cadbury Report and specifically: “[t]he country’s economy depends on the drive and efficiency of its companies. Thus the effectiveness with which their boards discharge their responsibilities determines Britain’s competitive position”- we can see how the UK government’s approach to CSR within corporate governance may be an attempt to accommodate capital whilst retaining competitiveness – the price of low regulation (Cadbury Report, 1992). This has implications for this paper as the UK, a traditional “core” country, and considered less dependent than small open globalised economies like Ireland under new dependence, still is bound by the demands of capital when legislating upon issues such as CSR. Is CSR therefore merely a way to avoid intense regulation of business behaviour which would thwart UK competitiveness globally? This could be the cost for a low regulation, competitive, model of governance. CSR may be nothing more than a concession – a window dressing exercise hiding the inadequacies of the UK corporate governance regime.

Despite this, the UK has developed legislation in order to supplement the BitC model. Ireland has not. But, if CSR is designed to be of long term benefit to the corporation as well as the community – why is there not a more committed desire to it in corporations investing in Ireland? Why is it reliant on goodwill from business as opposed to the realisation of the potential benefits of CSR? The business case for CSR is considered by Mc Barnet (2007) which suggests that “even the very poor of the world add up in aggregate to a significant market, and new markets are being found in meeting needs in developing countries while simultaneously doing profitable business”.

Why has this idea of an eye-catching, low cost intervention as discussed by Mc Barnet not been realised in Ireland? The answer lies in the concept of the small open globalised economy. A small economy is disadvantaged by the manner it attracts capital. Investing in the US or the UK – with a large potential product consumption base – suggests the need to interrelate business with socially responsible acts. Competing for a slice of the larger economy would theoretically instigate a need for embracing local needs and requirements and incorporating said needs and requirements into company policy. The UK for example has an estimated population of 61m⁴² compared to Ireland - estimated at 4m.⁴³ This difference corresponds to the

⁴¹ Article 176, Companies Act 2006

⁴² <https://www.cia.gov/library/publications/the-world-factbook/print/uk.html> Sourced on the 11/03/09

⁴³ <https://www.cia.gov/library/publications/the-world-factbook/print/ei.html> Sourced on the 11/03/09

potential consumer base in each nation. It is understandable, that an MNC operating in both the UK and Ireland, would hypothetically be more inclined to foster a vibrant CSR policy in the UK due to the potential benefits in brand recognition etc in accordance with the larger population. Ireland is once again at a disadvantage. What this suggests is that businesses seek to operate in states for different reasons. With small economies like Ireland, short term profit maximisation could be the main goal due to the small potential consumer base. With larger economies – like the UK – endeavouring to establish a niche in the market – and in doing so compete in a much larger potential consumer base – could mean a more committed desire to incorporate community demands within company policy via CSR. Ireland is destined to dependence on capital, without gain as the size of her consumer base is yet another potential disadvantage in ever emerging as an “equal” with regards CSR policy.

Conclusions

Ireland’s inability to develop CSR legislation lies not in an unwillingness to engage in CSR practice but due to the systematic limitations that prevail in its economic landscape. Ireland cannot implement domestic CSR legislation due to dependence on foreign capital and history suggests that, in Ireland, innovation is punished with the threat of capital flight.

In order for states classified as dependent to have any hope of effective domestic CSR policies, legislation is necessary. But the example of Ireland illustrates that domestic legislation is implausible. Fear of capital relocation is always going to outweigh the potential benefits of any mandatory domestic CSR legislation. However, for Ireland, CSR legislation at a supranational level (the European Union) could be the answer. The EU is becoming the “dynamic” and “competitive” trading bloc (Lisbon Council, 2000). The likelihood of MNC investment ceasing, in the event of EU legislation, seems unlikely. Ireland could benefit more than most in this scenario as the only English speaking member of the Eurozone and the implications this has for MNC investment. A mandatory requirement for CSR could then serve to develop Ireland – such as the indigenous industrial sector – in a way which may help foster long term development and even, alleviate some of the trappings of Irish dependence.

This paper considers the disadvantage, for Ireland, of the size of its potential consumer base. Estimated at having a population of approximately 4million, can Ireland realistically compete with nations such as China with an estimated population of 1313 million,⁴⁴ or even the UK at 57m? Probably not. The EU does not have this problem. The potential size of an EU economy would be a more effective bargaining tool with globalised capital. However, as the UK case has shown – all regions are dependent to some extent and it may be that a mandatory CSR policy is simply one step too far and perhaps could compromise EU competitive potential.

In conclusion, there is a possible solution for Ireland with regard to effective CSR policy. The likelihood of such a solution is improbable due to the demands of

⁴⁴ http://www.intercultures.ca/cil-cai/country_overview-en.asp?ISO=CN Sourced on the 11/03/2009

capitalism. Furthermore, any supranational legislative proposal on CSR would have to challenge the voluntary ethos of CSR policy in the European Union. The question becomes whether or not competitiveness or CSR is more important to the development of the EU as a leading trading bloc. For now, it seems as though the desire to be a competitive bloc supersedes designs on CSR.

References

An Roinn Gnóthaí Pobail, Tuaithe agus Gaeltachta (Department of Community, Rural and Gaeltacht Affairs) <http://www.pobail.ie/en/CommunityVoluntarySupports/> Sourced on the 02/02/09

Appleby, P., (2005). Corporate Regulation in Ireland. In O'Brien, J. (Ed). *Governing the Corporation: Regulation and Corporate Governance in an Age of Scandal and Global Markets*. Dublin: Wiley, J. & Sons Ltd.

Bernstein, H., (1971). Modernization Theory and the Sociological Study of Development. *Journal of Development Studies*. 7:2, 141-160.

Biersteker, T., (1987). *Multinationals, the State and the Control of the Nigerian Economy*. Princeton NJ: Princeton University Press.

Booth, D., (1975). Andre Gunder Frank: An Introduction and an Appreciation. In Oxaal, I. T Barnett and D Booth (Eds). *Beyond the Sociology of Development*. London: Routledge and Kegan Paul pp75-76.

Booth, D., (1985). Marxism and Development Sociology Interpreting the Impasse. *World Development*. 13:7, pp76 – 87.

Breathnach, P., (1988). Uneven Development and Capitalist Peripheralisation: The Case of Ireland. *Antipode*. 20:2.

Bullock, Lord., (1977). *Report of the Committee of Inquiry on Industrial Democracy*. London: HMSO

CLRG report on the DCS. (2005). Available at: <http://www.entemp.ie/publications/commerce/2005/clrgreport.pdf>. Sourced on the 12/04/2009.

Conlon, T., (1975). Industrial Democracy and EEC Company Law: A Review of the Draft Fifth Directive. *International & Comparative Law Quarterly*, 24, pp 348-359. .

Conroy, B., (2009). Revolutionising Irish Company Law – The proposed new Companies Consolidation and Reform Act. In, O'Neil, A. and Keane, R. (Eds.), *Corporate Governance: an Irish Perspective*. Dublin: Roundhall.

Crotty, R., (1986). *Ireland in Crisis – a Study in Capitalist Colonial Underdevelopment*. Dublin: Brandon Press.

Cueva, A. 1976, Crisis del capitalismo y perspectivas del nacionalismo en América Latina (análisis del caso ecuatoriano) Crisis del capitalismo y perspectivas del nacionalismo en América Latina (análisis del caso ecuatoriano) . *Revista Mexicana de Sociología*, 38:4, pp825 - 841 Perspectivas del nacionalismo Latinoamericano in Chilcote, R. H. 1978. A Question of Dependency *Latin American Research Review* 13: 2, pp55-68.

Dispatch, (2003). EFC. www.efc.ie/publications/dispatch/pdfs/efc_dispatch_14.pdf. Sourced on 16/04/2009.

Directors' Compliance Statement – proposed section 45 of the Companies (Auditing and Accounting) Act 2003. Act No. 44 of 2003. Tithe an Oireachtas. <http://www.oireachtas.ie/viewdoc.asp?fn=/documents/bills28/acts/2003/a4403.pdf> Sourced on the 27/02/2009

Dos Santos, T., (1973). The crisis of development theory and the problem of dependence in Latin America. In, H. Bernstein, (ed.), *Underdevelopment and development*. Penguin: Harmondsworth.

Erturk, I., Froud, J., Johal, S. & Williams, K., (2004). Corporate Governance and disappointment. *Review of International Political Economy*. 11(4) pp 677 – 713.

Fortell, Q. & Scheck, J., (2009). Dell moving its Irish operations to Poland. *Wall Street Journal*. <http://online.wsj.com/article/SB123141025524864021.html> Sourced 30/06/2009.

Frank, A.G. 1967. Sociology of Underdevelopment and Underdevelopment of Sociology. *Catalyst* 3:20 – 73.

Frank, A.G., (1991). The Underdevelopment of Development. *Scandinavian Journal of Development Alternatives* 10:3.

Gendzier, I., (1985). *Managing Political Change: Social Scientists and the Third World*. Boulder Westview.

Gibbons, L., (1988). Coming out of Hibernation? The Myth of Modernity in Irish Culture. In Kearney, R. (ed) *Across the Frontiers: Ireland in the 1990s*. Dublin: Wolfhound Press.

Gorg, H. & Ruane, F., (2000). European integration and peripherality: Lessons from the Irish experience. *The World Economy*. 23:3, 405 – 421.

Jackman, R W. (1982). Dependence on Foreign Investment and Economic Growth in the Third World. *World Politics*. 34:2, 175 – 196.

Jacobsen, J.K., (1994). *Chasing Progress in the Irish Republic – Ideology, Democracy and Dependent Development*. Cambridge University Press.

Kay, G., (1975). *Development and Underdevelopment: A Marxist Analysis*. Macmillan Press Ltd.

Kearney, R. (1988). *Across the Frontiers: Ireland in the 1990s*. Wolfhound Press.

Knights, D. & O'Leary, M., (2005). Reflecting on Corporate Scandals: The Failure of Ethical Leadership. *Business Ethics: A European Review* 14:4, 359 – 366.

Lambe, A., Directors' Compliance Statement - Section 45 - CLRG Shows Common Sense:http://www.accountancyireland.ie/dsp_articles.cfm/goto/1187/page/Directors_Compliance_Statement_-_Section_45_-_CLRG_Shows_Common_Sense.htm. (Sourced on the 11/03/09),

Leys, C., (1977). Underdevelopment and Dependency: Critical Notes. *Journal of Contemporary Asia*. 7:1, 92-107.

Leys, C., (1996). *The Rise and Fall of the Development Theory*. London : James Currey Ltd.

Lord Carr Industrial Democracy: Bullock Report. *HL Deb 23 February 1977 vol 380 cc179-355* <http://hansard.millbanksystems.com/lords/1977/feb/23/industrial-democracy-bullock-report> Sourced on the 11/03/2009.

Lozano, J.M., Albareda, L & Ysa, T., (2008). *Governments and Corporate Social Responsibility*. Palgrave Macmillan.

Mc Barnet, D., (2007). Corporate Social Responsibility and the Law. In Mc Barnet, D.Voiculescu, A. & Campbell, T. (Eds.) *The New Corporate Accountability – Corporate Social Responsibility and the law*. Cambridge: Cambridge University Press. Pp 9-59.

Moon, J., (2004). Government as a Driver of CSR. *No 20 – 2004 ICCSR Research Paper Series ISSN 1479-5124-*

Murphy, A.E., (2000). The ‘Celtic Tiger’: An Analysis for Ireland’s Economic Growth Performance. Robert Schuman Centre for Advanced Studies RSC No 2000/16 EUI *Working Papers*

Müller, R., (1973). The Multinational Corporation and the underdevelopment of the third world. In, Wilber, C. K. (Ed), *The Political Economy of Development and Underdevelopment*. Random House, New York. 124 – 151.

National Economic and Social Council (NESC). (1992). *The Association between Economic Growth and Employment Growth in Ireland*. Dublin.

Nolan, D., Revised Directors’ Compliance Statements are a step in the right direction http://www.finance-magazine.com/display_article.php?i=5997&pi=222, (Sourced on the 11/03/2009)

O’Brien, P. J., (1975). A Critique of Latin American theories of Dependence. In I Oxaal, T Barnett and D Booth (Eds), *Beyond the Sociology of Development*. (London, Routledge and Kegan Paul)

Office of the Director of Corporate Enforcement Consultation Notice: http://www.odce.ie/en/media_consultation_notices_article.aspx? (Sourced on the 16/02/2009) Oifig and Aire Fiontair, Trádála agus Fostaíochta. Department of Enterprise, Trade and Employment, <http://www.entemp.ie/> Sourced on the 02/02/09.

Prebisch, R., (1950). *The Economic Development of Latin America and its Principal Problems*. United Nations.

Report of the Committee on the Financial Aspects of Corporate Governance., (1992). <http://www.ecgi.org/codes/documents/cadbury.pdf>. Sourced on the 11/03/09.

Richards,S., (2000). Still panicking after all these years. available at; <http://www.newstatesman.com/200007310008>. Sourced on the 04/04/2009

Roxborough, I. (1979). *Theories of Underdevelopment*. Macmillen Press.

Sealy, L.S., Alexander, B. & Rider. K., (1998). *The realm of company law: a collection of papers in honour of Professor Leonard Sealy*. London: Kluwar Law International.

Schurmann, F., (1993). *Beyond the impasse: New directions in Development Theory*. London, Zed Books.

Sklair, L., (1988). Transcending the Impasse, Metatheory, Theory and Empirical Research in the Sociology of Under Development. *World Development* 16:6, 697 – 709.

Sklair, L., (2001) *Transnational Capitalist Class*. Blackwell Publishing.

Suiter, J., (2003). Compliance Rules Could Hit “Foreign Investment. *The Times*.

The Celtic Tiger: Europe’s Shining Light. *The Economist* 17/06/1997

Thomas, K.P., (2007). Investment incentives; Growing use, uncertain benefits, uneven controls
http://www.globalsubsidies.org/files/assets/GSI_Investment_Incentives.pdf Sourced on the 01/07/2009.

Toye, J., (1993). *Dilemmas of Development: Reflections on the Counter Revolution in Development Economics*. Oxford: Blackwell – 2nd Edition.

Valenzuela, J.S. &Valenzuela A., (1978). Modernization and dependency: Alternative perspectives in the study of Latin American underdevelopment. *Comparative Politics*, 10: 4, 535-557.

Vandergeest, P & Buttell, F.H, (1988). Marx, Weber and Development Sociology – Beyond the Impasse. *World Development*. 16:6, 683-695.

Ward, H. & Smith, C., (2006). *CSR at a Crossroads: Futures for CSR in the UK to 2015*. London: International Institute for Environment and Development (iied).
Wheeler, S., (2007). Ethics in the workplace. *Law Critique*. 18: 1-28. Report of the Presidency Conclusions of the Lisbon European Council 23 & 24 March 2000. http://www.europarl.europa.eu/summits/lis1_en.htm#b Sourced on the 26/02/09.
<https://www.cia.gov/library/publications/the-world-factbook/print/uk.html> Sourced on the 11/03/09

INVESTIGATING THE PRINCIPLES OF CORPORATE GOVERNANCE AND THEIR LINKAGES TO BROADER SUSTAINABLE DEVELOPMENT: CASES OF FINLAND AND ZAMBIA - *(PhD Research Project)*

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Abstract

The African continent is undoubtedly blessed with numerous rich resources; at the same time it remains the poorest on the planet in all forms of the word. The “paradox of the plenty”, (a situation where a country may rank low in terms of wealth despite being rich in terms of resources) is more evident in Africa than anywhere else. In an effort to solve that paradox, Countries such as Zambia have joined the race to attain the United Nations's Millenium Developmet Goals by the year 2015. Five years before that deadline however, the future of such countries looks as bleak as it looked at the time these MDGs where drawn and adopted. Zambian policy makers often use words such as sustainable development as an end they wish to achieve through MDGs, but amid the generally held view that these goals have been successful in drawing the country's attention to its numerous problems, questions still remain as to which strategies should be adopted and how they should be implemented to especially achieve poverty alleviation, tackle climate change and facilitate the development of a more prosperous society. Public sector driven economic activity is said to be the best way to achieve efficient and sustainable productivity that creates jobs and eventually social economic development. In that line, the Public - Private Partnerships (PPPs) is one of the strategic policies the Zambian Government lauched in 2006 in an efort to encourage pivate and public sector collaboration towards developing a sustainable economy. However, this has yielded little or no tangible success mainly because the Zambian economy is mared by a fragmented political environment, endemic corruption, lack of transparency in both private and public resource management; vices that often times render development efforts useless. In the efforts to find the best strategic approaches to attaining meaningful sustainable development, many questions need to be asked by various economic actors, one such question is: Can Corporate Governance offer some viable alternative policy and strategic approaches to economic development by enshrining its four pillars; Accountability, Transpaprency, Fairness and Responsibility at the core of the interactions between all economic actors?

Keywords: Corporate Governance, Sustainable Development, Corporate Social Responsibility, Zambia

Introduction / Aim of the study

The aim of this study is to investigate corporate governance (CG), and its linkages to sustainable development (SD). The study will review existing literature on the corporate governance concept in relation to the concept of sustainable development, building from agency and institutional theories.

The empirical part will be formed around comparative case studies of corporate governance practices in state-owned enterprises (SOE) and listed companies whose shares are publicly traded on the stock exchanges in Finland and Zambia.

Corporate governance has mainly been studied from the perspectives of accounting and finance as corporate control mechanisms that regulate the relationships between shareholders, board members and managers in their pursuit for profits.

The idea of this study however is to depart from that common route and move towards exploring how institutionalising and incorporating the corporate governance principles into the overall operational or strategic structures of state-owned and public companies can positively influence the advancement of the broader development programmes of an economy. Case studies in selected enterprises will provide comparative perspectives on how Finnish companies have used the CG concept as a tool for institutionalising best practices and later on contribute to sustainable economic development.

By choosing to benchmark Zambia's corporate governance principles against those of Finland, I am not in any way suggesting that Finland is good while Zambia is evil, but I am convinced that there are learning opportunities in such a rare study. For example, if we take corruption, which is undeniably one of the detriments to development in countries like Zambia, until 2008 Finland has enjoyed a shared first position as the least corrupt country in the world according to Transparency International's corruption perception index. Currently Finland is 5th while Zambia lies 115th on the same index. Finland's fall has been as a result of a few cases, first in and between private companies and more recently in and between state-owned companies. (see:

http://www.transparency.org/news_room/in_focus/2008/cpi2008/cpi_2008_table).

However, as a result of effective laws and the independence of various institutions that contribute to good governance, Finland has been able to effectively eliminate elements that otherwise undermine the process of institutionalising good governance principles in all sectors of the economy. It is for this reason that I firmly believe that results from this comparative study will provide learning opportunities for Zambia as far as institutionalising good governance in all sectors of the economy is concerned.

Going through literature, it is clear that this kind of comparative study has never been done before in the context of countries that are so different from each other both culturally, economically, politically and socially. However, every country has a "sustainable development" agenda, therefore, I firmly believe that there is a great deal to learn from this kind of comparative experiences in both policy and implementation approaches. Literature shows that despite specific local historical, economic and political conditions, reform leaders make choices on strategy and policy mechanisms, and their mistakes could have dramatic consequences on the long-term results of the reforms. This suggests that managers and reformists are faced with similar situations where critical decisions have to be made, therefore, comparative experiences provide an unparalleled resource for learning from how other countries have succeeded or failed on similar subjects.

Since adopting and implementing good corporate governance systems requires a certain measure of institutional reform, some may argue that the levels of both

economic and institutional development in these two countries are too far apart, (which is true) Finland being one of the most stable economies in the developed world while Zambia is one of the poorest nations on the planet with very weak institutional frameworks, and is plagued with endemic corruption. Such an argument might suggest that those differences might question the representativeness of the outcome of such comparative studies. However, as Zlattoni and Cuomo (2008) posit, countries more exposed to other national economic systems experience greater pressure to harmonize and legitimate their governance practices. Therefore, it is assumed by this researcher that Finland having a well developed and expansive industrial base that operate in a market with minimal cases of cronyism, corporatism and corruption must have well developed and institutionalised best practices that allow the economy to self regulate. It is hoped in that respect that the specific comparative case studies will provide an opportunity to see how Finland has used corporate governance principles built on the four pillars (fairness, accountability, transparency and responsibility) in state-owned and public enterprises as tools for contributing to the broader sustainable development agenda of the country, at the same time expose areas where particularly Zambia can learn from, both in theory and practice through benchmarking corporate governance standards in Zambia and Finland's best practice standards.

Problem Description

The African continent is undoubtedly blessed with numerous rich resources, at the same time it remains the poorest on the planet in all forms of the word. Zambia like many African countries depends largely on foreign investments and aid to sustain its economy. Therefore, as it struggles to position itself in the race to attract those investments, alleviate poverty, achieve functional democratic governance, and move a step further towards achieving the millennium development goals, later on its vision 2030, the need for working approaches to sustainable economic reform remains critical. In the period prior to the onset of the current global economic meltdown, the country exhibited fairly strong macroeconomic growth figures, part of which was attributed to strong performances in the mining industry and debt relief as a result of the country's attainment of the Highly Indebted Poor Countries (HIPC) completion point which meant that instead of servicing external debt, the country could channel its generated revenue into the development of various sectors of the economy. However, much of that growth was merely on paper because there is little evidence that any of it translated into real benefits for the poor majority, and that is largely because of the unequal distribution of income and opportunity, weak institutional and governance frameworks and most of all, sheer greed by individuals entrusted with the management of public resources.

Evidence of these weaknesses in the country's economic governance structures can be seen in the recent misappropriation of K27 billion or (USD 5 million) see: <http://www.lusakatimes.com/?p=12373>, by a few Ministry of Health officials, which led to the suspension of aid by two countries - Netherlands and Norway. This scandal and many others both in public and private sectors point to the fact that there is a serious breakdown in both the internal and external control mechanisms, lack of

accountability, transparency and responsibility coupled with a very poor ethics culture in the conduct of business across the economy. This scandal, together with evidence from the country's annual Auditor General's reports that suggest that the breakdown of internal controls is systemic across the civil service, is perhaps a sign that achieving sustainable development will remain a flitting illusion to be pursued by Zambia if proper prevention measures are not put in place.

Helbling & Sullivan (2002) posit that in countries struggling to break out and reduce poverty through sustainable economic means, much of the economic activity remains trapped in the informal sector, where entrepreneurial survival rather than business growth and development best describes the private sector, and rampant corruption prohibits the public sector from fulfilling its mandate of social service delivery. They further state that many African countries have fragile democracies exhibiting governments that are seldom accountable to their citizens beyond elections leading to day-to-day decision-making processes remaining opaque, unpredictable, and impenetrable for outsiders, while economic systems are tailored to benefit the insiders.

In the Zambian case therefore, successful development efforts demand a holistic approach, in which various partnership-based programs and strategies should be encouraged in order to maximize their important contributions to broader economic progress and prosperity. The country's vision 2030 states that:

"By the year 2030, Zambia should at least be an upper middle-income nation that is diversified and balanced sector-wise, geographically and socially, including gender-wise, with a per capita income of not less than US\$3,000 per annum, and medium Human Development Index rating".

However, the problem still remains as to whether it is possible to achieve that kind of development vision in the face of rampant corruption, weak institutions, seemingly total disregard for the law by economic managers and political leaders, and the lack of broader stakeholder participation in development activities. Furthermore, Zambia focuses on the attainment of the Millennium Development Goals by 2015, but amid the generally held view that these goals have been successful in drawing the country's attention to its numerous problems, questions still remain as to which strategies should be adopted and how they should be implemented to especially achieve poverty alleviation, tackle climate change and facilitate the development of a more prosperous society. To that effect, Shkolnikov & Wilson (2009) have posited that in order to achieve sustainable development, some of the key strategic reform areas require countries to focus on building market economies, encouraging broad based entrepreneurship initiatives, strengthening good governance, promoting sustainable investments, securing property rights, and most importantly for developing countries; fighting corruption.

Now, much of the problems highlighted above have a lot to do with governance issues, both corporate and public governance. In the same way, the New Partnership for Africa's Development (NEPAD) in 2001 recommended that, if Africa has to enjoy sustainable economic development and get the majority of its people out of poverty, one of the conditions that must be met is to ensure good political, economic

and corporate governance. The word "governance" is mostly used in the context of political governance, however, it is fair to say that its tenets are no different from the four fundamental pillars of corporate governance, (fairness, accountability, transparency and responsibility) and it is these pillars that are essential to any sound democratic strategy that aims at bringing about meaningful development.

Furthermore, it is important to note that there is an inter-relation between political, economic and corporate governance issues and this can be extended to include sustainable development because it is impossible to develop an economy without first putting in place institutions that strengthen good political, social and economic governance. The truth of the matter is that achieving sustainable development requires concerted efforts through broad based partnerships between all economic actors from both the public and private sectors. To that effect, it is unquestionably true that corporate governance does offer viable options to solving some of the development problems that poor countries like Zambia face through the institutionalising of its four basic principles. However, the problem is that in as much as corporate governance has been gaining popularity in research, much of it is restricted to the financial sectors of the industrialised countries and there are not many studies that have focused on investigating its relationship with sustainable development, particularly in the African context. Therefore, it is imperative to carry out this study to ultimately contribute to the body of literature that focuses on investigating how specifically, corporations (both SOEs and private) as key economic actors can contribute to the sustainability of the economies in which they are embedded.

Currently, the global economy is in turmoil. Some have argued that if market risk and its cyclical movements were the only causes of the collapse of the US mortgage market and other corporate failures that led to the initial global financial meltdown, there probably wouldn't have been such widespread public scorn for corporate greed, and anyway, the markets provide other instruments for investors to diversify their investments into, that would have led to the markets correcting themselves. In the same way, some can also argue that to the extent that the markets' fall, in Zambia's case poor economic management; the resultant abject poverty for the majority can be traced to corruption scandals and breaches of trust; public support for corporations evaporates, the market becomes dysfunctional and the broader economy embarks on a downhill spiral that is difficult to correct. As a knock on effect therefore, the state's role as a major economic player becomes questionable, which underscores a widespread public and hence political interest in reinforcing corporate governance practices as tools for broader economic development. Such concerns inevitably become even more important in an international context where the full benefits of free capital flows can only be realised if there is a mutual understanding on the basic elements of good corporate governance. Case in point; the freezing of aid from Norway and Netherlands (as pointed out earlier) to Zambia's Ministry of Health. The consequences were a nationwide strike by doctors and nurses which paralysed the health system in the country for days because government refused to improve their working conditions due to lack of funds while a few individuals were looting the same funds intended for such purposes.

Research Questions

To explore corporate governance and its linkages to sustainable development, the following questions will be addressed as guiding themes for a multi-method data gathering exercise.

1. What are the linkages between the four main principles of corporate governance and broader sustainable economic development? This will serve as the main or overriding question for this study and the following sub questions will help the deeper investigation of this question.
 - 1(a) What are the differences in the corporate governance frameworks in Finland and Zambia for state-owned enterprises (SOEs) and listed companies? This question will be addressed through the lenses of institutional and agency theories because it is partly a structural question and an institutional question. This approach is also due to my belief that for good governance to be achieved in business and politics, institutional reform is vital and in order to have sustainably managed business houses, corruption free institutions, there is need for corporate governance reforms that seek to implement and strengthen its four basic principles in the companies' management and strategic structures.
 - 1(b) How can corporate governance principles be used to fight corruption, corporatism and cronyism? This question will be addressed from the premise that corruption is one of the biggest deterrents to economic development and as long as it is not addressed, poor countries like Zambia can forget about attaining the millennium development goals. Corporatism and cronyism are vices widely known for increasing inefficiencies and distorting the proper functioning of markets; in the end, they negatively affect the entire economy if they are not prevented. Generally, literature shows that in countries where good corporate governance has been implemented, companies and government institutions are sustainably run because good corporate governance makes it difficult for individuals to engage in bribery; promotes and protects whistle blowers, and also contributes to the broader climate of transparency and fair dealing both in private businesses and public service.
 - 1(c) What are the common ownership structures used in these companies? This question will seek to test whether the case companies (both in Zambia and Finland) use pyramids, cross-sharing and/or multiple share classes as corporate control structures. The reason for my wanting to investigate this is that in theory, these three techniques can effectively be used by insiders to expropriate or divert resources from corporations in ways that would deprive non-controlling investors, and other

corporate stakeholders, of wealth that would be considered their fair share in a market with sound corporate governance practices.

- 1(d) What is the interplay between corporate governance and corporate social responsibility (CSR) in state-owned and public enterprises of Zambia and Finland, and how can these practices be used as tools for advancing the sustainable development agenda. To tackle this question, the four principles of corporate governance, i.e. fairness, transparency, responsibility, and accountability will be explored in detail alongside CSR to establish how they can be implemented as core best practices relevant to fighting poverty and advancing the sustainable development agenda particularly in Zambia.

Theoretical Background

The larger part of literature appears to suggest that corporate governance is a concept mainly applicable to large corporations, shareholders, and broad private sector issues in the financial sectors of developed economies of the world. This can be seen in the way it is defined by many. For example, according to the OECD (2005), corporate governance is the system by which business and corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing that, it also provides the structure through which company objectives are set, and the means of attaining those objectives and monitoring performance.

Okeahalam and Akinboade (2003) define it as a concept that refers to the manner in which the power of a corporation is exercised in the stewardship of the corporation's total portfolio of assets and resources with the objective of maintaining and increasing shareholder value and satisfaction of other stakeholders in the context of its corporate mission. Cochran and Warwick (1988) define it as "...an umbrella term that includes specific issues arising from interactions among senior management, shareholders, boards of directors, and other corporate stakeholders." According to Oman and Blume (2005), corporate governance refers to the private and public institutions, including laws, regulations and accepted business practices, which in a market economy, govern the relationship between corporate managers and entrepreneurs ("corporate insiders") on one hand, and those who invest resources in corporations, on the other.

From these definitions, it becomes clear that governance of corporations is more concerned with maximising shareholder value through managing the relationships between the principal (shareholders) and the agents (managers). These principal - agent relationships are managed through the implementation of the four pillars of corporate governance, fairness, transparency, accountability and responsibility, in the way corporations are managed.

From that definitional perspective, it might seem as though corporate governance is irrelevant to sustainable development issues. For example, Shkolnikov & Wilson (2009) state that many of the private sector issues that corporate governance are concerned with may seem to bear little relevance to broader development concerns, which deal with day-to-day issues of poverty, job-creation, anti-corruption, education, media, and political reform.

However, looking closely on the four principles on which corporate governance is built, (fairness, transparency, accountability and responsibility) and the meaning of governance, especially democratic governance, as Clarke (2004) suggests that “it basically means how to ensure the power of organisation is harnessed for the agreed purpose, rather than diverted to some other purpose, and its institutions provide a framework within which the social and economic life of countries is conducted”, it is clear that there is a direct linkage between the two types of governance. Therefore, it is fair to say that the CG principles are in fact applicable to any sector of any economy regardless of size activity type and location; thus it is fair to argue that corporate governance and economic social development are strongly linked and their application in various sectors of the economy should have a bearing on the success or failure of that economy. Furthermore, these definitions also suggest that there is a skewed approach to research on this subject that limits most of it to the financial sector; therefore, it is important to spread the pillars of corporate governance into broader management and governance research.

Shkolnikov & Wilson (2009) and many other scholars on the concept have posited that good governance of corporations plays an important role in attracting investment, establishing a healthy private sector, and building democratic societies. Overall, well-governed companies (private, public or state-owned) tend to perform better and contribute to long-term productivity and broad based economic growth. It should then be fair to say that proper institutionalization and incorporation of good corporate governance transforms its four principles into core values of transparency, fairness, accountability, and responsibility which if and when allowed to spread throughout all sectors of an economy, they instill accountability in the political economic and social system, and close off space for exacerbating corruption and cronyism.

From an institutional theory perspective, good corporate governance equally breaks the hold of vested interests that would otherwise undermine the proper functioning of markets and inhibit the development of social and democratic political institutions. Generally, it is fair to argue that in the same way that good governance principles and practices contribute to the sustainable development prospects of countries, increased economic sustainability of nations and institutional reforms that come with them, corporate governance provides the necessary basis for improved governance in the public and private sector.

On the other hand, corporate governance failures can undermine development efforts by misallocating much needed capital and resources and developmental fallbacks can reinforce weak governance in both the private and public sectors, and undermine job and wealth creation. This has been seen in the current global economic crisis, which some bodies such as the Association of Chartered Certified Accountants (ACCA) have argued that it has its roots in the credit crunch, which in part was as a result of

failures by corporate boards to provide oversight, control and direction to their organisations. The ripple effect of these failures has had deep consequences on the broader global economy, more so for least developed countries that have seen a reversal in much of the progress that was made prior to it and will be very difficult to recover.

According to Helbling & Sullivan (2002), corporate governance is one key element in improving economic efficiency and growth as well as enhancing investor confidence. Helbling & Sullivan further argue the presence of an effective corporate governance system, within an individual company and across an economy as a whole, helps to provide a degree of confidence that is necessary for the proper functioning of a market economy. The resultant benefit the whole economy gets from that is that the cost of capital becomes lower and firms are encouraged to use resources more efficiently, thereby underpinning growth. In essence, according to agency theory, corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders, making it a prerequisite for the integrity and credibility of market institutions. According to the OECD (2005) guidelines, by building confidence and trust, good governance allows the corporations to have access to cheaper external finance and to make reliable commitments to creditors, employees and shareholders. It is this contract that underpins economic growth in a market economy and public faith in that system.

Therefore, this study will employ two theories as stated in the introduction. Through the agency theory, the relationship types between company principals and agents will be explored in order to study how these can be taken advantage of to foster broader economic development. Institutional theory will be applied largely because practices vary across institutional environments and as a learning process, developing and implementing working good corporate governance principles requires key institutional reform. Thus, this theory will be key to understanding how different institutional frameworks can be strengthened to bring about a sense of accountability, transparency and responsibility in all sectors of the economy.

Empirical Focus

The empirical focus will be on selected state-owned enterprises (SOEs) and listed companies whose shares are publicly traded on stock markets in Finland and Zambia. Specific case companies will be selected in due course but here is a list of potential companies out of which six; three from each sector will be selected:

SOEs (Zambia)	SOEs (Finland)
Zambia Telecommunications Limited (ZAMTEL) Zambia Electricity Company Limited (ZESCO) Zambia Revenue Authority (ZRA) Zambia Development Agency (ZDA) Zambia National Broadcasting Corporation (ZNBC)	Suomen Posti Finnvera Plc Finnish Industry Investment Alko VR YLE
Private Listed Companies (Zambia)	Private Listed Companies (Finland)
Zambia Sugar Plc Copperbelt Energy Corporation (CEC) Zambia Breweries Plc Zambia National Commercial Bank (ZANACO) Cavmont Capital Holdings Zambia Plc Zain Zambia (CELTEL) BP Zambia	Nokia Stora Enso Nordea Neste Oil Outokumpu TeliaSonera Kesko

Methodology

The study will employ a multi-method research methodology. Because my questions for this research are of the "What and How" nature, a qualitative approach will be applied. Yin (2009) posits that qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. Therefore, data will be gathered using both primary and secondary data gathering techniques. Primary data will be gathered through in-depth face-to-face interviews with senior officials from selected companies to make up the empirical case studies that will be critical for comparative purposes. According to Yin (2003) three different types of research interviews can be identified namely, open ended, focused and survey interviews. The most commonly used form of interviews style in case study research is open ended where the researcher can ask respondents about facts and opinions concerning the subject under review. Therefore, I will use open ended interview questions that will allow me to ask follow-up questions every time unforeseen points arise during the interview process. Secondary data will be gathered through desk research techniques which will focus on reviewing various publications on the concept and principles of corporate governance and its relationship with boarder economic sustainable development. Yin 2009:18 states that; "case study inquiries rely on multiple sources of evidence, with data needing to converge in a triangulating

fashion", therefore I intend to apply a multi method research approach that will allow me to gather data from multiple sources in order to benefit from the fact that there is no data source that has a complete advantage over others but rather they complement each other if used efficiently. Therefore, this is a tentative methodology plan and due to the sensitivity of the subject under review and the nature of my research questions, I might include interviews from members of the public, professional associations such as Institutes of Directors, Chambers of Commerce, Trade Unions, Government agencies etc.

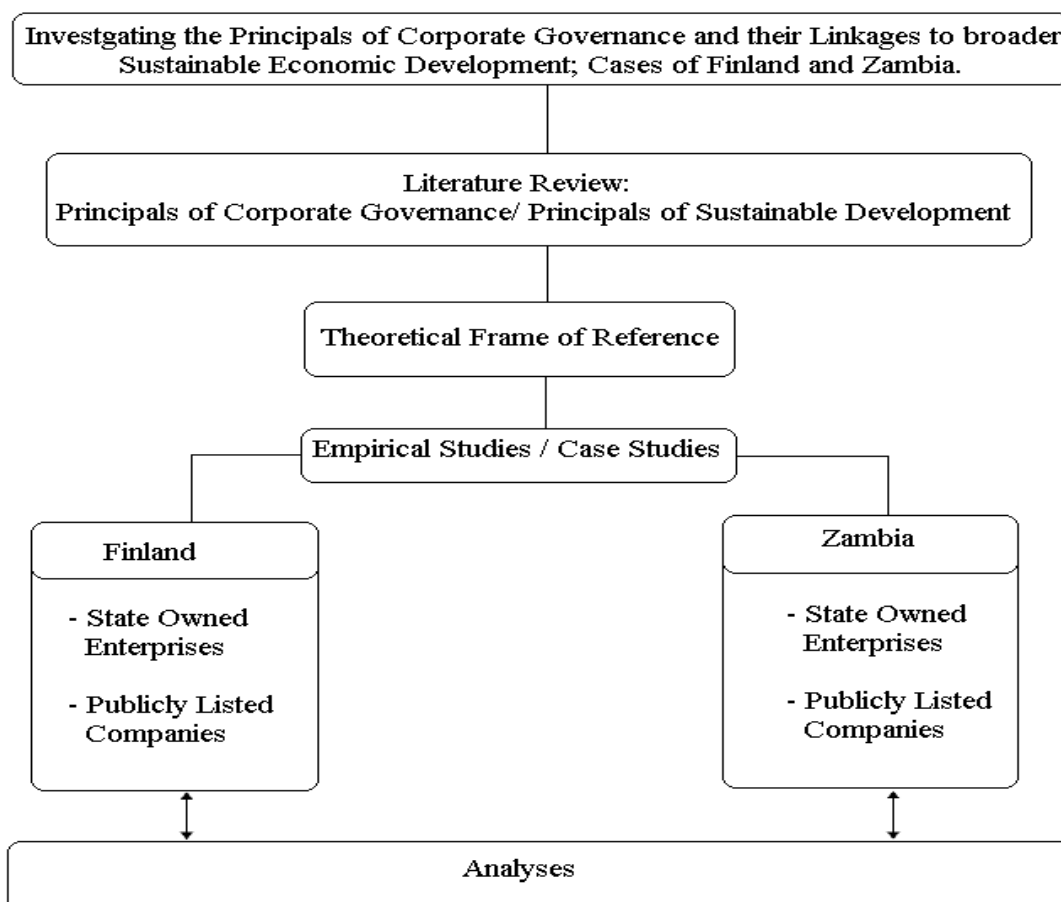


Figure 1. Research framework.

References

Davis, G.B and Parker, C.A. (1997) *Writing the Doctoral Dissertation : A Systematic Approach*. Baron's Educational Series Inc. New York.

Clarke, T. (Ed.) (2004), *Theories of Corporate Governance: The Philosophical Foundations of Corporate Governance*, Routledge, London

Helbling, C.L.K & Sullivan, J.D. (2002). *Instituting Corporate Governance in Developing, Emerging and Transitional Economies: A Hand Book*. Center for International Private Enterprise (CIPE) Publication. Available online at: www.cipe.org/programs/corp_gov/pdf/CGHANDBOOK.pdf

OECD (2005). *Guidelines on Corporate Governance of State-owned Enterprises*. OECD Publication ISBN 92-64-00942-6. Available online at: www.oecd.org/daf/corporateaffairs/soe/guidelines

Okeahalam, C.C. and Akinboade, O.A. (2003). *A Review of Corporate Governance in Africa: Literature, Issues and Challenges*. Available online at: http://www.gcgf.org/ifcext/cgf.nsf/content/Proceedings_Pan_Africa_Forum

Blume, D., Oman, C. (2005). *Corporate governance: the development challenge*. Available online at: www.oecd.org/dataoecd/45/28/34342425.pdf

Shkolnikov, A. and Wilson, A. (2008). *From sustainable companies to sustainable economies: Corporate governance as a transformational development tool*. CIPE's Economic Reform Issue Paper, October. Center for International Private Enterprise: Washington, DC.

Yin, R.K., (2009). *Case Study Research; Design and Methods*, 4th Ed., Vol. 5. SAGE: London.

Yin, R.K. (2003). *Case Study Research – Design and Methods*, 3rd Edition, Sage, Thousand Oaks.

Zattoni, A. and Cuomo, F. (2008). *Why adopt codes of good governance? A comparison of institutional and efficiency perspectives*. *Corporate Governance*, 16 (1): 1-15.

ENVIRONMENTAL MANAGEMENT PRACTICES IN LOCAL PUBLIC ADMINISTRATION IN PORTUGAL

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Abstract

The adoption of environmental management practices in overall management is a rising reality in the business sector. Also, local public institutions are shifting their management towards sustainability, though local governments are moving faster than other public sector levels regarding the integration of environmental and sustainability operations and strategies. The main goal of this research is to identify the environmental profile of local public administration, using Portuguese municipalities as a case-study. This paper assesses how environmental practices have been adopted in this sector, on the basis of self-assessment by the local public services. To accomplish this, a survey questionnaire was forwarded to all municipalities in the country in order to identify and analyse the environmental practices in the local public sector. The evaluation of the degree of implementation of certain environmental management practices was based on the Municipality Environmental Performance Evaluation (MEPE) index, which was developed on the basis of the data obtained on ten selected variables in the national survey. The overall results demonstrate a low adoption level of environmental management practices: one concludes that new practices and public policies need to be adopted to invert the current trend. This research can support municipalities in reviewing and analysing their environmental management practices in order to improve their environmental performance.

Keywords: Local public sector; Environmental and Sustainability Management practices; Environmental performance index; Questionnaire survey; Portuguese municipalities

Introduction

The public administration faces multiple challenges that compel it to make a continuous effort to adapt to new organizational forms capable of responding to the constant requirements of society. Most of the countries in the Organisation for Economic Co-operation and Development (OECD) are making efforts to remodel the public administration. A better administration will certainly generate a better public sector.

Public sector-led strategic initiatives, such as policies, plans and programmes, play a fundamental role in improving environmental and sustainability performance. In this area, legislation, economic instruments and voluntary schemes should be designed to be applied beyond traditional sectors such as energy, industry or transport. Hitherto, environmental assessment and management tools have most often been applied to

manufacturing industries and tangible products, while public organisations usually neglect and/or omit their own environmental problems, excluding themselves from the scope of strategic initiatives. This is important, since it is understood that public organisations must respond to social needs not covered by the private sector. Like any other organisation, public services should have environmental objectives, goals and targets (Ramos *et al.*, 2007a).

Sustainable development requires an integrated approach. Thus, national and regional authorities should assist municipalities in achieving more integrated management at the local level. Integrated approaches include long-term strategic visions and policies for linking different administrative levels to ensure consistency. For this, strategic management of the environmental impacts of all activities in the area where local authority policy operates should be guaranteed. The approach should be built up through cooperation between the various departments and sectors and include meetings with all stakeholders and the integration of local, regional and national policies (European Commission, 2007). The key agency for initiating change is local government itself and, as the history of Local Agenda (LA21) in Europe over the last decade has clearly shown, very little would have happened without the energy, leadership and commitment of local government politicians and officials (Evans & Theobald, 2001, 2003 *vide* Evans *et al.*, 2006).

The public sector has frequently been left out in research work on environmental integration in the different economic activities. This fact can be justified in part by the natural attention that is given to sectors with a longer/greater history of environmental impacts, e.g. industry, agriculture and transport.

The main goal of this research was to identify the environmental profile of local public administration, through an analysis of the environmental management practices in Portuguese municipalities. Another goal of this research was to assess the Portuguese local public sector's environmental performance through an index, as an initial step towards evaluating its environmental performance at national level, in a simplified and useful manner. This tool was used to help local decision-makers understand the sector's environmental signals. The index measures the extent to which a variety of environmental practices have been adopted.

This paper, likewise, assesses the extent to which a variety of environmental issues and practices have been adopted in this sector but, this time, on the basis of self-assessment by the local public services. These environmental issues and practices include the appointment of a designated environmental professional responsible for environmental issues, environmental training for personnel, knowledge of Environmental Management System (EMS) implementation, environmental programmes, environmental reporting, environmental cooperation with stakeholders, and environmental standards for suppliers, among others.

An Overview of Environmental Management Practices in Local Public Administration

Many local public institutions are becoming increasingly worried about reaching and demonstrating a solid environmental performance, through control of the environmental impacts of their activities, products and services. These concerns appear in the context of more restrictive laws and other measures that promote more and more environmental protection initiatives, and of a generalized increase in the concerns and hopes of stakeholders in environmental and sustainable development.

Local governments are responsible for providing a large number of services to their populations, depending on the institutional structure and function of the regional and national authorities. One important issue when analysing local public administration is the scope of their activities. Many of the environmental pressures and impacts of local administration services are indirectly related to their activities, since these organisations face different roles beyond the usual specific daily activities of their facilities, which take place within each of them. They usually participate in many other different tasks, e.g. local planning, regulation, surveillance and monitoring and in the respective environmental, social/cultural, economic and institutional systems operating within their jurisdiction.

Various pieces of research have surveyed and identified the adoption of environmental management practices by companies, especially addressing EMSs, environmental auditing and reporting practices, and related issues. However, few similar surveys have been conducted for local public organizations. One particularly relevant piece of work published in this context is the Profile of Local Government Operations, conducted by the United States Environmental Protection Agency (USEPA, 1999). It aimed to give a better understanding of the different types of local authority, the operations those authorities provide that have the potential to significantly affect the environment, the potential environmental impacts of those operations, the regulatory requirements with which local governments must comply, and potential pollution prevention opportunities. The cumulative environmental aspects and impacts that can result from activities managed or operated by local governments were some of the reasons identified to justify the importance of the study.

Nevertheless, a number of pieces of work analyse different environmental and sustainability initiatives in local public services. They show many experiences and case studies revealing that many local public administrations worldwide are already good examples of integrating environmental initiatives into their operational activities and strategic instruments. There have been numerous research initiatives involving integrated environmental and sustainability management tools such as EMSs, applied in local public organization facilities (e.g. Emilsson and Hjelm, 2004; Abubakar and Alshuwaikhat 2007; Lozano and Vallés, 2007; Malmborg and Norén, 2004; Burström and Korhonen, 2001; Emilsson and Hjelm, 2002). For example, Emilsson and Hjelm (2004) analyse the use of EMSs by local authorities, studying their implementation, with case studies from two European cities, Newcastle (United Kingdom) and Gothenburg (Sweden); Abubakar and Alshuwaikhat (2007) consider a modified approach to incorporating an EMS, called the Sustainable Urban

Environmental Management Approach (SUEMA). This approach is derived from the corporate EMS but incorporates Strategic Environmental Assessment into the EMS and includes public participation that will help city environmental agencies to improve their operations and ensure sustainability, accountability, transparency and responsiveness.

Environmental and sustainability reporting is another main area where public services are becoming aware. Following the rising interest of the private sector, public organizations are beginning to realise that they, too, must integrate this practice to inform stakeholders more effectively of their operational and strategic environmental performance. However, at the moment, there are very few guidelines designed exclusively to assist public agencies in developing sustainability reports. The Hong Kong Environmental Protection Department has produced guidance for public agencies to develop environmental reports and the State of Victoria in Australia has issued guidance on office-based environmental impacts. The Global Reporting Initiative (GRI) is the only international reporting framework for organisational sustainability/triple bottom line performance that is designed to be applicable to public agencies (GRI, 2004). According to Keating (2001), a significant number of cities around the world have or are developing environmental, sustainability or quality of life reports (e.g. Seattle), and they stress that people relate to issues most readily at the local level. Also related to this subject is the significant number of initiatives on sustainable development indicators at local scale (e.g. Crilly *et al.*, 1999; Devuyst and Hens, 2000; Valentin and Spangenberg, 2000; McMahon, 2002; Eckerberg and Mineur, 2003; Holden, 2006; Scipioni *et al.*, 2008; Karam *et al.*, 2008; Enticott and Walker, 2005; Bechi *et al.*, 2001; Butelli *et al.*, 2008; Holland, 1997; Mason *et al.*, 2008; Spangenberg and Valentin, 2000) aiming at monitoring the local state of environmental and sustainability reporting.

Additionally, some work analyses other environmental tools applied to municipalities, such as the environmental auditing of local public facilities and sustainable public procurement systems. Examples are Diamantis (1999), which outlines the procedures by which environmental auditing can be used to select appropriate environmental indicators, and Aall (1995), which adopts a municipal model of eco-auditing that was tried in nine cities in Norway. Jackson and Thomson (2007) state that the greening of public procurement in the United Kingdom was seen as a key initial step towards providing suppliers with a major incentive to reduce their environmental impacts and stimulating the markets for sustainable products and services, where each local authority has a different set of circumstances and priorities. When deciding on a particular purchase, the incentives for practising green procurement are often limited. The local authorities find it is generally easier to justify a decision on the basis of price than wider benefits such as long-term economic benefits, environmental or social benefits or benefits for someone else, particularly when the advice is unclear. The work published by Günter and Scheibe (2006) or Ryall and Warner (2001) are examples of other research initiatives on green purchasing within local authorities.

On the other hand, much of the work analyses local territories overall, where LA21 (and related issues) is the instrument most abundantly analysed (e.g. Jackson and Thomson, 2007; Ito, 2005; Evans *et al.*, 2006; Aguado *et al.*, 2007; Blake *et al.*, 2000; Li *et al.*, 2004; Braun, 2007 and 2008; Brugman, 1996; Cuthill, 2002;

Feichtinger and Pregernig, 2005; Grochowalska, 1998; Lorenzo and Sanchez, 2008; Miranda and Steinberg, 2005; Patton and Worthington, 1996; Selman, 2000).

A great deal of other work focuses on specific environmental problems and issues facing local government (e.g. waste production and recycling, noise control, water and wastewater treatment, land use management, ecosystem conservation, public participation, and environmental education), either generated by themselves or by the economic activities that have been set up in the local territory. However, the particular analysis of each of these fields is beyond the objectives and scope of this research.

Methodology

Case-study – Portuguese Local Administration

There are three distinct layers of government within Portugal: the national/central government, the two autonomous regions, which have their own political and administrative systems and governing bodies (the Atlantic islands of the Azores and Madeira), and the local authorities.

At present, there are two levels of local government: municipalities (municípios) and parishes (freguesias). The most basic local government unit in Portugal is the parish, which elects a local assembly, via proportional representation, for a four-year term. That body, in turn, elects an executive and president from their number (the president is at the head of the winning party list). The tier immediately above the parish is the municipality, which is elected on the same basis as the parishes (with the municipal assembly electing a municipal council and mayor).

Table 1. Summary characterization of the Portuguese sub-national authorities.

	Municipalities		Parishes
Area (km²)	Largest	1721 (Odemira)	373 (Penamacor)
	Smallest	8 (São João da Madeira)	0.05 (Castelo)
Population	Largest	509751(Lisbon)	63546 (Algueirão)
	Smallest	425 (Corvo)	39 (Bigorne)
Population range	Less than 20 000:	178	
	20 000-100 000:	106	
	Over 100 000:	24	
Total (no.)	308		4259
LA21 (no.)	87		–
ECOXXI award (no.)	Year 2005:	18	–
	Year 2006:	20	
	Year 2007:	23	
	Year 2008:	29	

Portuguese local authorities are frequently the main employer, playing a central role in local development, regardless of size, location, or demographic characteristics. They are responsible for providing a great diversity of services to their populations, such as educational facilities, environmental protection and management, land use planning, transportation, cultural events and social care.

Portuguese municipalities have significant asymmetries in their levels of development. Their significant diversity in valuable natural, social and cultural assets, serious human pressures, and importance for the Portuguese public administrative structure, and, in addition, government strategic and operational responsibilities in connection with their advantageous position near local communities, show how relevant environmental profile assessment is for environmental integration in public services.

Up to now, many local authorities have not accepted assessment of their own environmental performance as part of their responsibilities, although the municipalities carry out various environment-related public services. Nevertheless, several initiatives have been undertaken by the Portuguese municipalities, revealing a rising interest in achieving better environmental and sustainability performance. Some of them are related to EMS implementation and the majority are related to LA21.

LA 21 is a growing practice in Portugal, but many of these strategic processes are in their early stages, as is observed by Schmidt et al. (2006) for the whole country. According to O'Riordan (1998), the degree and depth of LA21 processes offers a good indicator of how far a given region is making the transition to sustainability. Nevertheless, Portugal is still a European country with relatively few LA21 processes in progress. In addition to the weak uptake, many of the processes in Portugal have difficulty in keeping in operation and implementing the Action Plan. It is urgent to evaluate LA21 in Portugal in accordance with objective and standardized quality indicators (Agenda21Local, 2007).

We should also stress the initiative ECO XXI, which is an award that took its inspiration from the underlying principles of Agenda 21. It was developed and managed by a Portuguese non-governmental and non-profit organisation (Associação Bandeira Azul da Europa, a member of the Foundation for Environmental Education) to recognize good sustainability practices in municipalities. In this way, ECO XXI intends to raise the importance of a set of aspects considered basic to the construction of local sustainable development, on the basis of two pillars: education in sustainability and environmental quality. The existence of this award is intended to foster pedagogical activities among municipalities, which are considered as privileged agents in the promotion of sustainable development (ABAE, 2007).

However, despite certain positive signals by the Portuguese local administration, little research work analyses the aggregated level of environmental integration in this sector, giving the overall extent to which a variety of environmental issues and practices have been adopted by these organizations.

Survey Questionnaire

The raw data on local government environmental management practices was obtained from a national questionnaire survey distributed among all Portuguese municipalities. This was the methodological approach used to identify the Portuguese profile on environmental integration at the local public administration level.

The questionnaire contains 44 questions, grouped into two main categories. The majority are closed questions. Table 2 presents a summary of the main issues addressed by the questions. The statistical population represents all the municipalities, that is, a total of 308. The questionnaire was developed and managed (design, administration and analysis) by the university research staff and was emailed in November 2007 to the 308 Portuguese municipalities (Table 3).

Altogether 95 municipalities returned usable responses to the questionnaires, which represents a response rate of about 31% (Table 3). This is a high level for this kind of method, as Garcia-Sanchez & Prado-Lorenzo (2008) report. According to them, a response rate of roughly 11% is slightly higher than usual for papers on municipalities in which the requested information can only be obtained through a tool such as a survey. However, any extrapolations of the current results to other cases should be undertaken with particular care.

Table 2. Summary of questions to establish the Portuguese local administration sector's environmental profile.

Category	Specific issue addressed
General characterization of the municipality	Geographic localization; population (number of inhabitants and population density); land area
Environmental practices in the municipality	Self-assessment of environmental performance; existence of coordinating structure for environmental matters; staff with environmental responsibilities and time allotted to these activities; training courses on environmental practices; EMS: current state of implementation, driving forces and scope; activities that cause negative impacts; environmental pressures related to the activities and their significance; environmental and/or sustainability information communicated through formal reports; use of environmental performance indicators; environmental auditing of municipality facilities; green purchasing; the ECOXXI award; LA21: characteristics of the implementation process.

Where there were important questions, in particular requesting additional explanations for the data, there were follow-up emails or telephone calls to respondents. Additionally, the missing cases (non-responses) were dealt with in accordance with the recommendations of Rea and Parker (1997), by means of

identification per response category and the estimation of adjusted frequencies. A pre-test to the questionnaire, with a set of selected individuals from the local authority and the academic sectors, was held in order to assess the overall quality of the draft questionnaire.

Table 3. Total number of Portuguese municipalities, municipalities surveyed, usable responses from municipalities and response rate.

Total no. of Portuguese municipalities – whole statistical population (no.)	Municipalities surveyed (no.)	Usable responses from municipalities (no.)	Response rate (%)
308	308	95	31

Descriptive statistics were used to analyse the results in the municipalities surveyed. Where appropriate, chi-square was used to test associations between frequency distributions in the groups of municipalities by size, in terms of the number of inhabitants and number of workers, and in the groups of municipalities by geographic location and the environmental management practice variables.

The Municipality Environmental Performance Evaluation Index (MEPE)

The raw data obtained in this survey is quite extensive and diverse. To convey the whole environmental performance picture to local policy decision-makers and the general public, an aggregation approach was adopted. On the basis of a selection of ten variables from the survey questionnaire (Table 4), taking into account the index proposed by Ramos and Melo (2006), we developed an index to evaluate the environmental performance of municipalities in a simplified and useful manner – the Municipality Environmental Performance Evaluation (MEPE) Index.

Table 4. Variables used to compute the MEPE index.

Description of variables
X ₁ – Existence of a coordinating structure for environmental matters;
X ₂ – Existence of a person in charge of the environmental management of municipality facilities;
X ₃ – Staff submitted to training courses on the environmental management of local government facilities;
X ₄ – Implementation of an EMS;
X ₅ – Environmental and/or sustainability information communicated through formal reports;
X ₆ – Use of environmental performance indicators to measure, communicate and report;
X ₇ – Environmental audit conducted in municipality facilities;
X ₈ – Use of environmental and/or sustainability criteria in local government public purchasing;
X ₉ – Application submitted to the ECOXXI award system;
X ₁₀ – Implementation of LA21 or another type of Local Sustainable Development Strategy.

After this selection, a normalization procedure was used to transform the original data of variables X into a single scale of continuous variation $[0, \dots, 1]$, which allowed the aggregation process. This scale varies between 0 (the worst environmental profile) and 1 (the best environmental profile).

The MEPE index was calculated using the following equation:

$$MEPE = \sum_{j=1}^m \frac{\left[\frac{1}{\sum w} \sum_{i=1}^n P_i w_i \right]_j}{m}$$

(Eq.1)

Where,

P_i = the value of the environmental practice variable i derived from the questionnaire, which is given a relative weight w

n = the total number of variables i ; $i = 1, \dots, 10$

m = the total number of municipalities j ; $j = 1, \dots, 95$

Though the MEPE index allows weighting, in this case study application it was computed with equal weights for each environmental practice. Five categories had been established to classify the environmental performance supplied by the index, on a scale of 0 to 1 (very poor: 0 – 0.20; poor: 0.21 – 0.40; medium: 0.41 – 0.60; good: 0.61 – 0.80; very good: 0.81 – 1.0). It should be stressed that the MEPE index was not designed to evaluate the individual performance of each municipality, i.e. this evaluation does not rank the respondent municipalities, and the analysis was conducted for the entire Portuguese local administration sector. The analyses for this

index took the geographic location and dimension of the municipalities into consideration, in terms of the number of inhabitants and workers.

To evaluate the potential differences between groups on the MEPE index, the non-parametric Kruskal-Wallis test (Gibbons, 1993), a one-way analysis of variance using ranks, was used. The test was applied to different types of groups, reflecting: (i) the geographical location by NUTS⁴⁵ II region: Alentejo, Algarve, Centre, Lisbon, North, Azores and Madeira; (ii) the number of inhabitants, considering an increment of 25000 individuals between consecutive classes (CL1=0-25000 individuals, CL2=25001-50000, ...); and (iii) the number of workers, considering an increment of 250 individuals between consecutive classes (CL1=0-250 individuals, CL2=251-500, ...).

Also, validation of the index was carried out by comparing the municipalities' self-assessment of their environmental performance, resulting from their answers to a particular question, and the evaluation of their environmental performance produced by the MEPE index. The of the five categories in the MEPE index are the same as those used in the question requesting self-assessment of environmental performance, where they have numerical values associated with the ordinal categories (1 to 5, very poor to very good). The comparison was based on the transformation of the metric values of the MEPE index into non-metric ordinal values for each class, which allowed the association with the same discrete data obtained in the related question.

Results and Discussion

Environmental Management Practices Surveyed in the Municipalities

The population of the respondent municipalities ranges from 2 688 to 307 444, thus revealing great variations in size. The average number of inhabitants for all the respondents was 34 320. The population density ranged from 3 710 inhabitants/km² to 4 inhabitants/km², with an average of 325. The majority of respondent municipalities (58%) have less than 250 employees, with the actual figures ranging from a minimum of 73 to a maximum of 1 973 workers. The average was 368.

The total physical area of each municipality also varies greatly, which means that these analyses focus on small, medium and large organizations, ranging from an area of 8 km² to 1 332 km², with an average value of 302 km². The geographic distribution of the respondent municipalities throughout the country shows a relatively representative participation of all NUTS II regions. All regions are represented, despite the fact that the majority of respondents are located in the Centre (30.5%) and North (30.5%) regions.

The majority of the municipalities (71%) have a coordinating structure for environmental matters, with the Department/Division being the most common administrative structure to manage this large and diverse domain. This result also shows a significant association between the size of the municipality (number of

¹European Union Nomenclature of Territorial Units for Statistics

inhabitants and workers) and the existence of this kind of administrative structure (confirmed by the chi-square test, $p < 0.01$).

About 68% of the local authorities surveyed state that they do not have any kind of employee training courses on environmental management practices in the organization. These results are consistent with the main figures identified by Martins *et al.* (2000) on green jobs and environmental training in Portugal, where municipalities are some of the organizations that most need environmental training, in particular for the personnel with lower-medium academic skills, who are responsible for many operational activities. Thus, the local authorities in Portugal primarily need environmental training, education and awareness-raising for their staff, specially those with more operational functions, since it is a fundamental step towards improving an organization's environmental performance. The association between the staff given training courses and the size of the municipality was significant for the variables workers (significant for $p < 0.01$) and inhabitants (significant for $p < 0.05$), which shows that the larger organizations are more aware of environmental training needs, though they also have better resources to provide that kind of training to their employees.

Only 12% of municipalities have implemented or are implementing an EMS. The majority state their intention to do so (64 %), which shows that EMS is apparently a widely known environmental management tool in the public organizations analysed. However, 4% of the respondents still do not know what an EMS is. The dependence/correlation between municipality size and EMS is confirmed (significant for $p < 0.01$). About half of the EMSs already implemented or now being implemented include the organization as a whole, while the remainder include only parts of the organization, e.g. a facility, department or operating sector. As stressed by Ito (2005) and Delmas and Toffel (2004), local governments play an important role in encouraging local companies to implement an EMS. For example they can facilitate adoption by reducing information and search costs linked to the adoption of the standard by providing technical assistance to potential adopters. Therefore, local authorities should demonstrate that they know this tool quite well and adopt it in their facilities so to be able to exert significant influence on the local society and economy.

In all, four of the respondent municipalities that have implemented an EMS are certified by ISO 14001 and one municipality is certified by EMAS. The main motivation identified by the municipalities surveyed for implementing an EMS was: to improve the overall environmental performance of the organization; to demonstrate local authority commitment to the environment; and to pass on the best possible image and reputation of the municipality to local communities and all interested parties.

Only 13% of the municipalities surveyed stated that they produce environmental/sustainability reports that are mainly published annually. The association between reporting and municipality size is confirmed (significant for $p < 0.05$). However, after an analysis of the names of these reports, it was easily concluded that they are mainly annual activities reports, with thematic sections on environment-related issues, instead of stand-alone environmental/sustainability reports. They are essentially communicated to the local community, the local administration and private and public organizations. Municipalities publish their

reports on paper and in electronic format so that they are available over the intranet and internet. Major private organizations are increasingly reporting their environmental and social performance, just as they do their operational performance. However, in public sector organizations this development is slower, despite some recent initiatives like the Global Reporting Initiative guidelines (GRI, 2004) for public agencies. According to this publication, a number of local governments in countries such as Italy have started to examine sustainability reporting as an outgrowth of their LA21. The local authorities have a number of other tools that are being developed to assist public agencies in sustainability planning and goal setting (e.g. EMSs, environmental audits, sustainability indicators). Therefore, public organizations often draw on those sustainability tools (e.g. LA21, EMSs) to identify and collect data/information for reporting. The current state of reporting in the public sector is a complex mixture of disclosures and reporting on operations, policies, strategies and the actual economic, environmental and social conditions in an area.

The majority of municipalities (67%) do not use environmental performance indicators, which shows that the implementation of indicator systems is generally poor. This management tool is mainly used by the larger municipalities, which is confirmed by the significant results for workers ($p < 0.05$) and inhabitants ($p < 0.01$). The respondents that use indicators identify the main aspects covered by them: training courses on environmental education and awareness, waste management, and energy consumption. Overall, indicators are related to goals and targets defined in the local strategic instruments. At local level, there are numerous initiatives on sustainability indicators (e.g. Valentin and Spangenberg, 2000; McMahon, 2002; Ambiente Italia Research Institute, 2003; Scipioni *et al.*, 2008) and most of them are related to monitoring the reporting of LA21, as ICLEI (2002) stressed. The Portuguese experience also shows that sustainability indicators are related to LA21, as stressed by Mascarenhas *et al.* (2009).

In the great majority of municipalities (63%), an environmental audit of their installations has never been conducted. The municipalities that already have applied this practice generally use external consultants for that kind of work and in many cases use mixed teams that include internal staff and private consultants or researchers from universities. The association between municipality size and environmental audits is confirmed by the chi-square test ($p < 0.01$). Financial audits are much more common and better known in local government than environmental audits. When an EMS or LA21 is in place, environmental audits are more likely to have used this kind of performance evaluation practice.

Overall, 36% of respondent municipalities adopt environmental/sustainability criteria in public purchasing. The larger municipalities (inhabitants and workers) are the ones that implement this practice most (significant for $p < 0.05$). The public services that have implemented these procedures generally state that for purchasing certain goods they require suppliers to present environmental certification labels, explaining this in the contracts. There is growing international interest in green purchasing in local government. However, as shown by the results obtained, Portuguese municipalities are just starting to be aware of this practice, despite some positive signals (e.g. one of the respondent municipalities is a key partner in an international project that is developing guidelines for environmentally-friendly public purchases in local government). Nevertheless, as stressed by Jackson and Thomson (2007), each local authority has a different set of circumstances and priorities. When deciding on a

particular purchase, the incentives for practising green procurement are often limited. They find it is generally easier to justify a decision on the basis of price than wider benefits such as a long-term economic benefit, environmental or social benefits, or benefits for someone else, particularly when the advice is unclear.

Only 21% of the municipalities had participated in the ECOXXI award. Once again, the larger municipalities are the ones mainly responsible for the positive results in the adoption of this practice. These results are reflected in the significant association between participation in the ECOXXI award and the different sizes of the municipalities (workers, $p < 0.05$; inhabitants, $p < 0.01$). With the implementation of the ECOXXI award, the NGO responsible for this initiative intends to identify and report the sustainability measures and practices carried out by the municipalities and demonstrate the good example to other public services and the entire society.

Only 3% of the respondents confirm that have implemented an LA21. About 38% state that they are in the course of implementing this sustainability tool and 39% report their intention to do so. Those that had implemented an LA 21 or are implementing it generally use mixed teams, including internal staff and private consultants or researchers from universities. About 44% of the LA21s that are in place are in the phase of developing the Action Plan, which will enable practical implementation on the ground. The great majority of respondents (98%) involved in LA21s report that public participation has been part of the process. It was carried out mainly through collaborative workshops initiated in the early phases of the process. Despite the growing interest in LA21s for almost the whole country, many of these strategic processes are in their early stages and few fulfil all the parameters required, as is observed by Schmidt et al. (2006).

In the international context, LA21 implementation is diverse as there are many factors that influence their development. Other countries present quite different performances. For example, by the year 2000, 93% of UK local authorities had LA21 policies that outlined their broad positions on sustainable development and explored methods for consultation and co-operation across local government and the community (Hansard, 2002).

The MEPE Index

The MEPE index results for the Portuguese municipalities demonstrate that the environmental performance of Portuguese municipalities is poor (0.33) (Figure 1). This classification confirms the results obtained in the previous chapter for each individual environmental management practice adopted by the municipalities, where it was shown that the overall performance, for the majority of them, is poor.

The MEPE index by geographic location (NUTS II) shows that there are no major differences among them. The relative consistency among regions is confirmed by the non-significant Kruskal-Wallis test results. The Lisbon region has the highest MEPE value (0.49), registering a small difference compared with the other regions (Figure

1), though it is enough to reflect a medium level of performance, against the poor level obtained by all the remaining regions.

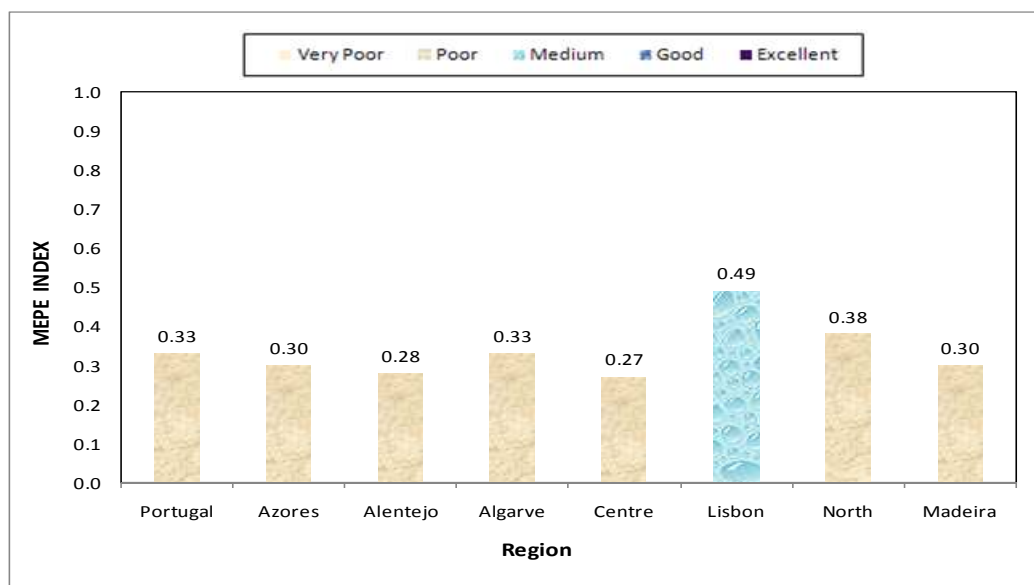


Figure 1. MEPE Index by geographic location – NUTS II regions.

Environmental performance is higher in large municipalities (Figures 2 and 3). In municipalities with more than 75000 inhabitants and 1000 workers the environmental performance is good (0.66 and 0.69, respectively). The differences among municipality-size classes (inhabitants and workers) are confirmed by the Kruskal-Wallis test (significant for $p < 0.01$).

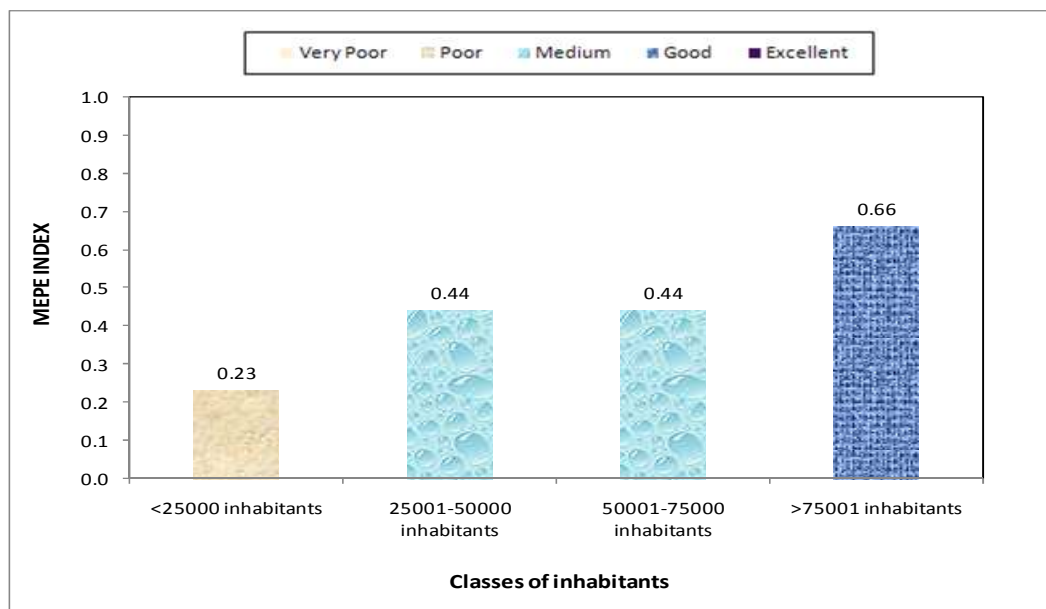


Figure 2. MEPE Index by municipality size: inhabitants.

On account of severe environmental problems and/or intense community pressure, large municipalities tend to lead in implementing environmental practices. Generally small-sized public organisations tend to have few financial and human resources,

which limits the adoption of better environmental practices. In addition, these results could be also explained by the fact that some of the larger municipalities are adopting EMSs and have more staff trained in environmental issues, among other practices that occur more in large municipalities. This pattern could explain the apparently better environmental performance of the large-sized local authorities surveyed.

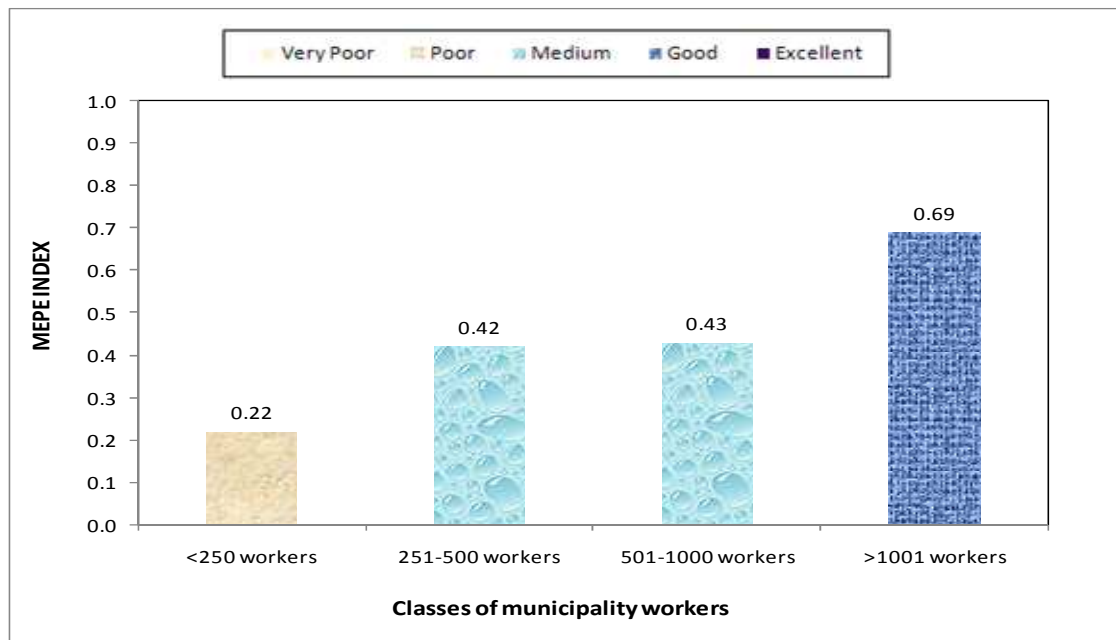


Figure 3. MEPE Index by municipality size: workers.

Municipality Self-Assessment versus the MEPE Index

Comparison between the MEPE index and the municipalities' self-assessment shows contradictory results (Figure 4). The results produced by the index shows that the municipalities' environmental performance is very poor (51%) and poor (21%). However, the self-assessment carried out by the municipalities reveals that they consider themselves as having a good (47%) or medium (42%) environmental performance.

These results may be explained by various factors, in particular the fact that many of the environmental management practices considered for this evaluation are voluntary and local government decision-makers will give priority to mandatory practices. On the other hand, the optimistic self-assessment results could be also explained by the need to report a very good performance, to protect the authorities' image. Additionally, as stressed by Ramos and Melo (2006) with reference to other public sector organizations, it may also be explained by their poor knowledge of their actual environmental and sustainability performance.

The MEPE index results probably reflect a more robust performance profile, compared with an overoptimistic view projected in the municipalities' self-assessment.

It should be also stressed that integrated environmental and sustainability performance assessment in public services is a relatively under-explored and complex domain, as shown by Ramos et al. (2007b) and Lundberg et al. (2009). GRI (2004) states that there is currently no consensus on the measurements that need to be incorporated into accounting for sustainability performance or on how to do so. For the public sector, the term "performance" is difficult to define, especially because the agencies do not have total control of all the aspects that surround them.

No similar work is available for other countries, i.e. research work that evaluates the environmental profile of municipalities through the integrated analysis of the different environmental management practices implemented by their services. Therefore, any attempts to make comparisons with other results are quite difficult. Assessment on the basis of the MEPE index seeks to help local decision-makers and key-stakeholders to understand the municipalities' environmental performance profile regarding these practices. The aggregation approach adopted with the use of an index can be particularly useful in conveying the information in an easier and more comprehensible way.

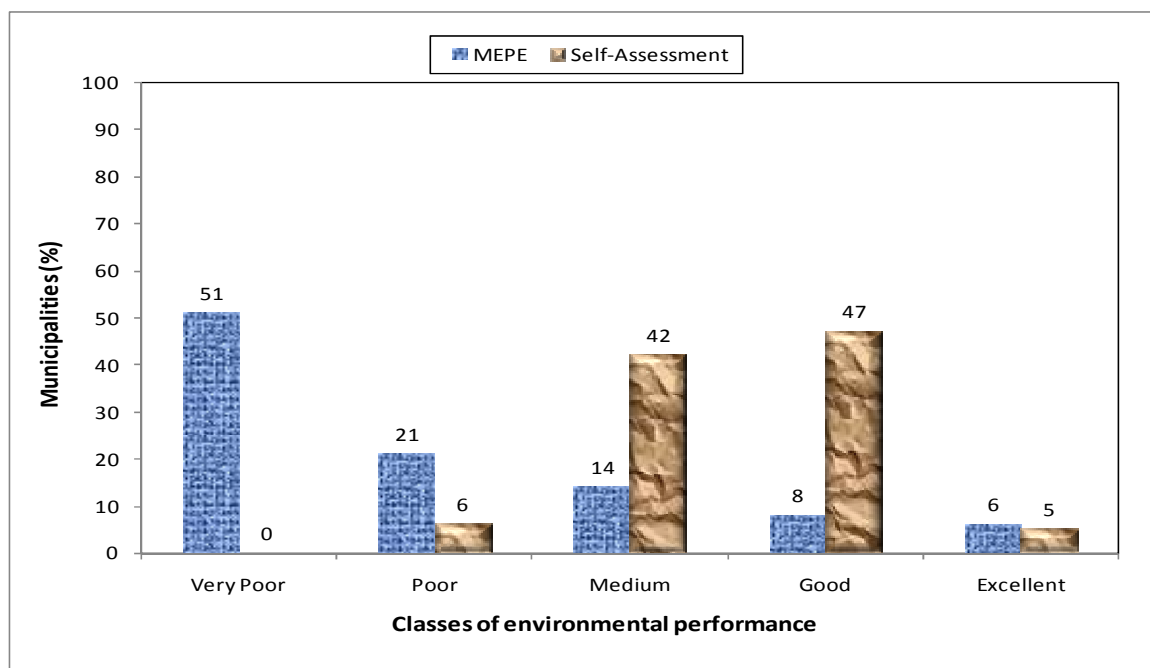


Figure 4. Municipality self-assessment versus the MEPE Index.

Conclusions

The overall profile of environmental management implementation in Portuguese municipalities shows a poor level of adoption of environmental management practices. These public services should adopt new measures and public policies if they want to change the current poor figures on the practices implemented.

There is a lack of theoretical and practical knowledge about environmental and sustainability issues in many municipalities. To attain a higher level of adoption of environmental management practices, Portuguese municipalities need environmental training, education and awareness-raising campaigns among their staff, including the top decision-makers. Various municipalities have no coordinating structure for environmental matters and this area is frequently handled by other local sectoral departments or services that do not have the necessary expertise, sensitivity or resources to deal with environmental and sustainability related issues.

The MEPE index evaluates the extent to which a variety of environmental practices have been adopted in the local authorities surveyed. This approach tries to help the local decision-makers understand the local public services' environmental profile. The MEPE index shows that environmental performance is higher in the larger municipalities, despite the generally poor profile of the Portuguese municipalities surveyed.

The comparison between the MEPE index and the municipalities' self-assessment of environmental performance showed contradictory results, with consistently overoptimistic self-assessment. The self-assessment carried out by the municipalities reveals that they consider their environmental performance as good or medium, in contrast to the very poor and poor classifications obtained with the index. Their poor knowledge of their actual environmental and sustainability performance and the fact that this evaluation is mainly supported by non-mandatory practices could explain, in part, this optimistic self-view on the part of the municipalities.

Top decision and policy makers in local government must be publicly committed to ensuring the success of environmental and sustainability initiatives. Without this first step, it will be particularly hard to achieve better results for organizational performance, and all the efforts by the technical staff risk being unproductive. A significant change in local institutional behaviour and policy practices is needed, with an improvement in the processes of governance, communication and stakeholder engagement.

National governments should encourage the adoption of voluntary environmental and sustainability management practices by the local authorities. National and regional authorities should provide adequate guidance to help municipalities to adopt these practices – it is worth noting that there is no national guidance on the implementation and maintenance of LA21, as a key instrument for sustainable polices at local level. The lack of financial and human resources and the lack of mandatory regulations on the adoption/maintenance of these environmental measures should not be a major limitation. Many of these initiatives could easily be adopted, since they need relatively few resources.

References

- Aall, C. (1995). Municipal Eco-Auditing in Norway. *Eco-Management and Auditing*, Vol. 2: 32-35.
- ABAE (2007). Web page of *Associação Bandeira Azul da Europa*. [Referred to 15.12.2007] Available: <http://www.abae.pt>.
- Abubakar, I., Alshuwaikhat, H. (2007). Towards a Sustainable Urban Environmental Management Approach (SUEMA): Incorporating Environmental Management with Strategic Environmental Assessment (SEA). *Journal of Environmental Planning and Management*, 50:2, 257-270.
- Agenda21Local (2007). Web page of *Agenda 21 Local em Portugal*. Escola Superior de Biotecnologia da Universidade Católica do Porto. [Referred to 15.12.2007] Available: www.agenda21local.info.
- Aguado, I., Barrutia, J.M., Echebarria, C. (2007). Networking for Local Agenda 21 implementation: Learning from experiences with Udaltalde and Udalsarea in the Basque autonomous community. *Geoforum* 38: 33-48.
- Ambiente Italia Research Institute (2003). *European Common Indicators – Towards a local sustainability profile*. Final project report. Milano.
- Becchi, M., Bodini, A., Ferrarini, A. (2001). Environmental quality and sustainability in the province of Reggio Emilia (Italy): using multi-criteria analysis to assess and compare municipal performance. *Journal of Environmental Management*, 63, 117–31.
- Blake, J., Davies, A., Smith, J. (2000). Putting Sustainability in Place: Sustainable Communities Projects in Huntingdonshire. *Journal of Environmental Policy & Planning*, 2: 211–223.
- Braun, R. (2007). Sustainability at the local level: Management tools and municipal tax incentive model. *Environment, Development and Sustainability*, 9: 387–411.
- Braun, R. (2008). Regional environmental assessment (REA) and local Agenda 21 implementation. *Environment, Development and Sustainability*, 10: 19–39.
- Brugman, J. (1996). Planning for sustainability at the local government level. *Environ Impact Assess Rev* 16:363-379.
- Burström, F., Korhonen, J. (2001). Municipalities and industrial ecology: reconsidering municipal environmental management. *Sustainable Development*, 9, 36–46.
- Butelli, P., Canziani, R., Marchesi, R., Perotto, E. (2008). Environmental performance, indicators and measurement uncertainty in EMS context: a case study. *Journal of Cleaner Production*, 16 (2008) 517-530.
- Crilly, M., Mannis, A. and Morrow, K. (1999). Indicators for change: Taking a lead. *Local Environment*. 4, 2, 151-168.

Cuthill, M. (2002). Exploratory research: Citizen participation, local government and sustainable development in Australia. *Sustainable Development*, 10, 79–89

Delmas, M., Toffel, M.W. (2004). Stakeholders and Environmental Management Practices: An Institutional Framework. *Business, Strategy and the Environment*, 13: 209-222.

Devuyst, D., Hens, L. (2000). Introducing and measuring sustainable development initiatives by local authorities in Canada and Flanders (Belgium) – A comparative study. *Environment, Development and Sustainability*, 2, 81-105.

Diamantis, D. (1999). The importance of environmental auditing and environmental indicators in Islands. *Eco-Management and Auditing*, 6: 18–25.

Eckerberg, K., Mineur, E. (2003). The use of local sustainability indicators: case studies in two Swedish municipalities. *Local Environment*, 6, 8, 591-614.

Emilsson, S., Hjelm, O. (2002). Mapping environmental management system initiatives in Swedish local authorities – A national survey. *Corporate Social Responsibility and Environmental Management*, 9, 107–115.

Emilsson, S., Hjelm, O. (2004). Different Approaches to Standardized Environmental Management Systems in Local Authorities – Two case studies in Gothenburg and Newcastle. *Corporate Social Responsibility and Environmental Management*, 11: 48-60.

Enticott, G., Walker, R.M. (2005). Sustainability, Performance and Organizational Strategy: an Empirical Analysis of Public Organizations. *Business, Strategy and the Environment*, 17:2, 79 – 92.

European Commission (2007). *Integrated Environmental Management – Guidance in relation to the Thematic Strategy on the Urban Environment*. Technical Report 2007-013. 2007.

Evans, B., Joas, M., Sundback, S., Theobald, K. (2006). Governing Local Sustainability. *Journal of Environmental Planning and Management*, 49:6, 849-867.

Feichtinger, J., Pregernig, M. (2005). Participation And/Or/Versus Sustainability? Tensions Between Procedural and Substantive Goals in Two Local Agenda 21 Processes in Sweden and Austria. *European Environment*, 15, 212–227.

Garcia-Sanchez, I.M. and Prado-Lorenzo, J.M. (2008). Determinant factors in the degree of implementation of Local Agenda 21 in the European Union. *Sustainable Development*, 16, 17-34.

Gibbons J.D. (1993). *Nonparametric Statistics - An Introduction*. University Paper Series on Quantitative Applications in the Social Sciences, series no. 07-090. Newbury Park, CA: Sage.

Global Reporting Initiative (GRI). (2004). *Public Agency Sustainability Reporting*. Boston: USA, Global Reporting Initiative.

Grochowalska, J. (1998). *The implementation of Agenda 21 in Poland*. *European Environment*, 8, 79–85.

Günther, L., Scheibe, L. (2006). *The Hurdle Analysis. A Self-evaluation Tool for Municipalities to Identify, Analyse and Overcome Hurdles to Green Procurement*. *Corporate Social Responsibility and Environmental Management*, 13: 61–77

ICLEI – International Council for Local Environmental Initiatives (2002). *Second Local Agenda 21 Survey* (conducted with support from UN Secretariat for WSSD, and in collaboration with UN Development Programme Capacity 21) (Freiburg, ICLEI European Secretariat).

Hansard (2002) House of Commons: Hansard Written Answers for 22nd April 2002 (London: The Stationery Office).

Holden, M. (2006). Revisiting the Local Impact of Community Indicators Projects: Sustainable Seattle as Prophet in Its Own Land. *Applied Research in Quality of Life*, 1, 253-277.

Holland, L. (1997). The role of expert working parties in the successful design and implementation of sustainability indicators. *European Environment*, Vol. 7, 39–45.

Hopwood, B., Mellor, M., O'Brien, G. (2005). Sustainable Development: Mapping Different Approaches. *Sustainable Development*, 13, 38–52.

Ito, K. (2005). *Environmental Management Systems for Public Sector*. Chiba University, Japão.

Jackson, T., Thomson, J. (2007). Sustainable procurement in practice: Lessons from Local Government. *Journal of Environmental Planning and Management*, 50:3, 421-444.

Karam, N., Nader, M.R., Salloum, B.A. (2008). Environment and sustainable development indicators in Lebanon: A practical municipal level approach, *Ecological Indicators*, 8:5, 771-777.

Keating, M. (2001). *Review and Analysis of Best Practices in Public Reporting on Environmental Performance*. Research paper #9. A report to Executive Resource Group, Birmingham.

Li, Y., Ma, F.M.F., Seabrooke, W., Yeung, S.C.W. (2004). Implementing sustainable urban development at the operational level (with special reference to Hong Kong and Guangzhou). *Habitat International*, 28: 443–466.

Lorenzo, J.M.P., Sanchez, I.M.G. (2008). Determinant Factors in the Degree of Implementation of Local Agenda 21 in the European Union. *Sustainable Development*. 16, 17–34.

Lozano, M., Vallés, J. (2007). An analysis of the implementation of an environmental management system in a local public administration. *Journal of Environmental Management* 82: 495–511.

- Lundberg, K., Balforsa, B. and Folkesona., L. (2009). Framework for environmental performance measurement in a Swedish public sector organization. *Journal of Cleaner Production*, 17, 11, 1017-1024.
- Malmborg, F., Norén, H. (2004). Are standardized EMSs useful in local authorities? A study of how a tool from the private sector is used in the public sector. *Business Strategy and the Environment*, 13: 187–197.
- Martins, A., Rodrigues, V., Ramos, T.B, Direitinho, F. (2000). *Guia para a Criação de “Empregos Verdes” a Nível Local*. Editado pela Direcção Geral do Emprego e Formação Profissional. ISBN – 972-8312-28-8. Lisboa.
- Mason, M., Mazzi, A., Scipioni, A., Zuliani, F. (2008). The ISO 14031 standard to guide the urban sustainability measurement process: an Italian experience. *Journal of Cleaner Production*, 16:12, 1247-1257.
- Mascarenhas, A., Coelho, P., Subtil, E., Ramos, T.B. (2009). The Role of Common Local Indicators in Regional Sustainability Assessment. *Ecological Indicators* (under review).
- McMahon, S.K. (2002). The development of quality of life indicators – a case study from the City of Bristol, UK. *Ecological Indicators*, 2, 177-185.
- Miranda, L., Steinberg, F. (2005). Local Agenda 21, capacity building and the cities of Peru. *Habitat International*, 29:163–182.
- O’Riordan, T. (1998). Civic Science and Sustainability. In: D. Warburton (ed). *Community and Sustainable Development*. Earthscan, London.
- Patton, D., Worthington, I. (1996), Developing Local Agenda 21: A case study of five local authorities in the UK. *Sustainable Development*, Vol. 4, 36-41.
- Price, T., Probert, D. (1997). Integrated Approach for the Achievement of Environmental Sustainability. *Applied Energy*, Vol. 58, No. 2-3, pp. 73-129.
- Ramos, T.B., Melo, J.J (2006). Developing and Implementing an Environmental Performance Index for the Portuguese Military. *Business Strategy and the Environment*, 15: 71-86.
- Ramos, T.B., Alves, I., Subtil, R., Melo, J.J. (2007a). Environmental Pressures and Impacts of Public Sector Organisations: the case of the Portuguese military. *Progress in Industrial Ecology – An International Journal*, Vol. 4, No. 5: 363-381.
- Ramos, T.B., Alves, I., Subtil, R. and Melo, J.J. (2007b). Environmental Performance Policy Indicators for the Public Sector: The case of the defence sector. *Journal of Environmental Management*, 82, 410-432.
- Rea L.M., Parker R.A. (1997) *Designing and Conducting Survey Research*. California: Jossey-Bass Inc.
- Ryall, C., Warner, K.E. (2001). *Greener purchasing activities within UK local authorities*. *Eco-Management and Auditing*, 8, 36–45.

Scipioni, A., Mazzi, A., Zuliani, F. and Mason, M. (2008). The ISO 14031 standard to guide the urban sustainability measurement process: an Italian experience. *Journal of Cleaner Production*, 16, 1247-1257.

Schmidt, L., Nave, J. and Guerra, J. (2006). Who's afraid of Local Agenda 21? Top-down and bottom-up perspectives on local sustainability. *International Journal Environment and Sustainable Development*. 5, 2, 181-198.

Selman, P. (2000). A Sideways Look at Local Agenda 21. *Journal of Environmental Policy & Planning*, 2: 39–53.

Spangenberg, J.H., Valentin, A. (2000). A guide to community sustainability indicators. *Environmental Impact Assessment Review*, 20: 381–392.

USEPA (1999). Profile of Local Government Operations. U.S. Environmental Protection Agency, Office of Enforcement & Compliance Assurance, EPA 310-R-99-001, Washington, D.C.

Valentin, A., Spangenberg, J.H. (2000). A guide to community sustainability indicators. *Environmental Impact Assessment Review*, 20, 381-392.

RELATIONAL GOVERNANCE AND THE DEVELOPMENT OF CSR IN RUSSIA: WHAT ROLE FOR GOVERNMENT AND CIVIL SOCIETY AS DRIVERS OF POLICY AND PRACTICE?

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Abstract

Part of the current research in Corporate Social Responsibility (CSR) is concerned with the impact of the stakeholders on the CSR policies and practices of the firms. Some recently published work has focused particularly on the significance of the government and civil society. This paper contributes to this debate by exploring the role of government and civil society as drivers for CSR in the Russian Federation via two case studies: the development of a new oil field and plans to construct a hydro-electric dam in Siberia. We find that rather than Russian government and civil society acting as the critical drivers, it is the pressure of meeting international standards and codes on CSR and the desire to secure a position in international markets that provides compelling reasons for the adopting of Russian CSR public policy and private practice.

Key Words: CSR, relational governance, Russia, civil society, government

Introduction

Practitioner interest in the role of business in society and its relationship with stakeholders dates back several decades. Recently, this debate about corporate social responsibility (CSR) has been reinvigorated, reflecting the growing public disquiet and media attention aroused by so-called 'scandals' concerning large business organisations such as Enron and Parmalat in Europe and the USA during the past decade. Concern is also manifest in the public policy discourse of governments across all levels of governance (see for example, the UN Global Compact 2004 and the European Union's (EU's) 2001, 2002 and 2006 policy papers).

Equally importantly, local, national and international civil society organisations have been provoked into articulating policy positions on CSR. See for example, the contributions of civil society organizations to the EU's 2001 CSR Green Paper consultation (Directorate General (DG) Employment & Social Affairs 2001). Significantly, individual businesses and their collective associations too have become

alert to the strategic importance of CSR, seeing it as critical to their public image and part of their efforts to achieve competitive advantage (see for example, WBCSD 2002).

Academic interest in CSR and the role of stakeholders is equally long-standing (see for example, Carroll 1979 and 1999; Freeman 1984; Evan & Freeman 1993; Clarkson 1995; Donaldson and Preston 1995; Mitchell et al. 1997) and has also undergone a similar rejuvenation. Recently published research by scholars located in the fields of management studies and business ethics encompasses both empirical studies and concept formulation. Notable are those surveys which have focused on the relationship between business, government and civil society in formulating CSR policy and practice and which have highlighted the role of government as a driver for CSR (Lozano et al. 2008; Albareda et al. 2008). This international comparative work is impressively wide ranging in terms of its geographical scope, covering fifteen EU member states. Using their extensive database the authors have constructed a useful analytical framework, labelled the 'relational model' that identifies four 'types' of CSR public policy model. This paper builds on this work, adopting the relational model as one of its underpinning structures.

However, the relational model, as developed in the research above does exhibit a number of limitations. For example, despite highlighting civil society as one of the three key elements of the relational model, the published work neglects this dimension. We contend that it is important to assess the role played by *both* the government *and* civil society as crucial stakeholders and, therefore, we also draw on the work that has explored the part played by civil society and non-governmental actors (Doh & Guay 2004 and 2006; Doh & Teegan 2002).

Furthermore, given that most research on CSR has focused on western industrialised countries in Europe (i.e. Western Europe) and the Americas (i.e. the USA and Canada), we contend that there is a gap in the empirical research. One geographical region that has received much less scrutiny is Eastern Europe. From within that region we have chosen to focus on Russia. Russia provides an interesting test case for the development of CSR public policy and private practice, given the country's strikingly distinctive economic and political history (Brown 2001; Remington 2004; White et al. 2001; Waller 2005).

Building on the streams of literature noted above, we have structured our research around the following questions:

- What is the content of Russian public CSR policy?
- To what extent and how has the Russian government driven CSR business practice in Russia?
- What role has Russian civil society played in promoting and shaping CSR public policy and business practice in Russia?

Given the Soviet legacy, we anticipate strong government direction and limited civil society influence. These propositions are examined via two case studies, both situated in a remote part of northern Siberia. The first case study concerns the behaviour of Vankorneft (a subsidiary of Rosneft, a partially government-controlled oil conglomerate) that has recently developed a new oil field. The second centres on

national-level plans to construct a hydro-electric dam, Evenkijskaya Hydro-Electric Station (EHES) on the Lower Tunguska river. Primary data derived from a variety of sources allow us to assess the impact of the two sets of stakeholders.

Accordingly, the remainder of the paper unfolds as follows. Section 1 provides a brief overview of the development of economic and political institutions in the Russian Federation, as the context for public CSR policy and private practice. Section 2 offers a conceptual framework for the paper. Section 3 presents findings concerning the two case studies. In section 4, we return to our underpinning research questions and draw some conclusions.

The Russian Federation

The Soviet State

Russia has existed as a state for more than one thousand years, having been the largest of the fifteen republics, in terms of geographical scale and population, which formerly comprised the Union of Soviet Socialist Republics (USSR). For most of the past century, Russia has been at the centre of this economic and political union, which has exhibited a distinctive trajectory. It is a history (during the 20th century) marked by revolutions, civil war, and the introduction of far reaching state control of the economy leading to collectivisation and nationalisation (Brown 2001; Remington 2004; White et al. 2001). This is a history in which the state has dominated public and private life and in which civil society has been largely impotent or merely an extension of the state (Evans 2005).

Post-communism developments: Gorbachev, Yeltsin and Putin

By the 1980s, it had become apparent that the USSR's economy was lagging behind the growth rates of western Europe, having been founded on defence and heavy industries at the cost of consumer goods and services (Waller 2005: 8). At the same time, questions also began to surface about the political structures and processes in place. During the 1980s⁴⁶ and 1990s, the then Russian leader, Gorbachev, who had recognised the importance of the exogenous and endogenous economic and political forces began to initiate reforms known as *glasnost* (openness) and *perestroika* (restructuring) culminating in the creation of the Russian Federation in 1991.

The processes unleashed by Gorbachev can be seen as the antecedents for the processes of 'democratization', 'marketization' and 'international integration' subsequently pursued by Yeltsin and Putin. Marketization, the process of restructuring of economic interests, called for a transition from the state-owned centrally-planned economics of the Soviet system to a market economy (the declared final objective of marketization). However, the results to date could be said to more closely resemble an 'administered economy' or 'quasi-market system' (Brown 2001;

⁴⁶ For example, this led to regulatory changes such as the 1986 law (that made privately remunerated work legal) and the Law on Co-operation (that permitted the establishment of cooperative enterprises independent of the state) and the 1988 Law on State Enterprise that freed enterprises from the ministries that had previously controlled them allowing them to become quasi-government corporations and some degree of independence.

Remington 2004; White et al. 2001). The transition was attempted via price liberalization, the privatisation of state enterprises and a growth in the number of independent businesses, cuts in public spending, and the creation of institutions of market system such as banks, a stock exchange, and private property rights.

In parallel to the process of marketization, the process of democratization was also attempted. Crucially, the 1993 constitutional reform introduced several important changes (Brown 2001; Remington 2004; White et al. 2001). These included the introduction of individual rights and associative freedom. It also re-affirmed the right to freely contested elections⁴⁷ and a multi-party system. It established a dual system (with the separation of power between an executive and a legislature⁴⁸) and created a federal system comprising the Federal, regional and district levels of governance. The reforms led to a more open, freer, and contested system than before (Brown 2001; Remington 2004; White et al. 2001).

Crucially, in Russia, the lack of a vibrant civil society can be seen as one of the obstacles to creating a fully democratic system (Remington 2004: 6). Previously under Soviet system there had been 'state-sponsored civil society' (referred to by some as GONGOs: government organized non-governmental organizations) where the organisations had been monitored or directly controlled by the state. In post-communist Russia, civil society organisations temporarily flourished. However, more recently, under both Yeltsin and Putin, civil society has suffered some setbacks. One scholar describes civil society in the reformed Russian Federation as an 'adjunct to the monocentric state' established by Putin (Evans 2005). Civil society organisations in the new Russian Federation are generally thought to be 'weak' or 'institutionalised', depending as they do for their survival on international aid or the patronage of the President (Evans 2005).

In addition, from the point of view of exploring public CSR policy and private practice, the process of international integration potentially could also be a major factor. Recall that during the post world-war two period, the USSR was largely separated or isolated from rest of world. More recently, under Putin there has been a re-emergence of the Russian state built on revenues from vast natural resources such as gas and oil extraction, forestry, metals, chemicals, weapons and military equipment and some re-engagement with the world beyond Russian boundaries. The result is that in the twenty-first century, the Russian Federation presents a picture of renewed confidence, national pride, a booming economy, and an assertive foreign policy (Brown 2001; Remington 2004; White et al. 2001).

⁴⁷ Freely contested elections had been made possible in 1989.

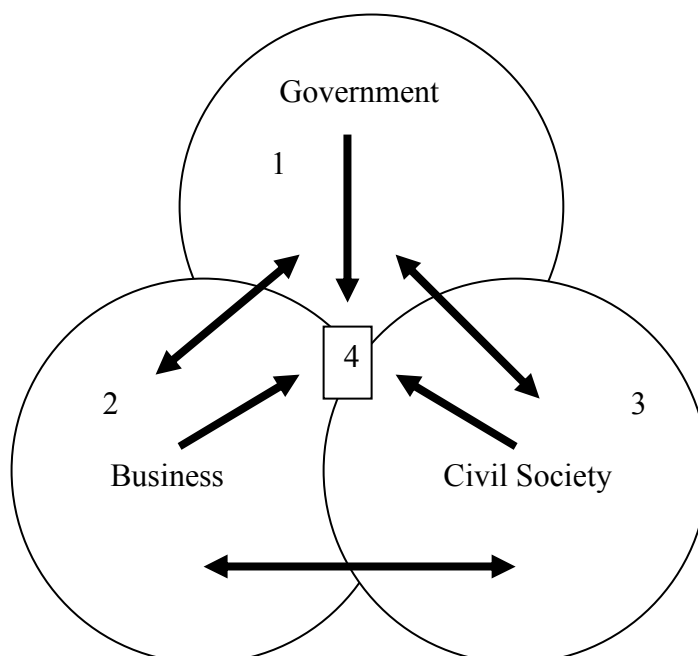
⁴⁸ Critically, the new structure bears the hallmarks of its Soviet heritage. Parliament has weak or limited powers to check and balance the very powerful President (Waller 2005: 17). The Presidency under Yeltsin and Putin displays much continuity with past in terms of form and function. It closely resembles the General Secretary of the CPSU.

Relational Governance

One of the main catalysts for this paper is the recently published research and concept development of a number of scholars positioned in the management studies and business ethics domain who have been undertaking major research projects into CSR across the Europe. Among the recent studies that are especially noteworthy are those that attempt either EU-wide (Habisch et al. 2005; Lozano et al. 2008; Albareda et al., 2008) or single country assessments (see for example, Moon 2004 and 2005; Antal & Sobczak 2007). Several of these studies have been useful in advancing the academic debate about CSR public policy and private practice. In particular, the relational model (Lozano et al. 2008, Albareda et al. 2008) could be considered to be one of the most significant developments.

The relational model of CSR has been described by its own authors as an interdisciplinary analytical framework that is underpinned by political science, public administration and CSR (Lozano et al. 2008; Albareda et al. 2008) that builds on the earlier work of others and their own previous research and publications. The model as outlined by Albareda et al. (2008) and Lozano et al. (2008) identifies four key relationships: CSR in public administration; CSR in administration-business sector relationships; CSR in administration-society relations; and finally what they label relational CSR (see Figure 1).

Figure 1: The relational model for analysis of public policies on CSR



Key:

1. CSR in public administration
2. CSR in administration-business sector relationships

3. CSR in administration-society relationships
4. Relational governance

Source: Albareda et al. 2008, page 352

The authors contend that the model can be used to better understand the role of government in public CSR policy as it demands an analysis of the overarching CSR policy framework and its implementation in terms of specific policies and programmes (Albareda et al. 2008: 351). This in turn requires a detailed analysis of government CSR policy (in terms of the government's vision, objectives, strategies and priorities), the internal government CSR structure (e.g. organisational structures), CSR responsibilities of different levels of government (e.g. the role of regional and local government), the scope of the CSR policy (i.e. whether domestic or international), and lastly the CSR role of other organisations (e.g. government agencies).

The model has a number of important strengths. First, it can be used in a systematic way to compare and contrast the public CSR policy of a range of countries. Indeed, the authors have employed the model in an effective manner to compare (Lozano et al. 2008) the national CSR public policy of fifteen member states of the EU. From that research the authors have been able to develop a four-way typology that categorises countries as either conforming to the 'partnership', the 'business-in-the-community', the 'sustainability and citizenship' or the 'agora' variety of the relational model. Second, the approach is to be applauded for its attention to detail. The analysis of the overarching policy framework and the detail of policy implementation are both very welcome. Finally, the model also has merits because of its focus on the relationship between the public, private and voluntary spheres of governance. However, despite highlighting civil society as one of the key elements of the relational model, Albareda et al. (2008) and Lozano et al. (2008) do not develop these ideas further in their own reported research. However, other authors located in the business ethics field and management studies have focused on civil society (Doh & Guay 2004 and 2006; Doh & Teegan 2002). This work provides a useful supplement to the relational model.

The combined literature above provides direction for the empirical research undertaken and reported in this paper. Accordingly, the research questions posed and addressed by this paper are as follows:

- What is the content of Russian public CSR policy?
- To what extent and how has the Russian government driven CSR business practice in Russia?
- What role has Russian civil society played in promoting and shaping CSR public policy and business practice in Russia?
-

In the next section of the paper, we explore the development of CSR public policy in Russia.

Case Studies: Vankorneft and the Evenkijskaya Hydro- Electric Station

In this section we respond to the research questions identified above. We explore the role of the Russian Federation's government and civil society in the development of CSR in relation to two selected case studies.

Our primary data derives from six unstructured interviews conducted in August of 2008 in the village of Turukhansk - the administrative capital of the Turukhansk district, Krasnoyarsk Province, in north-eastern Siberia - and in Krasnoyarsk, the capital of the Krasnoyarsk province. Turukhansk district is a very sparsely populated area, with very harsh climactic conditions. Due to a lack of industry, human presence in the district is heavily supported through the federal and provincial government budget. Local people also supplement subsistence by hunting, fishing, deer herding and gathering. The district has a significant presence of indigenous groups such as Selkups, Keto and Evenks. A variety of extractive companies, mostly oil and gas, work in the district.

The interviews focused on two instances of large-scale extractive and exploitative projects in the district which form the basis for the two case studies in this paper. The details of the case studies are summarised in Table 1 below. Details of interviews conducted are shown in Table 2.

Table 1: Case Studies

	Project and responsible company	Details
1	Opening of Vankor oil field by Vankorneft/ Rosneft	Vankorneft is a subsidiary of Rosneft – a fully government-owned oil conglomerate. It recently developed new oil fields in Vankor, a very remote and almost entirely unpopulated part of the Turukhansk district. The oil field was due to start operations in 2008, but the start has so far been delayed.
2	The Evenkijskaya Hydro-Electric Station/dam (EHES) by RusHydro	EHES is a national-level project managed by RusHydro, a company that oversees a number of Russian hydro-electric dams and has 61.93% of the shares under federal government control. The plans are to build a dam on the Lower Tunguska river on which Turukhansk stands. The electricity will be transmitted through newly developed highly efficient (allegedly) lines to the industrial regions in the Tjumen province and the Urals. The dam will affect the population of Turukhansk and a number of indigenous Evenk settlements up the river in the adjacent district of Evenkia. Serious plans to build the dam existed in the 1980's, but were cancelled due to large-scale public and environmentalists' protest (or, according to some versions,

	lack of funds). Currently, the project faces massive environmental and social protest as it is expected that the dam will have highly negative environmental consequences and also destroy the most important Evenk tribal communities.
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Table 2: Interviews in Turukhansk⁶

	Interview Participants
1	A senior official in the Turukhansk district administration
2	The environmental specialist in the Turukhansk administration with his wife, who is also a long-term employee the administration
3	The chief editor of the largest Turukhansk district newspaper. The newspaper is largely perceived as a media branch of the local administration, and thus also as loyal to the present federal government.
4	Representatives of SNC-Lavalin, a Canadian company charged with preliminary assessments of popular opinion in Turukhansk and Evenkia on the subject of EHES project, on their visit to Turukhansk
5	One of the key Turukhansk cultural workers, can be considered a member of the general public
6	A prominent scientist working for a research institute in Krasnoyarsk who actively participated in the protests against the EHES project in the 1980s and is also participating in the current protests.

We also draw on copious amounts of secondary data such as Russian federal government publications, CSR reports by Rosneft (Vankorneft does not publish independent CSR reports) and RusHydro, publications by NGOs and local interest groups, and press reports.

The shape of Russian public CSR policy

In post-communist societies, the notion that companies have social role is not new. Under socialism, state owned companies built and maintained social, cultural, sporting, housing and recreational facilities for their employees and adjacent communities. However, with the privatisation of 1990s, companies divested themselves of these social obligations as part of their adjustment to market economics. (Serenyi 2007).

The present Russian federal government does not have a dedicated CSR agency. Its engagement with CSR is mainly consultative and focused on challenges arising in particular industries. CSR engagement takes forms of parliamentary hearings, creation of government-sponsored CSR documents, and hearings in the Public Chamber⁴⁹. The government often acts as an intermediary by creating forums where various groups can voice their opinions.

One of the largest recent initiatives was the talks on “Corporate Social Responsibility in Russia: aims, goals, problems and legislative provisions” conducted by the Federal Council in 2007 and 2008 (Levitskiy 2007; Federation News 2008), attended by diverse government, business and civil society representatives. The talks declared a need for Russian business establishment to learn from the best foreign and domestic companies. This need was explained by the fact that largest international banks announced that new projects will be financed only when accompanied by thorough social and ecological impact assessments. Another stated motivation was the deep mistrust of Russian business abroad, resulting in losses for Russian companies. (see Table 3 for further details).

⁴⁹ Public Chamber is an institution within the federal government whose role is to act as an intermediary between the government and the public, protect the rights and freedoms of the citizens, develop the civil society, and conduct feasibility studies for federal legislative projects. It has 126 “elected” members who serve 2-year terms. The first 42 members are appointed by the President. They then select the next 42 members. The last 42 members are self-nominating representatives of various social organisations whose candidacies have to be approved by the existing members of the Chamber.

Table 3: Definitions of CSR from Russian federal government sources

Source	Definition
2008 Federal Council hearings on “CSR in Russia: aims, goals, problems and legislative provisions	<p>Key directions for CSR development:</p> <ol style="list-style-type: none"> 1. Care for immediate stakeholders – employees, shareholders, suppliers, and also conduct ecological and social projects in the local communities/regions. 2. Short-term, tactical interaction between the state, society and business – e.g. cultural initiatives by the government on behalf of society with financing by business. 3. Long-term investment in society and human capital – long-term collusion of social, state and business interests, not very developed in Russia. <p>State, business and social interests are never seen as conflicting, but always congruous.</p>
2005 Report by the Federal Council on “CSR in Modern Russia: Theory and Practice”	<p>The main identified components of CSR are:</p> <ol style="list-style-type: none"> 1. Production of quality products and services 2. Creation of attractive jobs, payment of “legal” (i.e. fully declared for taxation – JF and AZ) salaries and wages, investment into development of human potential. 3. Fulfilment of demands of tax, environmental, labour and other legislature. 4. Effective conduct of business, oriented towards adding economic value and increase in shareholder wealth. 5. Accounting for social expectations and commonly accepted ethical norms in the conduct of business. 6. Investment in the formation of the civil society through partnerships and local community development programmes.
2002 “Ecological Doctrine of Russian Federation”	<p>Key principles of government environmental policy:</p> <ol style="list-style-type: none"> 1. Sustainable development with equally balanced economic, social and environmental components, and recognition that social development is impossible alongside environmental degradation. 2. Just distribution of the gains from natural resources use

	<p>among the people.</p> <ol style="list-style-type: none"> 3. Prevention of the negative environmental consequences of the economic activity, accounting for future environmental impacts. 4. Rejection of economic and other projects with an impact on environmental systems if the impacts are unpredictable or if their forecasts are unreliable. 5. End of free use of natural resources, and the reimbursement of damages to local communities and environment 6. Openness of environmental information 7. Participation of the civil society, local governments and business circles in preparation, discussion and realisation of decisions in the area of environmental protection and rational use of natural resources.
<p>Report on CSR in the forestry industry (Ptichnikov and Park, 2006)</p>	<p>CSR is defined as ‘the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.’ Absence of ‘inherent contradiction between strong business ethics and effective capitalism’ is emphasized.</p>

The closest Russia has come to the development of an official CSR policy document is the “Ecological Doctrine of the Russian Federation” (2003). The Doctrine sets out recommendations on the conservation of the natural environment. The second document of any importance is the report on ‘Corporate Social Responsibility in modern Russia: Theory and practice’ (Federal Council 2005). It provides a review of basic CSR theory and uses case studies to demonstrate good practice.

As can be seen from Table 3, the Russian federal CSR orientation is rather practical and focused on the immediate business functions such as providing workplaces, caring for the employees and fulfilling tax obligations. Engagement with civil society is relegated towards the end of lists and is planned for the long term.

The role of international markets in driving the CSR agenda in Russia emerges as crucial. In addition to being cited in the Federal Council hearings, it was the key motivation for an investigation into market-based CSR and CSR-certification in the forestry industry commissioned by the Ministry of Economic Development and Trade and the Ministry of Natural Resources and Ecology (Ptichnikov & Park 2006): Wood products distributors on the international markets are increasingly demanding CSR certification of forestry products. The representatives of the Canadian company SNC-Lavalin interviewed by us also suggested that Rosneft/Vankorneft’s visible commitment to CSR was due to international market pressures.

The role of the province and district governments is mostly confined to the implementation of and monitoring of compliance with the federal CSR-related directives, negotiating with the commercial organisations in the process. An example of this limited role is one Krasnoyarsk province legislative assembly representative who was reported saying that he received most of the news about the EHES project from Moscow and not from the local government who were “as if with their mouths full of water” (Doktorov 2009)

The Russian Government as a Driver for CSR Policy and Practice

Judging by the CSR reports and other publicity by Rosneft and RusHydro⁵⁰, the influence of the federal government on their CSR activities is limited. They, for instance, do not make use of the Ecological Doctrine. Potentially, the reason is that the Doctrine does not make any enforceable demands of action on the part of the firms. Rosneft and RusHydro also do not refer to the 2005 Federal Council report on CSR in Russia.

Overall, business is consistently ahead of the government in developing CSR initiatives. Such organisations as The Union of Russian Industrialists and Entrepreneurs and Association of Russian Managers have been producing numerous publications on the subjects of CSR for years. In fact, the 2005 Federal Council report on “CSR in modern Russia” discussed above was written with the help of the Association of Russian Managers materials.

The influence of Krasnoyarsk province government on business CSR often involves organising projects to encourage CSR among local business. The motivations for this are probably two-fold: fulfilment of the federal directives on one hand and plugging in the holes in the local budget on the other. An example is the Charity Season – 2008 event organised by the Krasnoyarsk government: local businesses financed small grants for charity projects competed for by local citizen organisations (Krasnoyarsk Province Portal 2008). Overall, it appears that while the provincial government does not dictate the business CSR agenda, it manages to mobilize some companies for its own projects.

Rosneft clearly lists both federal and local governments among its major stakeholders. It sees the government as an industry regulator and as a potential partner development programmes. RusHydro similarly sees the government as an industry regulator. “Realisation of the government energy policy” is the first item on their CSR agenda in the 2007 report. However, both companies do not see the government as a source of CSR definitions or as a force that dictates how they should engage with their other stakeholders.

⁵ Both our case companies, Rosneft (parent of Vankorneft) and RusHydro produce CSR reports. Rosneft’s CSR publicity on its official website is, however, much more extensive than RusHydro’s. Rosneft published very extensive CSR reports in 2006 (242 pages) and 2007 (135 pages). In comparison, RusHydro only published a 33-page report in 2007. Rosneft’s also provides detailed summaries of various aspects of its CSR, very visibly, on its website, whereas RusHydro’s presentations are limited to a few documents.

At the Turukhansk district level, five out of six of our interview respondents emphasized the role of law in regulating the behaviour of the companies, particularly their environmental performance (Krasnoyarsk Scientist 2008, Turukhansk Administration Official 2008; Turukhansk Culture Worker 2008; Turukhansk Environment Specialist 2008; Turukhansk News Editor 2008). Compliance with the law was seen as part of CSR. On paper, Russia has rather advanced environmental legislation. Enforcement, however, is a problem. While the Turukhansk district administration is charged with policing Vankorneft's activities, it is highly challenging as Vankor oil field is extremely remote. District government inspectors can afford to visit only once or twice a year. Turukhansk government is also prepared to close ignore some violations in exchange for companies financing local social programmes. Turukhansk administration is continuously short of funds, and social problems are seen as more pressing than environmental issues in remote oil fields. (Turukhansk Administration Official 2008; Turukhansk Environment Specialist 2008)

The Role of Russian civil Society

The Vankor oil field project and the EHES project attracted distinctly different amounts of critical attention from the civil society organisations. Vankor is generally perceived as a very 'clean project'. None of our interviewees (Turukhansk Administration Official 2008; Turukhansk Culture Worker 2008; Turukhansk News Editor 2008; Turukhansk Environment Specialist 2008; SNC-Lavalin Representatives 2008; Krasnoyarsk Scientist 2008) mention any problems. The administration official (Turukhansk Administration Official 2008) and Krasnoyarsk scientist (Krasnoyarsk Scientist 2008) in particular described the project as highly environmentally responsible. We found no criticism of the project in the press. However, Rosneft/Vankorneft do not appear to be responsible due to pressure from the civil society. Whilst Rosneft lists local community organisations among its stakeholders (Rosneft 2006, 2007), the details of the interaction with these social groups are not explained.

EHES, on the other hand, attracts vast amounts of mainly negative attention. The involved civil society in this case can be split into three categories: first, members of communities and indigenous tribes that will be affected by the dam; second, more formally organised groups and registered organisations representing affected communities; and third, national and international environmental organisations. (Table 4 summarises their actions.)

⁶Where possible, the identities of the interview participants will be maximally anonymised. CSR and the EHES in particular are sensitive topics within the Russian governmental context.

Table 4: Civil Society Interest Groups

Category	Interest groups	Details
Individual citizens and indigenous tribes	Individual members of affected communities (e.g. of settlements of Turukhansk, Tutonchany, Tura, etc.) and affected indigenous tribes (e.g. the Evenks)	In 2008 the inhabitants of the village of Tutonchany signed a petition against the EHES addressed to the head of the Evenkia municipal district, and the provincial and federal governments. Participated the RusHydro public consultations about the project. In March 2009 the Third Conference of Evenks of Russia expressed full support for the petitions of the social organisations (below) to the federal government against EHES.
Formally organised groups representing affected communities	Evenkia Life – the official newspaper of the Evenkia municipal district	The newspaper is not technically a social organisation. However, Evenkia Life has been functioning as an information distribution portal for such organisations as For the Future of Evenkia. Its approach is distinctly anti-RusHydro.
	Novaya Gazeta (New Newspaper) – a national newspaper	Novaya Gazeta is widely recognised as one of the last remaining outposts of free press in Russia. It is active in publicising human rights abuses and other violations by the government and its agencies (police, army, government-owned businesses) in Russia. Over the past two years, the publications produced several publications criticising the EHES project.
	Russian Association of the Indigenous Peoples of the North (RAIPON)	RAIPON includes dozens of indigenous groups of the Russian north. Together with the environmental organisations listed below, it wrote and sent petitions to Russian federal government, various financial institutions, RusHydro itself, potential subcontractors, and to SNC-Lavalin, asking not to support, finance and participate in the EHES project. The petitions outlined various negative environmental and social events of the project and sited UN conventions and

		Russian federal legislature violated by the project.
	Plotina.net ⁵¹	A Krasnoyarsk-based online watchdog for various Russian hydro-electric dams. Recently has been very active as an information portal for anti-ESEH publications. It is currently being sued by RusHydro for allegedly insisting violent ethnic uprisings against the dam on its website.
	For the Future of Evenkia	A youth movement, operating in the district of Evenkia. It is involved in a number of social and environmental projects, and strongly argues against the ESEH using Evenkia Life and Plotina.net as information portals.
	Evenkia – For Future Generations	A very recently established organisation (exact date unknown). An organisation similar to For the Future of Evenkia. Participates in various social projects such as helping schools and the elderly. Conducts surveys of popular opinion about ESEH. At the same time, it openly supports ESEH, citing multiple potential benefits for the Evenkia communities. It also openly cooperates with RusHydro on its social projects. Plotina.net and For the Future of Evenkia accused this organisation of being an act of ‘grey or black PR’ on the part of RusHydro. They allege that Evenkia – For Future Generations is used by RusHydro to present evidence of ‘locals’ in favour of ESEH to its financial and governmental stakeholders in Moscow. Evenkia – For Future Generations actively fights both in press and in court against such accusations. It is a potential GONGO.
National and	World Wildlife Fund	Wrote and sent petitions to Russian

⁵¹The URL of this organisation is also its name. It is a play of words. ‘Plotina’ is ‘dam’ in Russian. ‘Net’ is ‘no’ in Russian.

international environmental organisations	(WWF)	federal government, various financial institutions, RusHydro itself, potential subcontractors, and to SNC-Lavalin, asking not to support, finance and participate in the EHES project. The petitions outlined various negative environmental and social events of the project and cited UN conventions and Russian federal legislature violated by the project. Used their websites to extensively publicise the potential future negative effects of the dam. Participated in EHES roundtable in the Public Chamber and in Krasnoyarsk provincial administration. Organised an environmental roundtable on hydro-electric dams in Krasnoyarsk.
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Table 4 shows that civil society activity around the EHES project is diverse and vibrant. However, the actual influence of civil society groups over RusHydro is questionable. RusHydro 2007 CSR report (RusHydro 2007a) does not discuss interaction with civil society groups. They are also not listed among the “key stakeholders” in RusHydro CSR presentation (RusHydro 2007b). Most of RusHydro’s interaction with civil society is confined public consultations with the communities that will be affected by EHES that are required by law. One of the few attempts to interact with the civil society on the EHES subject outside the legal requirements were the public hearings in the Public Chamber in September of 2008. (RusHydro 2008) In May 2009, RusHydro also participated in the round table organised by the Krasnoyarsk Regional Association of Public Organisations of Indigenous Peoples of the North. RusHydro used this roundtable to publicise the positive impacts of EHES (Krasnoyarsk.bi, 2009).

The interview data above reveals a similar degree of ‘weak influence’ by civil society in both the Rosneft/Vankorneft and RusHydro cases. Our Turukhansk interviewees described Turukhansk population as quite apathetic or perhaps lacking in empowerment. While they readily discussed Vankorneft and EHES in private, few people attend public hearings or express their opinions about these projects through local media. This is true even in the case of EHES that is often seen as an environmental disaster in-waiting. Interviewees (Turukhansk Culture Worker 2008; Turukhansk Environment Specialist 2008) pointed to the low level of specialist education among the people as a problem. During the public hearings on extractive projects, for example, people simply often do not know what to ask for or about. They may be unaware of their rights, of what the companies can give them, or even of what is needed to tangibly improve their lives. Indigenous communities are often seen as asking for short-term benefits such as snowmobiles as opposed to focusing on long-term development.

The maintenance of the long-term social programmes by corporations is also challenging. One example is the establishment of the special “Rosneft class” in a Turukhansk school after the opening of the Vankor field. This was intended to be a class where only the best students would be accepted to be prepared for future work in the oil and gas industries. They would have special teachers and all the latest equipment. But the local school and parent politics meant that the student-selection process was biased, and no new teachers were hired. The company does little to police their investment and to make sure it works as intended. (Turukhansk Administration Official 2008; Turukhansk Environment Specialist 2008)

Conclusions

Having presented our case study evidence, we now return to our underpinning research questions. They were:

- What is the content of Russian public CSR policy?
- To what extent and how has the Russian government driven CSR business practice in Russia?
- What role has Russian civil society played in promoting and shaping CSR public policy and business practice in Russia?

In conclusion we find that the content of the present Russian governmental CSR output generally defines CSR in terms of immediate business functions such as providing workplaces, quality products and services and fulfilling tax and other legal obligations. It also addresses environmental concerns. It does not dwell on the nature of interaction between the government, civil society and business. Most of the CSR policy is formulated on the level of federal government. Provincial and district governments are charged with enforcement of the federal policies. However, they also engage in negotiations with the companies about their CSR activities. Sometimes they are prepared to ignore violations such as violations of environmental codes in exchange for help with local social programmes. In summary, the role of the government in driving CSR in Russian companies is weak. Business itself is consistently a step ahead in their CSR involvement. Government bases its CSR publications on business materials. Government, however, often provides forums where corporations can meet with their stakeholders (e.g. hearings in the Public Chamber of Russian Federation). Its role is consultative and facilitating. Through participating in CSR forums and roundtables, government officials also legitimise corporate action.

With regard to the role of civil society and its impact on corporate behaviour, we find that is also weak. Case study company reports do not indicate a high level of interaction with, or influence by, civil society. Companies regularly provide assistance to local communities (e.g. educational or health programmes) but are much less likely to respond to criticism or challenges as in the case of EHES. In this case, interaction between companies and civil society organization often happens on corporate terms. The companies do what suit them and when it suits them. Companies may engage in ‘black PR’ strategies by creating and supporting loyal

civil organisations (GONGOS). Community members are disempowered in the interaction with the corporations due to lack of education and information. In summary, civil society in the Russian north has little serious influence over corporations as communities and local administrations are often dependent on the companies to supplement budgets. Additionally, the companies are government-owned and government in Russia is not known for its accountability to the population, communities have little recourse for their grievances.

In conclusion, international markets emerge as the major drivers of CSR among Russian extractive companies. The companies are forced to adopt CSR codes as CSR-certified products are more likely to be bought and gain higher prices on international markets. Rosneft/Vankorneft widely trades oil on international markets and expects to do so with the oil from the Vankor field. CSR-certification is important for the company to gain higher prices for its product on the international markets. RusHydro, on the other hand, is not planning to export electricity from EHES. This may be the reason why it is not as concerned as Rosneft about socially responsible image.

Clearly, the research conducted to date is limited to two very specific cases studies in Siberia. It is essential now to extend the scope of the investigation to capture a broader picture of CSR in Russia and the role played by government and civil society.

References

Albareda, L., Lozano, J. M., Tencati, A., Midttun, A., & Perini, F. (2008). The changing role of governments in corporate social responsibility: drivers and responses, *Business Ethics: A European Review*, 17:4, 347-363.

Brown, A. (2001). *Contemporary Russian Politics*, Oxford: Oxford University Press.

Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance'. *The Academy of Management Review*, 4:4, 497-505.

Carroll, A.B., (1999). Corporate Social Responsibility: Evolution of a Definitional Construct, *Business and Society*, 38:8, 268 - 295.

Clarkson, M.B.E., (1995). A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance, *The Academy of Management Review*, 20:1, 92-117.

Directorate General (DG) Employment and Social Affairs (2001) Responses to the consultation on the Green Paper on CSR [Online]. [Referred to 07.2005]. Available: http://ec.europa.eu/employment_social/soc-dial/csr/csr_responses.htm.

Doh, J. P. & Guay, T. R. (2004). Globalization and corporate social responsibility: how nongovernmental organizations influence labor and environmental codes of conduct, *Management International Review*, 44:3, 7–30.

Doh, J. P. & Guay, T. R. (2006). Corporate Social Responsibility, Public Policy, and NGO Activism in Europe and the United States: An Institutional-Stakeholder Perspective, *Journal of Management Studies* 43:1, 47-73

Doh, J. P. & Teegen, H. (2002). Nongovernmental organizations as institutional actors in international business: theory and implications, *International Business Review*, 11:6, 665–84.

Doktorov, T. (2009). Did Putin start preparing for the elections? *Vek*, 19th October, [Online]. [Referred to 03.07.2009]. Available: <http://www.wek.ru/articles/politic/241346/index.shtml>, (in Russian).

Donaldson, T & Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications, *The Academy of Management Review*, 20:1, 65-91

EC (2001). Green Paper. Promoting a European Framework for Corporate Social Responsibility, COM (2001) 366 final, Brussels, 18th July,

EC (2002). Communication from the Commission Concerning Corporate Social Responsibility: A Business Contribution to Sustainable Development, COM (2002) 347 final, Brussels, 2nd July

EC (2006) 'Implementing the partnership for growth and jobs: Making Europe a pole of excellence on Corporate Social Responsibility', COM (2006)136 final, Brussels, 22nd March.

Ecological Doctrine of the Russian Federation (2003). Official website of the President of Russia, [Online]. [Referred to 22.06.2009]. Available: <http://www.kremlin.ru/text/docs/2003/06/52004.shtml>, (in Russian).

Evan, W. M. & Freeman, R.E. (1993). A stakeholder theory of the modern corporation: Kantian capitalism. In N. E. Bowie (Ed.) *Ethical Theory and Business* (3rd edition), Englewood Cliffs, NJ : Prentice Hall

Evans, A. B. (2005). A Russian Civil Society? In S. White, Z. Gitelman, & R. Sawka (Eds.) *Developments in Russian Politics*, Basingstoke: Palgrave Macmillan.

Federal Council (2005). Corporate Social Responsibility in modern Russia: Theory and practice, *Analytical Newsheet*, v. 26 (278), [Online]. [Referred to 01.05.2009]. Available: http://www.council.gov.ru/inf_sl/bulletin/item/233/index.html, (in Russian).

Federation News (2008). Federal Council held hearings on Corporate Social Responsibility, 3 June, [Online]. [Referred to 21.06.2009]. Available: <http://www.regions.ru/news/2146540/>, (in Russian).

Freeman, R. E. (1984). *Strategic Management: a Stakeholder Approach*. Boston, MA: Pitman.

Krasnoyarsk.biz (2009). RusHydro: Company took part in a roundtable organised by RAIPON of Krasnoyarsk province, RusHydro Press Release, 25th of May, [Online]. [Referred to 05.07.2009]. Available: <http://www.krasnoyarsk.biz/events/releases/13306.html>, (in Russian).

Krasnoyarsk Province Portal (2008). In praise of good deeds, 10th December, [Online]. [Referred to 29.06.2009]. Available: <http://www.krskstate.ru/press/news/0/news/54832>, (in Russian).

Krasnoyarsk Scientist (2008). Interview with authors, August, Krasnoyarsk.

Levitskiy, L. (2007). Not charity, but social responsibility, *Russia Today*, n. 7, [Online]. [Referred to 09.06.2009]. Available: http://www.russia-today.ru/2007/07/07_society.htm, (in Russian).

Lozano, J. M., Albareda, L., Ysa, T., Roscher, H., & Marcuccio, M. (2008). *Governments and Corporate Social Responsibility*. Basingstoke: Palgrave.

Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts, *The Academy of Management Review*, 22:4, 853-886

Moon, J. (2004). Government as driver of Corporate Social Responsibility, International Centre for Corporate Social Responsibility Research Paper Series, University of Nottingham, No. 20-2004

Moon, J. (2005). United Kingdom. An Explicit model of business society relations. In A. Habisch, J. Jonker, M. Wegner, & R. Schmidpeter, (Eds), *Corporate Social Responsibility across Europe*, Berlin: Springer , 51-65.

Ptichnikov, A. & Park, J. (2006). Strengthening Russia's Engagement with Market-Based Corporate Social Responsibility (CSR), Conclusions and Recommendations from Experience in Forestry and Lessons for Other Sectors. International Finance Corporation, World Bank and EU Policy Advice Programme, [Online]. [Referred to 20.06.2009]. Available: <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/RUSSIANFEDERATIONEXTN/0,,contentMDK:20982135~p gePK:141137~piPK:141127~theSitePK:305600,00.html>.

SNC Lavalin Representatives (2008). Interview with authors, August, Turukhansk.

Remington, T. F. (2004). *Politics in Russia*, New York: Pearson Longman.

Rosneft (2006). Report on Sustainable Development OAO 'NK "Rosneft" in 2006. [Online]. [Referred to 20.06.2009]. Available: <http://www.rosneft.ru/Development/reports/>, (in Russian).

Rosneft (2007). Report on Sustainable Development OAO 'NK "Rosneft" in 2007. [Online]. [Referred to 20.06.2009]. Available: <http://www.rosneft.ru/Development/reports/>, (in Russian).

RusHydro (2007a). *Report on Social Responsibility and Corporate Sustainability*, [Online]. [Referred to 25.06.2009]. Available: <http://www.rushydro.ru/company/socialotvetstvenost>, (in Russian).

RusHydro (2007b). 'Report on social responsibility and corporate sustainability OAO RusHydro' Presentation by board member P. M. Khaziakhmetov, [Online]. [Referred to 25.06.2009]. Available:<http://www.rushydro.ru/company/socialotvetstvenost>, (in Russian).

RusHydro (2008). Evenk HES was discussed in the Public Chamber of the Russian Federation, Press-Centre, 25th of September, [Online]. [Referred to 06.07.2009]. Available: <http://www.rushydro.ru/press/news/5270.html>, (in Russian).

Turukhansk Administration Official (2008). Interview with authors. August, Turukhansk.

Turukhansk Culture Worker (2008). Interview with authors. August, Turukhansk.

Turukhansk Environment Specialist (2008). Interview with authors, August, Turukhansk.

Turukhansk News Editor (2008). Interview with authors, August, Turukhansk.

UN (2004). *The Global Compact – Human Rights, Labour, Environment, Anti-Corruption*, New York: United Nations.

Waller, M. (2005). *Russian Politics Today*. Manchester: Manchester University Press.

WBCSD (2002). *The Business Case for Sustainable Development: Making a Difference Towards the Johannesburg Summit 2002 and Beyond*. World Business Council for Sustainable Development: Switzerland.

White, S, Gitelman, Z, & Sawka, R. (2005). *Developments in Russian Politics*, Basingstoke: Palgrave Macmillan

PART NINE: RENEWABLE ENERGY

BIO-ECONOMIC AND ENVIRONMENTAL MODELING OF BIOFUELS ADOPTION IN THE PETROLEUM SECTOR IN NIGERIA - Research Study Abstract

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Abstract

Biofuels are increasingly making inroads into the energy sector and the demand for them as an alternative to petroleum is increasing. This surge has been ascribed to concerns over the diminishing supplies, rising prices, adverse environmental and human health impact from the use of fossil fuel (West et al 2008,). The global acceptance of bioenergy as a viable alternative energy source has set the benchmark for various governments and corporations to explore the potentials for generating the various forms of bioenergy available within the stretch of their natural resource endowment. This global adoption of biofuels is symbolic of the display of corporate responsibility relating governance and corporations in the management of the earth resources, pursuance of sustainable development and environment. The increase in the use and subsequent demand for biofuels is creating an international biofuel trade (EPC 2001), with biofuel markets already fully developed in some countries that have been able to harness their natural resource for producing biofuels. This increase in demand and adoption of biofuels, by and large, calls for corporate social and cultural responsibility, to ensure that the world's poor and the marginalized communities can participate and benefit from this exploitation, rather than the reverse. The study seeks to assess the impact of the adoption of biofuels in Nigeria vis-à-vis socio-economic sustainability, access to land and conflict with other productive ventures as well as the capacity to expand fortunes and livelihoods of the poor and marginalized community in the Niger region of the country.

Introduction

Biofuels are increasingly making inroads into the energy sector and the demand for them as an alternative to petroleum is increasing. This surge has been ascribed to concerns over the diminishing supplies, rising prices, adverse environmental and human health impact from the use of fossil fuel (West et al 2008). As the surge in the interest, adoption and utilization of biofuels in both the producing and consuming economy (either in developed and developing world), is linked with the increasing cost of petroleum products as well as the concern to save the environment by reversing the carbon emission associated with the use of petroleum products, energy concerns has taking central stage in the global development agenda. This trend culminated in the emergence of a global bioenergy policy and support in the form of subsidies, mandates and investments (Keam and McCormick 2008).

The global acceptance of bioenergy as a viable alternative energy source has set the benchmark for various governments and corporations to explore the potential for

generating the various form of bioenergy available within the stretch of their natural resource endowment. In many independent countries and the European Union targets have been set for the various levels adoption of bioenergy (EC 1997, 2001 & EPC 2001, 2005). Trømborg et al (2008) envisaged that the setting of these targets will substantially increase the use of biomass for energy purpose in Europe. This increase can as well be envisaged for other major energy consuming economies of the world. The increase in the use and subsequent demand for biofuels is creating an international biofuel trade (EPC 2001), with biofuel markets already fully developing in some countries that have been able to harness their natural resource for producing biofuels.

The human energy need has increased with the technological advancements. Boyle (2004) estimated more than 10-fold increase in the amount of energy consumed globally in the twentieth century. The 451 exajoules estimate in 2002 is approximately 10,800 million tonnes of oil equivalent, a consumption that increased steadily until 2008. Though global energy production is on the increase, the huge demand by emerging economies such as China and other far eastern countries means an increase in the demand with time, yet, fossil fuel reserves are declining (St. Clair, *et al* 2008). The continuous increase in the consumption and price of oil with it attendant environmental impact has renewed the interest in alternative energy, including biofuels.

Basic biofuel are acknowledged as the primary source of heating and cooking for thousands of years for humans. Cunningham et al (2005) posited wood supplied upto 90 percent of fuel used in the United States until 1850. In Nigeria and most other developing countries, majority of the population still depends on basic fuels such as firewood, cow dug and charcoal. The discovery of coal and later petroleum led to the decline in the reliance on these basic fuels as human technological advancement made a leap in 18th and 19th centuries.

Biofuel are liquid or gaseous form of fuels processed from biomass sources, which can replace petrol, diesel and other transport fuels used for running various automotive and mechanical machines. Biofuel as form of bioenergy can be derived from a wide array of sources including agricultural crops, forest biomass, bio-wastes from a wide variety of sources, perennial crops such as jatropha, among others (Keam and McCormick 2008). The various forms of fuels obtainable from bioenergy sources include bioethanol, biodiesel, and biogas.

Background

Energy constitutes a major development challenge for developing countries, including Nigeria with rich petroleum and natural gas resources. The technological advancement and economic progress in since the twentieth century have expanded the reliance on energy. According to EC/UNDP (1999) the provision of energy services has for a very long period played a central role in economic development. Nigeria is an oil rich nation and its national economy depends mainly on proceeds from the main extractive resources of petroleum (oil and gas). This sector has consistently contributed increasingly to the gross revenue of the country since the

late 90s with a shift from other real sectors such as agriculture, manufacturing and mining. CBN (2006) estimated that 89.4 percent of the country's gross revenue came from oil revenue in 2006. The dependence on oil and gas implies an overwhelming exploitation of these resources. In 2006, Nigeria's aggregate crude oil production including condensates, averaged 2.23 million barrels per day (mbd) or 813.95 million barrels, while natural production in the same year reached 57,753.7 million cubic metres (MMm³).

However, the dependence on this sector has not translated into a well-developed and efficient petroleum industry in Nigeria. The producing Niger Delta region is rife with crises, environmental degradation, pollution, unemployment and lack of basic infrastructure. This has led to the decline petroleum production capacity of the country with about 11 percent decline in production between 2005 and 2006 (CBN, 2007). Moreover, the natural gas resource is not fully harnessed as is the case in other developed economy. In 2006, an estimated 18,365.68 million cubic metres (MMm³) of natural gas representing 31.8 percent of the total annual production was flared (CBN, 2007).

The dependence on revenue from mainly oil and gas, the collapse of other real sectors and the inability of these other sectors to contribute significantly to the country's GNP as well as budgetary need portray a level of insecurity of the economy. The country's ability to pursue its sustainable development goals is dependent on revenue from petroleum, whose price in the international market is unstable and unpredictable. Coupled with this, the global agenda to pursue the development of sustainable energy sources and reduce the reliance and consumption fossil fuels questions the country's total reliance on this sector for its revenue.

With the attempt by major consumers and developed economies to ensure a global shift in the reliance on fossil fuels, Nigeria will need to ensure a shift in its revenue earning profile to take advantage of this global trend and harness its sustainable energy resources. The need for the country to adopt and improve its alternative energy sources are necessitated by the inability ensure a flow-over of revenue to invest in the development of other real sectors. A high percentage of the petroleum products consumed in the country are refined and imported from other countries. Furthermore, only a small proportion of the natural gas produced is channeled into production in other real sectors. In 2006, only 3.1 percent of the total gas produced were utilized within Nigeria as cooking gas produced by the Nigeria Gas Company (NGC), for electricity generation by the Power Holding Company of Nigeria (PHCN) and by cements and steel companies for heating.

Though Nigeria is the sixth largest exporter of crude oil globally with huge revenue accruing from oil sales and exploitation, it faces many challenges including:

- Instability in supply and prices of the petroleum products with recurrent acute shortages
- Land degradation, environmental damage, air pollution and loss of biodiversity resulting from oil exploitation and utilization
- Conflict, increased poverty level and loss of livelihoods in the oil rich Niger Delta
- Food crises and food insecurity

- The lack of basic infrastructure and
- The collapse of the real sector.

Apart from the huge, though declining petroleum production capacity, Nigeria has a very high potential for bioenergy production. The harnessing of the bioenergy potential provides a premise for solving the various problems highlighted above and facilitating the development of other real sectors and enhancing socio-economic development. This study will examine the potential for commercial scale bioenergy production in Nigeria and explore the possibilities for reducing the nation carbon footprint.

Objectives of The Study

The broad objective of the study is to assess the impact of the adoption of Biofuels in the energy sector in Nigeria.

The specific objectives are to:

1. Describe the prevailing trend in petroleum and biofuels exploitation in Nigeria
2. Estimate petroleum consumption and the capacity for biofuels substitution
3. Assess the socio-economic impact of biofuels adoption and production on human livelihoods and other sectors.
4. Model the environmental impact of biofuels production and utilization.
5. Assess land use changes envisage from biofuels adoption
6. Develop a framework for mainstreaming biofuels into the petroleum sector in Nigeria.

Justification for the Study

With the instability and unpredictability of the international oil and gas market, necessitating the need to diversify the Nigerian revenue base and the need to ensure access to sustainable energy source for rural and peri-urban households that constitutes over 70 percent of country's population as well as small and medium scale enterprises that are not being served by the reducing national grid, a study on alternative energy like this is very important in line with the global shift and adoption of alternative energy, particularly bio-energy sources such as biofuel.

Literature Review

For the purpose of the study, a wide array of related and relevant literatures will be reviewed for a deeper understanding of the concept, concerns, issues, prospects, and methodologies useful for the bioenergy (biofuel) modeling study in Nigeria. This

chapter will also provide information for expanding the background on the energy situation in Nigeria and help to fully understand the gap in energy need, the prospects and concerns to control the effort to adopt biofuel use in Nigeria. The literature review will also provide background secondary data for the preliminary analyses and developing the study hypothesis.

Methodology

This study will employ both theoretical and empirical approaches in modeling the impact of biofuel adoption on land use, household welfare, macroeconomic and environmental issues in Nigeria. The study will employ methodologies from a multi-disciplinary perspective for answering the research questions and developing a policy framework for harnessing biofuel adoption in Nigeria.

The study will use information/data gathered from both secondary sources as well as primary sources (field surveys). Secondary data will be sourced from government agencies' reports such as the CBN report, National Bureau of Statistics Annual report, national gazette, as well as other relevant national and international database. The primary data will be sourced through field survey across Nigeria for the collection household based data on energy consumption, social welfare, among others. Case studies and control experimentation will also be adopted for sourcing national data not currently available.

For data analysis, the study will adopt a range of methodologies and tools including:

- **Excel based energy-costing tool:** for estimating regional and national energy consumption in Nigeria and filling the data gap for other analyses.
- **Sustainable Livelihood Framework (SLA):** for a theoretical estimation of the socio-economic and welfare related impacts of the adoption of biofuel using data from ongoing biofuel out-grower schemes and industrial adoption of biofuel.
- **GIS Mapping:** for depicting the geographical spread of the biofuel capacity across Nigeria and for projecting trends base on current land use and population spread data.
- **Input Output Analysis of Sectors:** for determining cross-sector impact of the adoption of biofuel in the real sectors of the Nigerian economy.
- **CGE Modeling using GAMS:** for a macroeconomic modeling and estimation of the impacts of the adoption biofuels in Nigeria.
- **Goal Programming or Linear Programming:** for modeling and testing various energy consumption scenarios in attaining socio-economic and welfare targets for Nigeria and for developing a sustainable energy policy for the country.

- **A Tool for assessing the ecosystem services derivable i.e. carbon sequestration:** for assessing the national carbon footprint and estimating other ecosystem services derivable from the adoption of biofuels in Nigeria

Expected Result

Data collected as well as the results of the analyses will provide guidance for developing sustainable energy policy for Nigeria. Essentially, the outcome of the research will inform policy for mainstreaming biofuels into the energy sector and be useful for developing a framework for harnessing the biofuels production and utilization potentials in Nigeria for proffering solutions to the various socio-economic, ecological and environmental problems relating to petroleum exploitation in Nigeria.

References

Boyle G. (2004). *Renewable Energy: Power for a Sustainable Future*. 2nd ed. Milton Keynes. London: Oxford University Press.

Central Bank of Nigeria – CBN (2007). *Annual Report and Statements of Accounts for the year ended 31st December 2006*. Abuja: CBN.

Cunningham, W. P., Cunningham, M. A., and Saigo, B. W. (2005). *Environmental Science: A Global Concern*. New York: McGraw Hill. Pp 600.

European Commission – EC (2005). *Biomass Action Plan*. Communication from the Commission SEC (2005) 1573. Brussels: European Commission.

European Commission – EC (1997). *Energy for the future: renewable sources of energy*. White paper. Brussels: European Commission.

European Parliament and the Council – EPC (2001). *Promotion of electricity produced from renewable energy sources*. Brussels: Directive 2001/77/EC.

European Parliament and the Council – EPC. (2003). *The promotion of the use of biofuels or other renewable fuels for transport*. Brussels: Directive 2003/30/EC.

Keam, S. and McCormick, N. (2008). *Implementing Sustainable Bioenergy Production; A Compilation of Tools and Approaches*. Gland, Switzerland: IUCN. 32pp.

St. Clair, S., Hillier, J., Smith, P. (2008). Estimating the pre-harvest greenhouse gas costs of energy crop production. *Biomass and Bioenergy* 32: 442 – 452.

Trømborg, E. Bolkesjø, T. F. and Solberg, B (2008). Biomass market and trade in Norway: Status and future prospects. *Biomass and Bioenergy* 32:8, 660-671.

European Commission – EC/United Nations Development Programme –UNDP (1999). *Energy as a Tool for Sustainable Development for African, Caribbean and Pacific Countries*. Belgium: EC.

West, A. H., Posarac, D. and Ellis, N. (2008). Assessment of four biodiesel production process using HYSYS. *Plant. Bioresource Technology* 99, 6587-6601.

ARTICULATION OF ENVIRONMENTAL AND SOCIAL - ECONOMIC EXTERNALITIES FROM BIOENERGY: A Qualitative Model

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Abstract

Bioenergy from agriculture is considered as a way to reduce GHG emissions and thus global warming and climate change. Bioenergy also presents other externalities as impacts on environment quality, biodiversity, direct and indirect land-use changes, local prosperity, social well-being, etc. These externalities must be assessed in order to enhance responsible politics' and managers' choice of the best bioenergy route(s).

From our literature review and assessment of certification initiatives, we have derived the list of externalities, also called sustainability criteria, to take into account in bioenergy routes assessment.

The sustainability criteria selected are interlinked and cannot be evaluated in isolation. They are thus articulated into a qualitative model. This model defines links between criteria and characterises them into positive or negative correlations, and indeterminate relations.

Keywords: bioenergy, externalities, qualitative model, sustainability criteria

Introduction

Bioenergy from agriculture is today in the heart of sustainable development. Each bioenergy production and conversion route presents environmental and socio-economical externalities. These must be assessed in order to enhance responsible politics' and managers' choice of the best bioenergy route(s)⁵⁵. However, these externalities are not independent. A good understanding of the potential interactions between the externalities is of prime importance to put into evidence non linear effects that would considerably affect one or several of the environmental and/or socio-economical externalities during the implementation of the chosen bioenergy route.

Large part of literature is mostly interested by internal costs of bioenergy production and conversion, and by the comparison of (bio)energy economic viability and cost-effectiveness. Some environmental externalities are sometimes taken into account,

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⁵⁵ This paper is tied to the TEXBIAG project: "Decision-Making Tools to Support the Development of Bioenergy in Agriculture". This project is sponsored by the BELgian Science POLicy and led by Walloon Agricultural Research Center, University of Namur, Vrije Universiteit Brussel and Katholieke Universiteit Leuven.

especially emissions, to prove the advantage of bioenergy use (for example, ExterneE project). Some socio-economical externalities are also considered. For example, externalities evaluation models based on multipliers as BIOSEM (Stravroulia 2003), ABM (Madlener et al. 2000), or INPUT-OUTPUT models (Avonds et al. 2004; Federal Planning Bureau 2006) assess employment and income externalities of bioenergy. Some other models as ELVIRE, SAFIRE, or PLANET try to take into account socio-economical and environmental externalities but they evaluate only few externalities. A large number of externalities is never integrated into a same model (Stirling 1997; Madlener et al. 2000; Domac et al. 2000; Hektor 2002; O'Doherty et al. 2007), except in the CASES project (CASES 2006; CASES 2007) which gathers different models to evaluate a greater number of socio-economical and environmental externalities.

From this literature review, it also appears that, even if several methods to monetize externalities exist (Pearce et al. 2006; Atkinson et al. 2007; De Palma et al. 2007; Jenkins et al. 2007), externalities are sometimes quantified (tons of CO₂ emitted, number of jobs created...) but rarely monetized (cost of one ton of CO₂, benefits from job creation...).

In order to enhance bioenergy externalities evaluation and monetization, we propose, in section 2, a list of externalities or sustainability criteria that were selected through literature and stakeholders' consultation. Section 3 focuses on the articulation of those sustainability criteria. We use sub-models to study cause-effect relationships, feedbacks, induced and non-linear effects, and to build the global qualitative model. In section 4, we conclude, giving the limitations of the proposed model and the perspectives of future research.

This research is the first step in the design of a quantitative model allowing the evaluation and comparison of those externalities for different bioenergy routes. It will enable, on the one hand, the monetization of measurable sustainability criteria and their introduction in a policy support model, and, on the other hand, the qualitative assessment of other sustainability criteria and their potential introduction in a certification scheme.

Selection of Externalities or Sustainability Criteria

“An externality is present whenever the well-being of a consumer or the production possibilities of a firm are directly affected by the actions of another agent in the economy” (Mas-Colell et al. 1995). Externalities are goods which have positive or negative interest for economic agents but that are not sold on market. As externalities are market imperfections, they can prevent Pareto efficient allocation of resources (Varian 1994).

To define a list of externalities to take into account when assessing bioenergy routes, we consider a panel of initiatives led by different stakeholders (consultants, government representatives, distributors, social and/or environmental Non-Governmental Organizations (NGOs)...) on different agricultural products (soy, palm oil, fruits and vegetables, coffee, wood...):

- Cramer Commission⁵⁶,
- Renewable Transport Fuel Obligation (RTFO)⁵⁷,
- Round table on Sustainable Palm Oil (RSPO)⁵⁸,
- Basel criteria (for responsible soy production)⁵⁹,
- Utz Codes of Conduct⁶⁰,
- Eurep or Global Good Agricultural Practices (EurepGAP – GlobalGAP)⁶¹,
- International Federation of Organic Agriculture Movements (IFOAM)⁶²,
- Sustainable Agricultural Network / Rainforest Alliance (SAN/RA)⁶³,
- Forest Stewardship Council (FSC)⁶⁴,
- Pan-European Forest Council (PEFC)⁶⁵,
- American Tree Farm System (ATFS)⁶⁶,
- Sustainable Forestry Initiative Standard (SFIS)⁶⁷,
- European Green Electricity Network (Eugene)⁶⁸,
- Green Gold Label program (GGL)⁶⁹,
- Öko-Institut⁷⁰.

These initiatives define principles, criteria and, sometimes, indicators to assess the sustainability of agricultural biomass and/or bioenergy. For example, a bioenergy route is sustainable if it respects a list of environmental, social and economical criteria. These criteria are not taken into account in bioenergy cost and price. They can thus be considered as externalities. Sustainability criteria respect is a way of internalizing externalities.

Table 1 briefly describes how each initiative covers biomass/bioenergy sustainability criteria.

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- ⁵⁶ Netherlands project group “Sustainable Production of Biomass” with representatives of private companies (for example, SenterNovem), social organizations, financial institutions and government (SenterNovem 2005; Cramer et al. 2006)
- ⁵⁷ United Kingdom Department of Transport commissioned two independent consultants on carbon and sustainability reporting. Consultants met oil and biofuel industries, NGOs and other stakeholders’ representatives (Tipper et al. 2006; Dehue et al. 2007).
- ⁵⁸ A commercial initiative to promote sustainability criteria for imported palm oil (Denruyter 2007; WWF Germany 2007)
- ⁵⁹ Technical draft for the Round Table on Responsible Soy (RTRS), a parallel initiative to RSPO (Proforest 2004; RTRS 2006; Cert ID 2006)
- ⁶⁰ Relevant for coffee plantings (Utz Certified 2007)
- ⁶¹ Retailers and producers define integrated farm assurance standards for combinable crops. In other words, they define minimum requirements to allow European market entry of fresh fruits and vegetables, flowers and ornamentals, green coffee, aquaculture... (GLOBALG.A.P.(EUREPGAP) 2007; ACCS 2007) In 2007, EurepGAP became GlobalGAP, and revised its world wide standards (Dehue et al. 2007). We describe here EurepGap criteria.
- ⁶² IFOAM 2002. Meta-standard which gives accreditation to other standards for different crops (Dehue et al. 2007)
- ⁶³ Independent and non-profit conservation groups define sustainability criteria for crops as bananas, coffee, cocoa... (Smeets et al. 2006; SAN/RA 2008)
- ⁶⁴ Forest Stewardship Council 2002; Stupak 2007
- ⁶⁵ PEFC 1998; Stupak 2007
- ⁶⁶ Fritsche et al. 2006
- ⁶⁷ Fritsche et al. 2006
- ⁶⁸ A European label for green energy from biomass (Van Dam et al. 2006; Fritsche et al. 2006)
- ⁶⁹ Van Dam et al. 2006; Fritsche et al. 2006
- ⁷⁰ Recommendations based on various studies on sustainability criteria and certification initiatives (Fritsche et al. 2006)

Table 1 – Sustainability criteria retained by initiatives

	Cr a m e r	R T F O	R S P O	Ba s e l	U t z	E u r o p e a n G A P	I F O A M	S A N/ R A	F S C	P E F C	A T F S	S F I S	Eu gè ne	G G L	Ö k o- i n s t
Environmental criteria															
Global warming															
<i>GHG</i>	++ + 71	++	0	0	0	0	0	0	0	0	0	0	0	0	+ + +
<i>Carbon stocks</i> ⁷²	++	++	+	0	0	0	0	0	0	0	0	0	0	0	0
<i>Land-use changes</i>	++ 73	0	0	0	0	0	0	0	0	0	0	0	0	0	+ +
Environment quality															
<i>Air quality</i>	++ +	++ +	++ +	+	+	0	0	+	0	0	+	0	0	0	0
<i>Soil quality</i>	++ +	++ +	++ +	++ +	++	+	++	+	+	++	+	+	+	+	+ + +
<i>Water quality</i>	++ +	++ +	++ +	++ +	++	+	++	+	+	++	+	+	+	+	+ + +
<i>Agricultural practices</i>	+	++	++ +	++ +	++	+	++ +	+	+	++	++	+	+	+	+ +
Biodiversity															
<i>Biodiversity</i>	++ +	++ +	++ +	++ +	++	+	++	+	+	++ +	++	+	0	+	+ + +
<i>GMO</i> ⁷⁴	0	0	0	++ +	+	+	++	+	+	0	0	0	0	0	+
Socio- economical criteria															
Local prosperity	++	0	+	0	0	0	0	+	0	0	0	0	0	0	+
Working	++	++	++	++	0	+	++	+	+	0	0	0	0	0	+

²⁰If the criteria is selected : +, if the criteria is described : ++, and if some methodology is given : +++, if criteria is lacking: 0

⁷²Under development

²²Monitoring by Government

²³Genetically Modified Organism

conditions	+	+	+	+		+		+	+						+
Property rights	++	++ +	++ +	++	0	0	0	0	+	0	0	0	0	0	+
Local well-being ⁷⁵	+	+	++ +	++	0	0	0	+	+	0	0	0	0	0	0
Competition with food	++ 76	0	0	0	0	0	0	0	0	0	0	0	0	0	+

From this initiatives review, we can see that Cramer Commission and RTFO initiatives cover the greatest number of sustainability criteria and describe them with lots of details (and methodologies). Moreover, the Cramer Commission initiative seems to guide European Union work on sustainability criteria. Even if the *Renewable Energy Directive* adoption has recently limited the list of criteria to take into account in bioenergy routes assessment, it keeps the right to enlarge this list in coming years. Thus, Cramer Commission and RTFO, which are commissioned by public authorities and developed by consultants in collaboration with stakeholders (industries, NGOs...), must also inspire our own selection of criteria or externalities.

Both initiatives recommend the coverage of an exhaustive list of sustainability criteria. This is also relevant for us as we want to articulate externalities or sustainability criteria in a comprehensive qualitative model which will enable to grasp all relationships between these externalities or criteria.

Table 2 presents our final selection of externalities or sustainability criteria to take into account when evaluating bioenergy routes.

Table 2 - Externalities and sustainability criteria selected

Externalities	Sustainability criteria	
Environmental externalities	Global warming	GHG emissions Carbon stocks Direct land-use
	Environment quality	Air quality Soil quality Water quality Agricultural
	Biodiversity	Biodiversity GMO
Socio-economical externalities	Local prosperity Social well-being ⁷⁷ Property rights Competition with food Energy security	
Macro-level externalities	Indirect land-use change	

²⁴ Participation, respect...

²⁵ Monitoring by Government

²⁶ Social well-being covers local well-being (dialogue, consent, complaints...) and working conditions

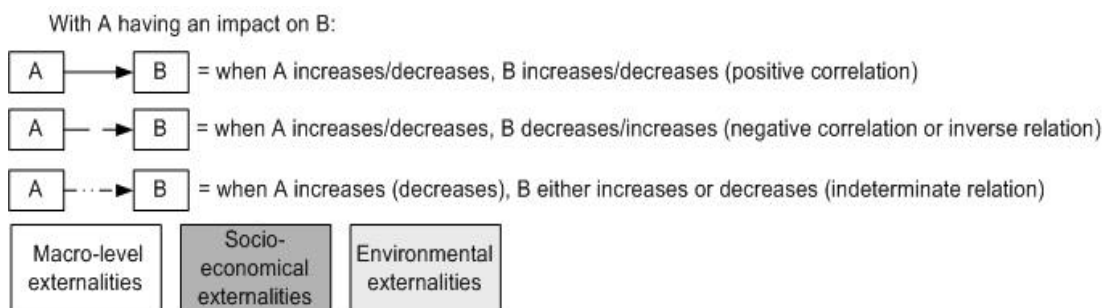
In the following steps of our research, we intend to monetize and introduce the criteria in bold in a policy support tool. The other criteria will be qualitatively assessed, and possibly integrated in a certification scheme.

However, before this monetization task, it is of prime importance to understand the causal relations between the criteria and to unveil the potential non linear effects. The goal of section 3 is to articulate all sustainability criteria and to describe their relationships.

Articulation of Sustainability Criteria

The goal of this section is to understand the nature of the impacts between sustainability criteria. Does a positive change in a given cause “A” has a positive or a negative impact on its consequence “B”? Or is this link indeterminate? To evaluate this, we shall use the “Direct and indirect land-use changes” element as starting point, as it is at the core of biomass-based energies. Direct land-use change arises when a crop is replaced, on a specific parcel, by a bioenergy crop. Indirect land-use change arises because what is no longer produced on this parcel must be produced elsewhere at the expense of other land.

The next sub-sections explain each relation which constitutes our qualitative model.



The global model is then described in section 3.14 and figure 13.

Direct and Indirect Land-Use Changes – Carbon Stocks – Global Warming

Direct and indirect land-use changes have impacts on carbon sinks above (vegetation) and below (soil) ground (see figure 1). For example, production of bioenergy crop could lead to the conversion of wetlands or forests. This will destroy carbon sinks and allow the release of carbon, previously captured in soil, in the atmosphere.

On the contrary, some bioenergy productions can create or increase carbon sinks, and capture carbon from atmosphere in the soil.

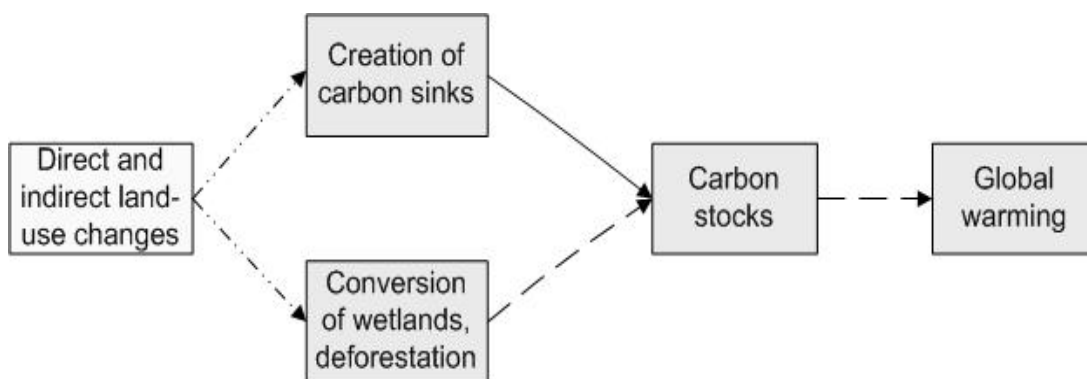


Figure 1 - Impacts of direct and indirect land-use changes on carbon stocks and global warming

The relation between direct and indirect land-use changes and carbon stocks can be positive or negative. On the one hand, agricultural production, whatever its use may be (food, feed, energy), is expected to increase in order to ensure the growing world population needs. This will lead to conversion of wetlands or forests. On the other hand, new crops implementation on set-aside or degraded land is likely to lead to carbon stocks expansion, balancing somehow negative effects of deforestation. This relation is thus **indeterminate**.

The release of carbon in the atmosphere due to the loss of carbon stocks contributes to global warming. The relation between carbon stocks and global warming is inverse.

Direct and Indirect Land-use Changes – Greenhouse Gases Emissions – Global Warming

GreenHouse Gases (GHG: CO₂⁷⁸, CH₄⁷⁹, N₂O⁸⁰ and O₃⁸¹)⁸² come from various sources and have complicated impacts on each other. Figure 2⁸³ presents major GHG sources and direct and indirect relations between main GHG.

EPA (2006) gives figures on major GHG sources. Main CO₂ source is fossil fuel combustion (79%). CH₄ is obviously produced by fossil fuel combustion and extraction (47%) but also by cattle breeding and manure management (34%) and landfills emissions (24%). Agricultural soil management activities (fertiliser application) are responsible for 78% of the N₂O emissions.

There are two types of ozone (EPA 2003): stratospheric ozone ("good" ozone) and tropospheric ozone ("bad" ozone). Ground-level or "bad" ozone is not emitted directly into the air, but is created by chemical reactions in the presence of sunlight

²⁷ Carbon dioxide

²⁸ Methane

²⁹ Nitrous oxide

³⁰ Ozone

³¹ GHG emissions considered in TEXBIAG project

³² Legend is different for this figure.

between the so-called ozone precursors: NO_x ⁸⁴, CO ⁸⁵, CH_4 and NMVOC ⁸⁶. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NO_x , CO and VOC ⁸⁷.

Beside its direct effect as a GHG, "bad" ozone is also known to damage vegetation and ecosystems. It leads to reduced agricultural crop and forest yields, reduced growth and survivability of tree seedlings, and increased susceptibility to diseases, pests and other stresses. In particular it decreases carbon uptake by plants, indirectly restraining them in their role in CO_2 emissions reduction.

Finally, according to Sitch (2007), NO_x diminish CH_4 presence in the atmosphere, somehow counterbalancing their harmful direct effect as ozone precursors.

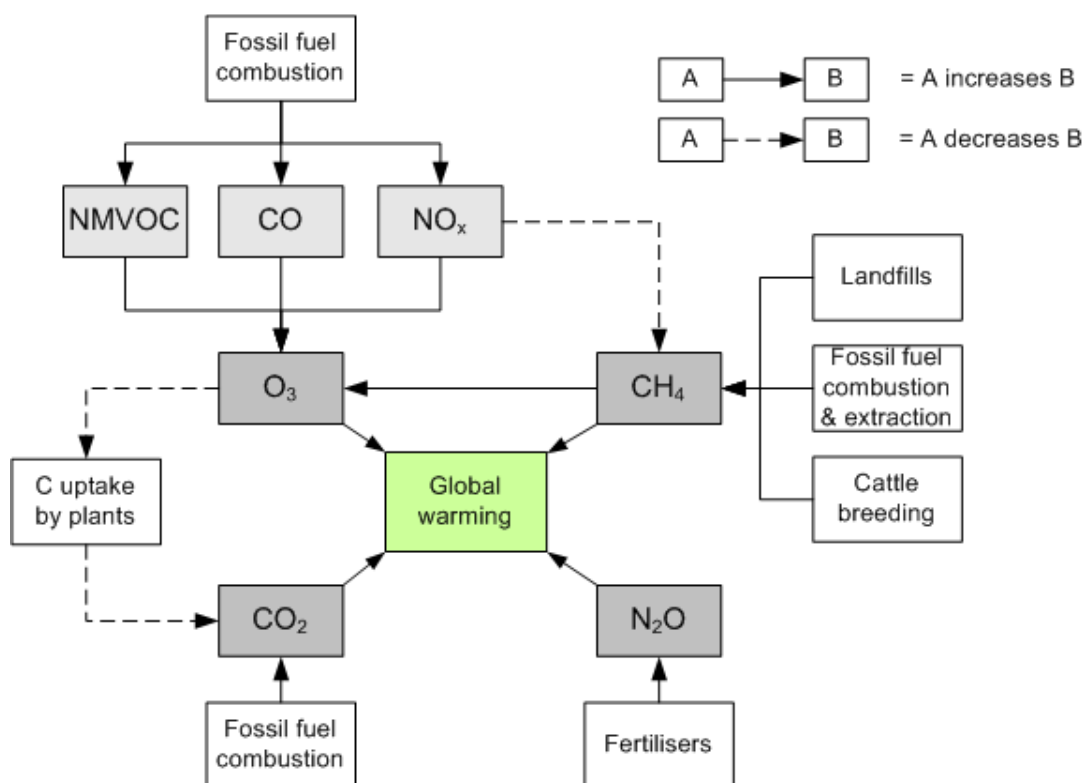


Figure 2 - Major interactions between GHG and their main sources

As different crops have different levels of GHG emissions (Searchinger et al. 2008), because of variable agricultural practices (fertilisers and pesticides application, soil work, etc.), direct and indirect land-use changes have different impacts on emissions (see figure 3).

³³ Oxides of nitrogen

³⁴ Oxide of carbon

³⁵ Non Methane Volatile Organic Compounds

³⁶ Volatile Organic Compounds

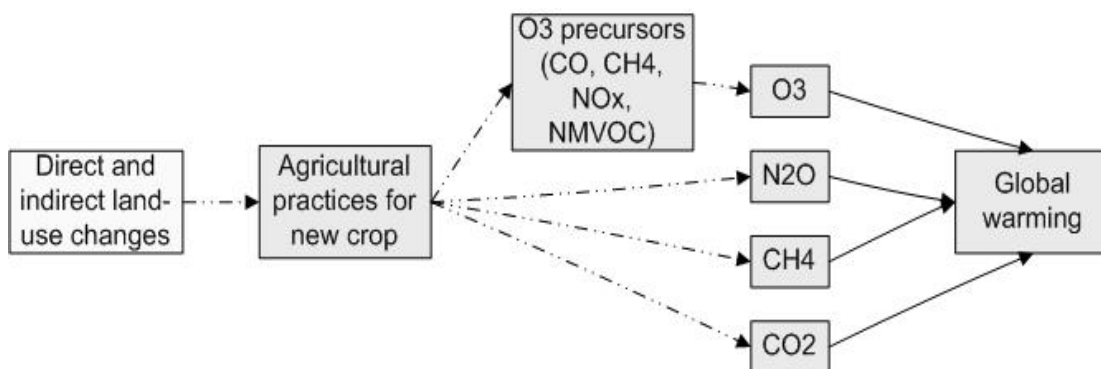


Figure 3 - Impacts of direct and indirect land-use changes on GHG emissions and global warming

Level of GHG emissions can increase or decrease according to direct and indirect land-use changes compared to the previous land-use. This relation is thus indeterminate.

Since GHG emissions contribute to global warming, there is a positive correlation between these two externalities.

Direct and Indirect Land-Use Changes – Biodiversity

Factors influencing directly biodiversity include habitat loss and fragmentation, invasion by introduced species, overexploitation of living resources, pollution, global climate change and industrial agriculture and forestry (McNeely et al. 1995). Now all these parameters are bioenergy externalities and are here after classified among direct and indirect land-use changes, global warming and agricultural practices.

Since they influence habitats and ecosystems (Riedacker 2007), land-use changes have impacts on biodiversity (see figure 4).

On the one hand, forests, grasslands, or areas for the protection of rare, threatened or endangered ecosystems or species could be destroyed and converted into new cropland. On the other hand, in some cases, land-use changes can also (re)create biodiversity through (re)introduction of local species.

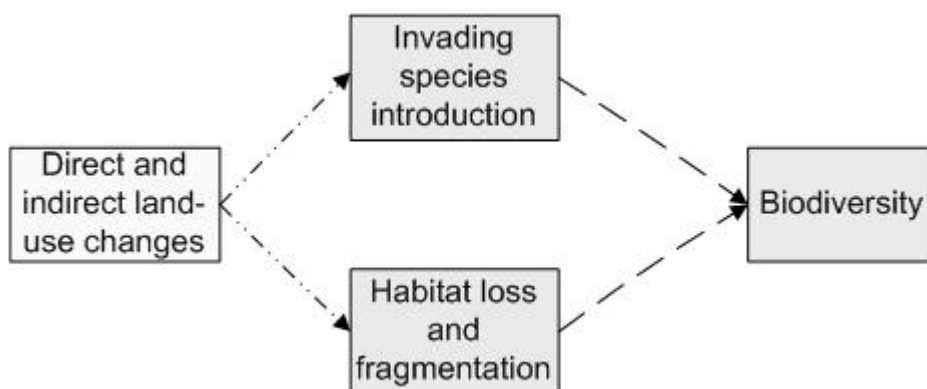


Figure 4 - Impacts of land-use changes on biodiversity

Nevertheless, as agricultural activity is expected to increase in the future, due (partly) to bioenergy demand, conversion of areas with high biodiversity value or introduction of more productive but invading species is a risk. This relation is thus assumed to be inverse, even if, in some cases, land-use changes can improve biodiversity.

Greenhouse Gases Emissions – Global Warming – Biodiversity

GHG emissions influence biodiversity indirectly through their impacts on global warming (see figure 5).



Figure 5 - Impacts of GHG emissions on biodiversity

GHG emissions are correlated to global warming and global warming influences biodiversity, through climate change (temperature variations, rainfall disturbances, sea level rise, etc.). This influence can be either negative or positive. Even if it is generally felt negative it is for instance possible that a raise in temperature lead to an improvement of biodiversity, according to local conditions. This relation is therefore indeterminate.

Agricultural Practices – Biodiversity

Figure 6 shows that, directly or through their influence on environment quality, agricultural practices as fertilisers and pesticides application, soil structure alteration and /or Genetically Modified Organism (GMO) introduction impact biodiversity.

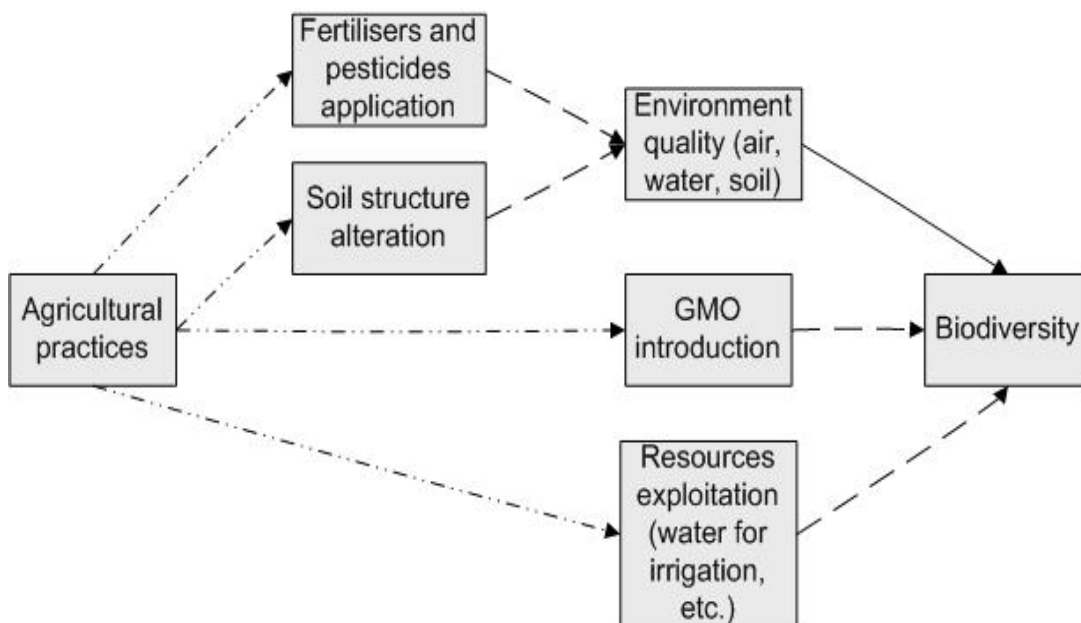


Figure 6 - Impacts of agricultural practices on biodiversity

Good Agricultural Practices (GAP)⁸⁸ can sometimes have positive impacts on biodiversity but most of the times agricultural practices decrease it. This relation is generally inverse.

GMO use can be considered as an agricultural practice. The impacts of GMO on biodiversity can therefore be introduced here.

Agricultural Practices – Greenhouse Gases Emissions

Agricultural practices can also influence GHG emissions (see figure 7). For example, use of fertilisers will increase N₂O emissions. However Good Agricultural Practices can decrease GHG emissions. Agricultural practices are crop- and region-specific according to climate, soil quality or level of mechanisation. Depending on these factors, agricultural practices effects on GHG emissions balance can be either positive or negative. Nevertheless, as agricultural activity (machinery work, fertilisers and pesticides application...) is expected to increase in the future, due (partly) to bioenergy demand, GHG emissions are also supposed to increase. There is a **correlation** between these externalities.

³⁷GAP are described by cross-compliance rules (EC 2003) of Common Agricultural Policy (CAP).

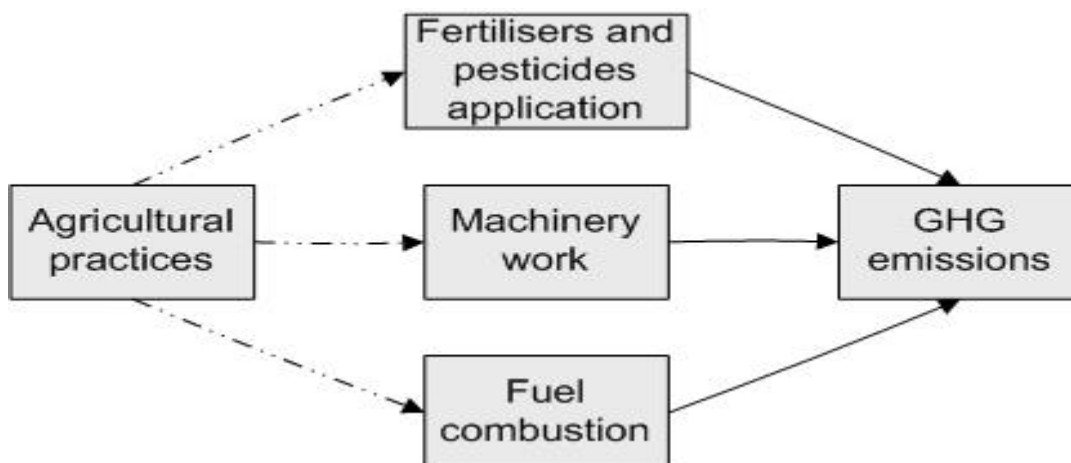


Figure 7 - Impacts of agricultural practices on GHG emissions

Agricultural Practices – Environment Quality

The sustainability criterion “environment quality” includes soil, water and air quality and is influenced by agricultural practices as machinery work, fuel combustion, fertilisers and pesticides application (see figure 8).

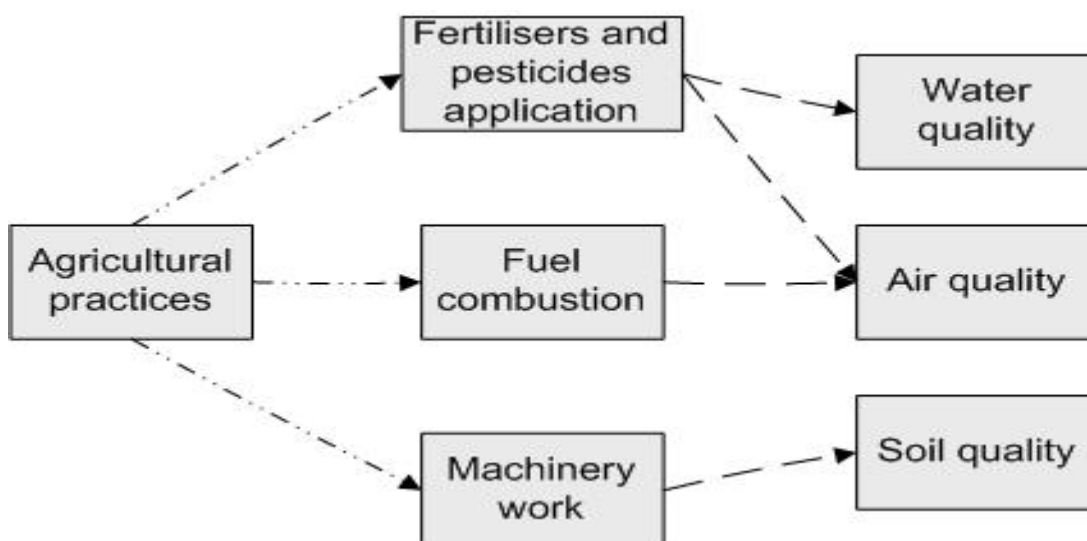


Figure 8 - Impacts of agricultural practices on environment quality and health

Air quality is related to emissions of CO, NO_x, SO₂⁸⁹, metal, PM₉₀, NMVOC, PAH₉₁, and Benzene, themselves depending on agricultural practices. Some practices increase these emissions (for example, use of fertilisers), some decrease them, and some other practices increase some emissions and decrease others.

³⁸ Sulphur dioxide

³⁹ Particulate Matter of different sizes

⁴⁰ Polycyclic Aromatic Hydrocarbons

Agricultural practices have also impacts on soil structure and fertility. GAP should:

- Control erosion, avoid steep slope cultivation,
- Prevent salinisation,
- Preserve nutrient balance and organic matter (for example, pH),
- Promote crop rotation,
- Manage residues removal,
- Reduce burning use,
- Manage waste treatment...

Finally, agricultural practices have impacts on water quality. GAP should:

- Prevent depletion,
- Prevent use from non-sustainable resources,
- Promote efficient use (irrigation),
- Manage treatment and reuse,
- Prevent and correct contamination,
- Manage waste,
- Protect natural courses and wetlands...

If bioenergy routes use GAP, agricultural practices have positive impacts on environment quality, if not, these impacts are negative. But as agricultural activity is expected to increase in the future, due (partly) to bioenergy demand, global impact of agricultural practices on environment quality is supposed to be negative. There is an **inverse** relation between these externalities.

Global Warming – Environment Quality

Figure 9 shows that global warming, through climate change (temperature variations, rainfall disturbances, sea level rise, etc.), influences soil, water and air quality. As impacts of global warming and climate change are only measurable in the long-term, lots of effects are still unknown or not well-understood. This relation is thus indeterminate.

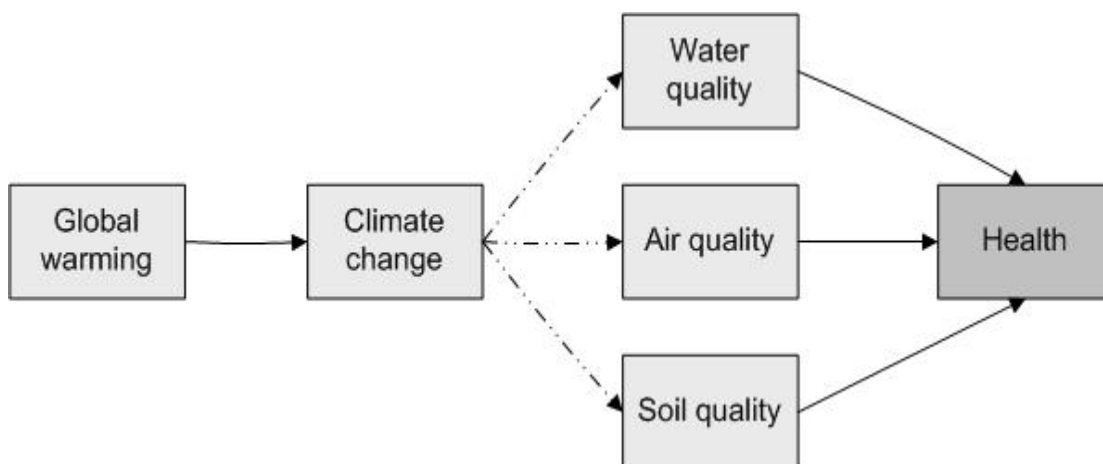


Figure 9 - Impacts of global warming on environment quality and health

Deterioration of air, soil and water quality due to global warming has a negative impact on health.

Environment quality – Local prosperity

Local prosperity can be defined as the income of the population living next to production or conversion site of biomass. Activity created locally by bioenergy production contributes directly, through employment and expenses, and indirectly, through taxes, to income and local prosperity. Activity creation can nevertheless conduct to activity destruction (see figure 11). Activity creation can also generate changes, damages (for example, on environment) that represent a cost for local population. It is thus important to assess net impacts of activity creation. Finally, local prosperity is a self-enforcing criterion which can lead to rural development.

Environment quality is important for local prosperity (see figure 10). Air, soil and water of good quality represent more economic opportunities and less cost (health, damage and/or restoration costs, penalties, etc.) which allows higher investment and activity creation rate, and prosperity.

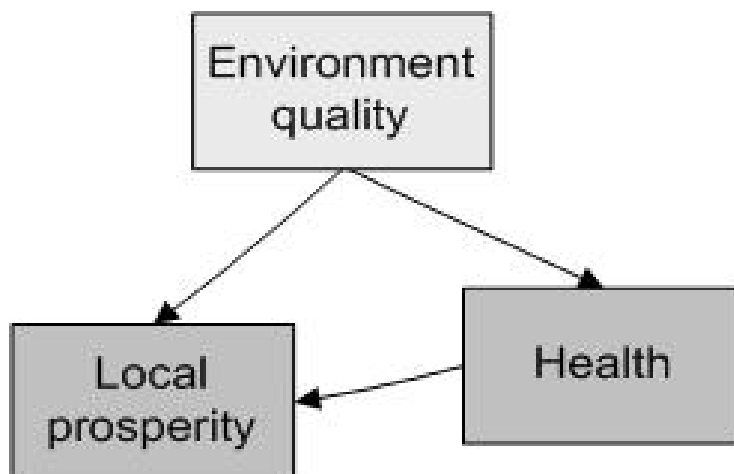


Figure 10 - Impacts of environment quality on health and local prosperity

Environment quality is **correlated** with local prosperity.

Direct and Indirect Land-Use Changes – Local prosperity

Biomass production for energy use is a new opportunity for investment, employment (direct⁹², indirect⁹³ and induced⁹⁴), and value-added. It can contribute to local and rural development.

⁴¹Direct employment is due to the activity of, for example, a new or a bigger bioenergy production plant.

⁴²Indirect employment is due to increased activity for the suppliers of the bioenergy production plant, and for the suppliers of these suppliers, and so on.

⁴³ Induced employment is due to increased spending made by people who get an income from bioenergy

Nevertheless, land-use changes lead to suppression of previous activities (for example, in fossil energy conversion). There are displacement effects. Suppression of activities should be compensated by creation of activities at local level.

The net economic impact of land-use changes must be assessed for each bioenergy route retained.

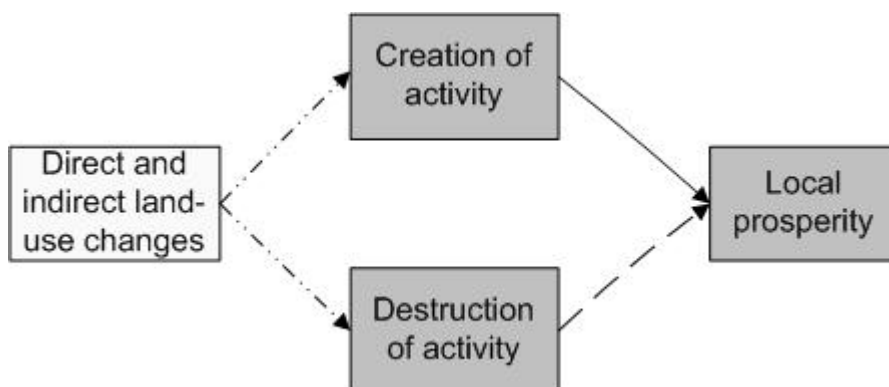


Figure 11 - Impacts of direct and indirect land-use changes on local prosperity

Direct and Indirect Land Use Changes – Competition with food

Direct and indirect land-use changes are partly due to competition between bioenergy and food cultivation.

Direct and indirect land-use changes have impacts on availability of land for food cultivation. As land availability for food cultivation decreases, land price increases. Feed, livestock, and food productions are then more costly.

Impacts of food price increase on local prosperity are nevertheless indeterminate: higher food price represents higher income for local farmers, but increasing price of land can threaten their income. Moreover, poor urban population is the most at risk in front of short and mid-term impacts of land-use changes on food price.

Figure 12 describes the relation between direct and indirect land-use changes and competition with food.

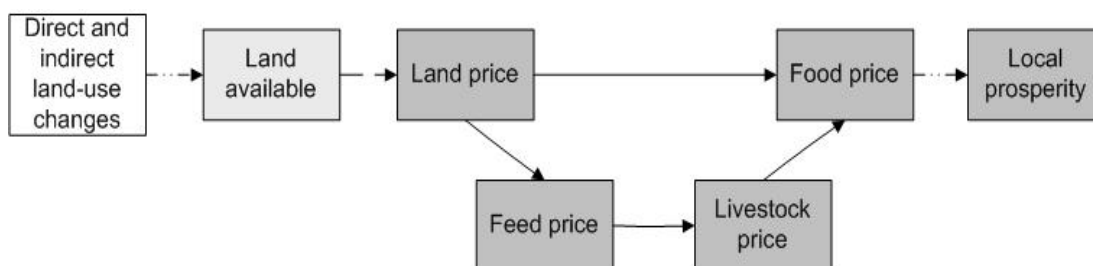


Figure 12 - Impacts of direct and indirect land-use changes on competition with food and local prosperity

Impacts of direct and indirect land-use changes on food market are difficult to measure. Lots of studies exist but give very different estimations of these impacts⁹⁵: from zero impact to dramatic influence on market.

Even if global impacts of direct and indirect land-use changes on prices and local prosperity are difficult to assess and indeterminate, it is clear that there is a **correlation** between land-use changes due to bioenergy production and competition with food.

Production of biomass for energy can also compete with other local biomass applications as energy supply, medicines, and building materials.

Increase in importations⁹⁶ and decrease in exportations⁹⁷ of food (feed and livestock) can threaten food security and independence of bioenergy producing countries.

If available arable land, degraded land or fallow are preferred for bioenergy cultivation, negative impacts of land-use changes on land availability can be limited. Public and private investments in research and increase in yield (Renewable Fuels Agency 2008) can also relax land availability constraint. But this constraint can again be tightened with population and demand increase.

Direct and Indirect Land-Use Changes – Land property rights

Direct and indirect land-use changes impose changes in land property potentially threatening property rights, especially in developing countries. These rights should be clearly defined, documented and legally established; and systems to resolve conflicts should exist.

The relation between direct and indirect land-use changes and land property rights respect is **inverse**.

Direct and Indirect Land-Use Changes – Social well-being

Direct and indirect land-use changes should contribute to the social well-being of local population through:

- Fair and transparent deals,
- Information,

⁴⁴According to date, macro, meso or micro level, and to products considered

⁴⁵ Diversion of domestic use (Renewable Fuels Agency 2008)

⁴⁶Export diversion (Renewable Fuels Agency 2008)

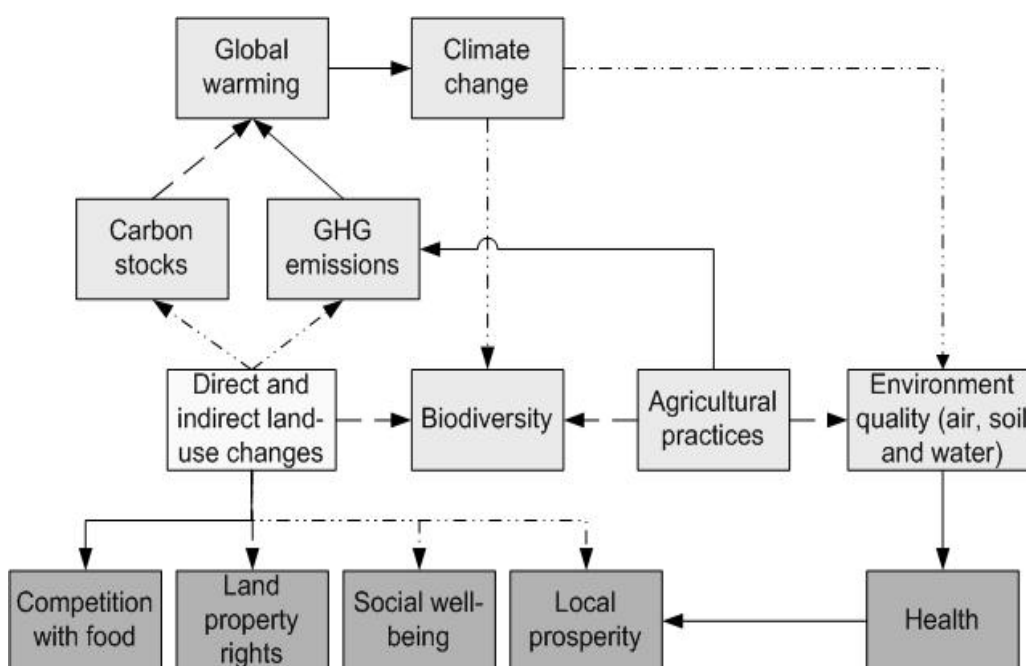
- Discussion possibilities,
- Free consent,
- System to deal with complaints,
- Compensations,
- etc.

Impacts of direct and indirect land-use changes on social well-being promotion are **indeterminate** but must be evaluated for each bioenergy route retained, especially for routes which include biomass importations from developing countries.

The impacts of direct and indirect land-use changes on working conditions (wages, security, legal age...) can be treated as part of local well-being and can be introduced here.

Global qualitative model

Figure 13 gathers all relations described in previous sub-sections and underlines the causal links sustainability criteria can have on each other. This figure is our global qualitative model.



With A having an impact on B:

A → B = when A increases/decreases, B increases/decreases (positive correlation)

A - -> B = when A increases/decreases, B decreases/increases (negative correlation or inverse relation)

A ···→ B = when A increases (decreases), B either increases or decreases (indeterminate relation)

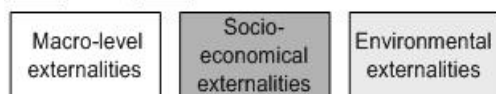


Figure 23 - Articulation of major sustainability criteria

Conclusion

The different sustainability criteria selected have been articulated into a qualitative model. This model defines links between criteria, studied separately, and characterises these relations into positive or negative correlations, and indeterminate relations.

From this modelling, it appears that many interactions between bioenergy externalities are not straightforward. Many of them are time or space-dependent. Agricultural practices vary a lot from one region to another, indirect effects are far from being understood and assessed correctly, long-term effects of climate change are still unknown, etc.

Even if our qualitative model enhances the understanding of relations between bioenergy externalities or sustainability criteria, its limits cannot be ignored. Constant refinement and improvement of this model, especially concerning the indeterminate relations, are necessary. Lots of research efforts are still ongoing on many of these parameters (climate change, biodiversity, indirect effects, etc.) and must be considered when enhancing the model.

Any energy policy or managerial decision based on the results of this qualitative model should consider these limits. Decisions must be reviewed according to the increasing understanding of their impacts and to the qualitative model improvement. Indirect and long-term impacts assessment is difficult whatever the topic considered. The respect of the precautionary principle appears as a wise way to deal with these sources of uncertainty.

On the basis of the final consolidated qualitative model, we intend to build a quantitative model. It should allow, on the one hand, the monetization of measurable sustainability criteria and their introduction in a policy support tool, and, on the other hand, the qualitative assessment of other sustainability criteria and their potential introduction in a certification scheme.

References

- ACCS (2007a). *AFS Standards for the On Farm Cold Crush Processing of Oilseeds into Meal*. Final Version.
- ACCS (2007b). *Assured Combinable Crops and Sugar Beet Scheme Standards*. Final Version.
- Adams, M.A. & Ghaly, A.E. (2006). An Integral Framework for Sustainability Assessment in Agro-Industries: Application to the Costa Rican Coffee Industry. *International Journal of Sustainable Development and World Ecology* 13:2, 83-102.
- Atkinson, G. & Mourato, S. (2007). Environmental Valuation: A Brief Overview of Options. *Milan European Economy Workshops Working Paper 7*.
- Avonds, L., Deguel, V., Hambye, C., Van Den Cruyce, B., Wera, J. & Gilot, A. (2004). *Tableaux Entrées – Sorties de la Belgique pour 2000*. Federal Planning Bureau.
- CASES (2006). Non Technical Presentation of CASES.
- CASES (2007). *A Database of Studies on Energy-related External Costs due to Land Use Changes, Acidification and Eutrophication, Visual Intrusion and Climate Change*. Deliverable 31.
- Cert ID (2006). *Cert ID Releases the ProTerra Standard for Socially and Environmentally Responsible Food and Feed Production*.
- Cramer, J. & Members of Project Group “Sustainable Production of Biomass” (2006). *Criteria for Sustainable Biomass Production*. Final Report.
- De Palma, A. & Zaouali, N. (2007). *Monétarisation des Externalités de Transport : un Etat de l’Art*.
- Dehue, B., Hamelinck, C., De Lint, S., Archer, R., Garcia, E. & Van Den Heuvel, E. (2007). *Sustainability Reporting within the RTFO: Framework Report*. Ecofys Report.
- Denruyter, J.-P. (2007). *Sustainability of Bioenergy*. Presentation.
- EC (2003). No1782/2003 – *Establishing common rules for direct support schemes under the Common Agricultural Policy and establishing certain support schemes for farmers (...)*.
- EPA (2003). *Ozone, Good Up High, Bad Nearby*. U.S. Environmental Protection Agency.
- EPA (2006). *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006*. U.S. Environmental Protection Agency.

Federal Planning Bureau (2006). *Outils et Méthodes du Bureau Fédéral du Plan*. Working Paper 7.

Forest Stewardship Council (2002). *FSC International Standard – FSC Principles and Criteria for Forest Stewardship*. Version 4.0.

Fritsche, U.R., Hünecke, K., Hermann, A., Schulze, F., Wiegmann, K. & Adolphe, M. (2006). *Sustainability Standards for Bioenergy*. WWF Germany.

GLOBALG.A.P. (EUREPGAP) (2007). *Control Points and Compliance Criteria Integrated Farm Insurance (Introduction)*. Version 3.0.

Hektor, B. (2002). *Socio-Economic Management Models for the Bioenergy Sector*. IEA Bioenergy: Task 29 – Socio-Economic Aspects of Bioenergy Systems.

IFOAM (2002). *Biodiversity and Landscape Standards*. D2 – Draft.

Jenkins, G., Kuo, C.-Y. & Ozbaflı, A. (2007). Cost-Benefit Analysis Case Study on Regulations to Lower the Level of Sulphur in Gasoline. *Queen's Economic Department Working Paper* 1134.

Madlener, R. & Myles, H. (2000). *Modelling Socio-Economic Aspects of Bioenergy systems*. A Survey Prepared for IEA Bioenergy Task 29 Workshop in Brighton (UK), 2nd July 2000.

Mas-Colell, A., Whinston, M. & Green, J.R. (1995). *Microeconomic Theory*. New York: Oxford University Press, 352.

McNeely, J.A., Gadgil, M., Leveque, C., Padoch, C. & Redford, K. (1995). Human Influences On Biodiversity. In Heywood, V.H. & Watson, R.T. (Eds). *Global Biodiversity Assessment*. Cambridge: UNEP, 711-822.

O'Doherty, J. & Tol, R.S.J. (2007). *An Environmental Input-Output Model for Ireland*. Working Paper.

Pearce, D., Atkinson, G. & Mourato, S. (2006). *Cost-Benefit Analysis and the Environment – Recent Developments*. OECD.

PEFC (1998). *Pan-European Criteria and Indicators for Sustainable Forest Management*. 3rd Ministerial conference on the protection of forests in Europe, 2-4 June 1998, Lisbon/Portugal. Annex 1 of the resolution L2.

ProForest (2004a). *The Basel Criteria for Responsible Soy Production*. Report for Coop Switzerland in cooperation with WWF Switzerland.

ProForest (2004b). *The Basel Criteria for Responsible Soy Production: Local Interpretation for Use in Brazil*. Report for Coop Switzerland in cooperation with WWF Switzerland.

Renewable Fuels Agency (2008), *The Gallagher Review of the Indirect Effects of Biofuels Production*.

Riedacker, A. (2007). *A Global Land Use and Biomass Approach to Reduce Greenhouse Gas Emissions, Fossil Fuel Use and to Preserve Biodiversity*. Climate Change Modelling and Policy. Nota di Lavoro 61.

RTRS (2006). *Principles of the Round Table on Responsible Soy*. Final draft.

SAN/RA (2008). *Sustainable Agriculture Standard*.

Searchinger, T., Heimlich, R., Houghton, R.A., Dong, F., Elobeid, A., Fabiosa, J., Tokgoz, S., Hayes, D. & Yu, T.-H. (2008). Use of U.S. Croplands for Biofuels Increases Greenhouse Gases through Emissions from Land-Use Change. *Science* 319, 1237-1240.

Sitch, S., Cox, P. M., Collins, W. J. & Huntingford, C. (2007). Indirect radiative forcing of climate change through ozone effects on the land-carbon sink. *Nature* 448, 791-794.

Smeets, E., Juginger, M., Faaij, A., Walter, A. & Dolzan, P. (2006). *Sustainability of Brazilian Bio-ethanol*. Report NWS-E 110.

Stirling, A. (1997). Limits to the Value of External Costs. *Energy policy* 25:5, 512-540.

Stravroulia, H. (2003). *Socio-Economic Impacts of Biomass Deployment for the Production of Heat and Electricity*. Thesis submitted for the MSc degree Energy Systems and the Environment. University of Strathclyde Mechanical Engineering Department.

Stupak, I. (2007). *Do Current Forest Certification Schemes Ensure Sustainable Woodfuel Harvesting?* Presentation.

Tipper, R., Woods, J., Garstang, J., Vorley, B. (2006). *Draft Environmental Standards for Biofuels*. ECCM – IIED – ADAS and Imperial College report, commissioned by the LowCVP.

UTZ Certified (2007). *Code of Conduct*.

Van Dam, J., Juginger, M., Faaij, A., Jürgens, I., Best, G. & Fritsche, U. (2006). *Overview of Recent Developments in Sustainable Biomass Certification*. Draft Paper written within the frame of IEA Bioenergy Task 40.

Van Stappen, F., Schenkel, Y. & Brose, I. (2008). *Sustainability Criteria and Certification for Biomass and Bioenergy: State-of-the-Art and Propositions in the Belgian Context*. TEXBIAG project publication, funded by the Belgian Science Policy.

Varian, H.R. (1994). *Introduction à la Microéconomie*. Brussels: De Boeck (3rd edition), 589.

WWF Germany (2007). *Rain Forest for Biodiesel ? – Ecological Effects of Using Palm oil as a Source of Energy*.

SUPPLY CHAIN ISSUES OF BIO-ENERGY PRODUCTION: A Literature Review

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Abstract

This paper presents a literature review of selected articles published in English-speaking peer-reviewed journals, which cover the interface of bio-energy production and issues of logistics and supply chain management. The articles are assessed according to (1) topic and research method, as well as (2) feed stock, technology, energy end application, and part of supply chain under examination. Moreover, issues and challenges in the context of bio-energy chains have been classified into (1) transport, handling, pre-treatment, storage, (2) logistics in general, (3) system design, (4) supply security, and (5) purposes of bio-energy supply chains apart from energy production. Although biomass supply chains are manifold in terms of size, design, and functioning, most relevant issues regarding logistics and supply chain management of bio-energy production are identified. The findings are discussed against the backdrop of bio-energy as sustainable renewable energy option.

Keywords: Biomass, bio-energy, supply chain management, logistics, literature review.

Introduction

Declining stocks of fossil fuels have entailed the need to search more intensely for renewable energy options in recent years. Following the concept of sustainable development as defined by the Brundtland Commission, energy systems should be ecologically, socially, and economically sustainable, so that the present generation is able to meet its energy needs without compromising the ability of future generations to meet their energy and other needs (WCED 1987). Thereby bio-energy could play a substantial role, since it helps preserve non-renewable resources, improves energy security, mitigates the greenhouse effect, and promotes regional development (McComick & Kåberger, 2007; Ecosense 2007) as well as rural diversification. On a community level, bio-energy may contribute to job creation and income improvement (Elghali et al. 2007). In contrast to current solar and wind energy technologies, bio-energy offers an “energy inventory”, which may be used for optimising the power grid by providing peak load services. The sustainable technical potential of bio-energy is substantial: The German Advisory Council on Global

Change estimates a potential of 80 to 170 EJ (1 EJ=10¹⁸ J) per year for the year 2050, which equals one quarter of the current primary energy use and one tenth of the energy use to be expected in 2050. Hereby, energy from waste and residual materials account for a considerable part of approximately 50 EJ (WBGU 2009). However, the contribution of biomass to the future global energy supply is a contentious issue due to different estimations of the main parameters land availability and yield levels which Berndes, Hoogwijk and van den Broek (2003) show in their review of 17 studies.

Critics pointing to the adverse sustainability balance of certain forms of bio-energy production when considering its whole life-cycle have gained more and more scientific and public attention in recent years. Bio-ethanol production is one example of such a contentious bio-energy form. Puppán (2002) comes to the conclusion that the environmental life-cycle balance of bio-diesel and ethanol is much more favorable than those of fossil fuels, if the agricultural climate conditions are advantageous. In contrast, a review of studies comparing bio-ethanol systems to conventional fuels on a life cycle basis conducted by von Blottnitz and Curran (2007) reaches the conclusion that the balance of environmental impacts of current liquid fuels from biomass is ambiguous. Apart from the definite advantage of bio-fuels to reduce resource use, their impacts e.g. on acidification, human and ecological toxicity and eutrophication have been evaluated more often unfavourably than favourably (von Blottnitz & Curran 2007). Moreover, energy efficiency of bio-fuels varies strongly according to plant species, climate, and production technique: Bio-ethanol from Brazilian sugar cane yields 8 units bio-energy output from one unit fossil fuel input into the production process. Biodiesel produced from rapeseed in the EU has a ratio of 1:2.5, while bio-ethanol from US corn merely holds an efficiency of 1:1.5 (Böttinger, Leschus & Vöpel 2008; GTZ 2006).

Apart from these environmental and efficiency issues illustrated above, there are major additional problems linked to bio-energy, of which only some can be mentioned in the framework of this paper: Challenges arise from competing land use between biomass production for food, material and energy use, which may have severe repercussions primarily in developing countries (Kerckow 2007). In these regions, food shortages may be reinforced, together with fuel poverty, since the cultivated energy crops represent commodities to be exported to the industrialised world. As well, water shortage may be severely exacerbated in certain regions by the cultivation of energy crops (Gerbens-Leenes, Hoekstra & van der Meer 2009). Moreover, conversion of former grasslands or woodlands into agricultural lands used for the production of energy crops or into forest monocultures may release great amounts of green-house gas. In this respect, one extreme example is the conversion of tropical and subtropical rain forests into oil palm monocultures, which, in addition, harms irreversibly the sensitive soil and may lead to desertification in the long run (WBGU 2009).

When evaluating bio-energy production, a system perspective has to be taken comprehending the components biomass resources, supply systems, conversion technologies, and energy services. In practice many idiosyncratic combinations of these components are possible, which makes direct comparisons between different bio-energy systems difficult (McComick & Kåberger 2007). Still, it is obvious that providing economically, environmentally and socially sustainable bio-energy requires an optimisation of the structure and functioning of the supply chain/network,

adjusted to the specific conditions of the respective production system (climate and topology, feedstock, production technology, final application). McComick and Kåberger (2007) underline that supply chain management and co-ordination is most important when introducing bio-energy systems. The whole supply network has to be actively integrated thus realising synergies and meeting the needs of all supply chain actors. In terms of activities, harvesting, refining and transporting of biomass are key issues, which must be facilitated by supply chain and operations management as well as the adoption of most adequate technologies. Berglund (2006) points to costly transport to centralised biogas plants and high costs for cultivating energy crops as possible barriers for realising the full potential of biogas energy production. Functioning SCM systems, proactively managed relationships, and long-term contracts may turn out to be essential for encouraging farmers to invest in energy crops (McComick & Kåberger 2007).

These considerations confirm the high relevance of SCM and logistics issues for the implementation of bio-energy production systems and hence make this topic a suitable subject for a research literature review. The extant paper reviews and assesses systematically a sample of papers dealing with this subject, published in English-speaking peer-reviewed journals. Thus, it aims at contributing to structure the field at the interface of bio-energy production and supply chain management (SCM) and it intends to identify most relevant issues.

The structure of the paper is as follows: after defining basic terminology, the methodology of a literature review is outlined. The sample of papers are assessed according to the topic, research method, feed stock, technology, energy end application, part of supply chain under examination as well as issues and challenges in the context of bio-energy chains. Subsequently the findings are discussed against the backdrop of bio-energy as sustainable renewable energy option.

Sustainability, Logistics Management, Supply Chain Management and Bio – Energy - Terms and Definitions

The Brundtland Commission shaped one of the most well-known definitions of sustainability, highlighting the equal right of present and future generations to meet their respective needs. (WCED 1987). Elkington (1997) posits the integration of the intensely interrelated economic, ecological and social aspects of sustainability in a “triple-bottom line”. Also Dyllick and Hockerts (2002) point to the three facets of sustainability, conceiving corporate sustainability as the business case (economic), the natural case (environmental), and the societal case (social).

Biomass comprises wood, agricultural residues, energy crops, human and animal excrement as well as industrial and municipal bio-degradable waste (Allen et al. 1998). Bio-fuels are solid, liquid, and gaseous fuels based on biomass. Bio-energy is defined as energy (heat, electricity, gas, transport fuels) from bio-fuels (McComick & Kåberger 2005).

The Council of Supply Chain Management Professionals (CSCMP) defines logistics management as “that part of supply chain management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods,

services and related information between the point of origin and the point of consumption in order to meet customers' requirements" (CSCMP n.d.).

Mentzer et al. (2001) coined commonly used and well-adopted definitions of supply chains and SCM. They define the supply chain as "a set of three or more entities (organisations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer" (Mentzer et al. 2001: 4f.). SCM means „the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole" (Mentzer et al. 2001: 18).

The extant paper conducts a literature review with the principal aim of exploring SCM and logistics issues relevant to bio-energy production systems, considering the need of designing them economically, ecologically and socially sustainable.

Methodology – Literature Review

In this chapter the methodology of the literature review presented in the extant paper is briefly outlined. "A research literature review is a systematic, explicit, and reproducible design for identifying, evaluating, and synthesizing the existing body of completed and recorded work produced by researchers, scholars, and practitioners." (Fink 2005: 3) A literature review aims at providing an in-depth account of research conducted in a certain field and thus represents a first step in the theory development process (Mentzer & Kahn 1995; Meredith 1993). It may be regarded as an archival research method (Searcy & Mentzer 2003).

Our process of analysis is structured in the following four steps (Mayring 2003; Srivastava 2007):

- a) Defining the unit of analysis: The unit of analysis has been defined as a single research paper.
- b) Collecting publications and delimiting the body of literature: Our literature review focuses upon English-speaking peer-reviewed journals, since they are the most common resources for information exchange among researchers. To establish a time span, a starting point was set at 2000. The paper sample was compiled by conducting a literature search based on the combinations of descriptors (1) "biomass", "bio(-)energy" and "supply chain", and (2) "biomass", "bio(-)energy" and "logistics", using major databases and library services: Emerald (www.emeraldinsight.com), Springer (www.springerlink.com), Wiley (www.wiley.com), Scopus (www.scopus.com). In total, we identified 69 papers published, dispersed over several journals. Out of this sample of 69 articles we picked a sub-sample of 11 articles and evaluated them; in the extant paper we present the findings of this preliminary review. Although we analysed just a minor part of our sample, the actually used sub-sample still well serves the purpose of exploring relevant issues regarding the research field at the interface of bio-

energy and logistics/SCM. Follow-up work should look at a broader sample of articles, validating and refining the findings.

- c) Classification context: Assessing the classification context to be adopted in the literature review helps to structure and classify the material. There are two contexts: context 1 refers to a paper's overall characteristics such as topic, method and scope; context 2 addresses more detailed issues emerging at the interface of SCM / logistics and bio-energy.
- d) Material evaluation: The material is reviewed and analysed according to the classification context. Classification context 1 applies pre-defined categories for analysing main characteristics of the papers as regards content and method: (1) topic and research method, as well as (2) main features of the bio-energy system, namely feed stock, technology, energy end application, and part of the bio-energy supply chain under examination. Classification context 2 structures issues and challenges in the context of bio-energy chains according to the following inductively derived categories: (1) transport, handling, pre-treatment, storage, (2) logistics in general, (3) system design, (4) supply security, and (5) purposes of bio-energy supply chains apart from energy production. These categories have been identified in an iterative process of category building, testing and revising by constantly comparing categories and data (Eisenhardt 1998; Mayring 2000). Table 1 briefly describes the categories.

Table 1: Issues at the interface of SCM / logistics and bio-energy

Category	Description
Transport, handling, pre-treatment, storage	These operations influence crucially both economic and environmental performance in bio-energy chains.
Logistics in general	Supply logistics, addressed generally and/or comprising various aspects, has a major impact on bio-energy chains.
System design	System design is the challenging task of effectively and efficiently designing and operating bio-energy systems, taking into account the interests of all stakeholders.
Supply security	Ensuring supply security is an objective of outstanding relevance for bio-energy plant operators.
Other purposes of bio-energy supply chains	Apart from energy production, bio-energy supply chains may serve also other objectives.

Source: Own illustration

Overview of Studies

Table 2 gives an overview over the basic topic of the paper and the principal research method(s) applied by the author(s).

Table 2: Topic and research method

Paper	Topic	Research method
Ayoub et al. 2007	Development of a two-levels' general Bio-energy Decision System for bio-energy production planning and implementation.	Development of a decision system methodology starting from a literature review; Case study: electricity from forestry residues in Japan.
Berglund & Börjesson 2006	Life-cycle assessment of energy performance.	Calculations on basis of data from literature reviews.
Börjesson & Berglund 2006	Analysis of fuel-cycle emissions according to different biogas systems.	Fuel-cycle emissions calculations based on literature reviews.
Börjesson & Berglund 2007	Analysis of the overall environmental impact when biogas systems are introduced and replace various reference systems for energy generation, waste management and agricultural production.	Analysis based on literature reviews.
Caputo et al. 2005	System analysis investigating the economical feasibility of biomass utilisation for direct production of electric energy through combustion and gasification processes, considering the technical, organizational and logistical issues.	Economic feasibility analysis.
Elghali et al. 2007	Multi-criterion decision analysis framework and decision-conferencing approach for assessing the sustainability of potential short-term projects and long-term scenarios	Development of a methodology by literature review. Illustrative supply chain of willow.

	concerning bio-energy systems.	
Madlener & Bachhiesl 2007	Detailed case study on Austria's largest biomass cogeneration plant.	Case study.
Perry & Rosillo-Calle 2008	Trends and future opportunities in UK bio-energy.	Literature analysis.
Puy et al. 2008	Application and adaption of the methodology of integrated assessment focus groups in order to understand and analyse the enhancing factors, as well as the constraints which drive or limit the take-off and development of sustainable forest biomass energy systems in a selected large forested area of the Mediterranean basin.	Integrated assessment focus groups on basis of a literature analysis.
Rentizelas, Tatsiopoulos & Tolis 2009	Decision support system (DSS) aiming at supporting an investor by thoroughly assessing an investment in locally existing multi-biomass exploitation for tri-generation applications (electricity, heating and cooling), in a given area.	Model (Decision Support System - DSS) combining analytical biomass logistics calculations with holistic bio-energy system modeling and optimization. Case Study based on statistical data for the biomass available in the region.
Uslu, Faaij & Bergman 2008	Assessing which pre-treatment method(s), at what point of the chain, with which conversion technology would give the optimal power and fuel delivery costs for international biomass supply chains.	Techno-economic analysis of key pre-treatment technologies. Calculation of energy and mass balances and economic performances of the chains selected.

Source: Own illustration. Table contents contain excerpts from the respective papers.

Table 3 presents the design of the bio-energy systems dealt with in the papers and the section framed by the researchers. Namely, feedstock, technology, energy end application, and the part of the supply chain under examination are assessed.

Table 3: Feedstock, technology, end application, and part of the supply chain

Paper	Feedstock	Technology	End application	Part of supply chain
Ayoub et al. 2007	All biomass. Case study of forestry residues.	Fluid bed combustion system, followed by steam turbine cycle power generation.	Electricity.	Whole supply chain.
Berglund & Börjesson 2006	Manure (cow); manure (pig); grease separator sludge; ley crops; municipal organic waste; slaughterhouse waste; tops and leaves of sugar beet; straw.	Biogas production (fermentation).	Heating, electricity generation, vehicle fuel, distribution on the national gas grid.	Whole chain/system.
Börjesson & Berglund 2006	Ley crops; straw; tops and leaves of sugar beet; liquid manure (pig); food industry waste; municipal organic waste (sorted).	Biogas production (fermentation).	Boilers for heat production, in turbines for co-generation of heat and electricity, or as a transportation fuel in light- and heavy-duty vehicles.	Whole chain.
Börjesson & Berglund 2007	Ley crops; straw; tops and leaves of sugar beet; manure; food industry waste; municipal organic waste.	Boilers for heat production; gas turbines for co-generation of heat and power; vehicles.	Heat, power and transportation fuel.	Whole system.
Caputo et al. 2005	Biomass.	Combustion; gasification-conversion processes; fluid bed combustion	Electricity.	Whole chain/system.

		followed by steam turbine.		
Elghali et al. 2007	Energy crops; agricultural and forestry residues.	Heat and power plants; bio-fuel production; power plants co-fired with fossil fuels; gasification.	Heat and power; bio-diesel and bio-ethanol.	Whole system.
Madlener & Bachhiesl 2007	Wood chips from forest residues.	Biomass cogeneration plant.	Heat and power.	Whole chain.
Perry & Rosillo-Calle 2008	Energy crops; various residues.	Co-firing; production of transport fuels.	Transport fuel; electricity, heat.	Whole chain with special focus on pretreatment and transport.
Puy et al. 2008	Forest, forest residues, agricultural woody crops, sawmill industries and bulky wastes	Cogeneration plant.	Heat and electricity.	Whole chain.
Rentizelas, Tatsiopoulou & Tolis 2009	Wheat straw; corn stalks; cotton stalks; olive tree prunings; almond tree prunings.	Biomass combined heat and power plant (fluidised bed combustion, pyrolysis).	Tri-generation applications (electricity, heating and cooling).	Whole chain/system.
Uslu, Faaij & Bergman 2008	Energy crops; forest residues.	Key pre-treatment technologies: torrefaction, pyrolysis, pelletisation. Final conversion technologies: Entrained Flow Gasification for Fischer Tropsch (FT) liquid production, biomass integrated gasification combined cycle, combustion and co-firing for power	Bio-oil; FT-liquid; electricity.	The chain assumptions were based on feedstock harvested in South America (Brazil) and the final conversion applied in North-West Europe.

		production.		
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Source: Own illustration. Table contents contain excerpts from the respective papers.

SCM / Logistics Issues and Challenges of Bio-Energy Chains

This chapter presents a classification of most relevant SCM / logistics issues and challenges in the context of bio-energy chains addressed in the paper sample: (1) Transport, handling, pre-treatment, storage, (2) logistics in general, (3) system design, (4) supply security, (5) purposes of bio-energy chains apart from energy production.

Transport, handling, pre-treatment, storage

Transport distance impacts heavily both the emissions from the bio-energy production chain (Börjesson & Berglund 2006), such as the photochemical oxidant creation potential (Börjesson & Berglund 2007) and the total operating costs (Caputo et al. 2005; Madlener & Bachhiesl 2008; Puy et al. 2008). Thereby, the transport distances reported to be acceptable vary according to the form of bio-energy and the feedstock. Puy et al. (2008) suggest limiting the transportation distance up to 50 km for woody biomass processed in a cogeneration plant, whereas Börjesson and Berglund (2006) report that transport distances for biogas feedstock (fermentation) lie between approximately 3 and 15 km. However, from an energy balance perspective, manure can be transported for some 200 km and slaughterhouse waste up to 700 km before the energy balance of biogas production turns negative (Berglund & Börjesson 2006). Overall, transport of raw materials currently contains less reduction potential concerning the energy consumption than, for example, technologies for the upgrading of biogas to natural gas quality (Börjesson & Berglund 2006).

The logistics of biomass fuel supply is complex due to the intrinsic feedstock characteristics: limited period of availability and scattered geographical distribution (Caputo et al. 2005; Madlener & Bachhiesl 2008). Similarly, the collection of organic waste in rural areas increases the necessary energy input three to four times in comparison to urban areas (Börjesson & Berglund 2006). Madlener and Bachhiesl (2008) state that biomass supply logistics are severely impacted by available modes of transport and need combined transport and extensive handling space. For saving transport and handling costs, and for improving the efficiency of the final conversion, densification of the biomass is crucial. From the economic and environmental point of view, torrefaction in combination with pelletisation is the optimal pre-treatment (Uslu, Faaij & Bergman 2008). Ayoub et al. (2007) report that forestry residues are chipped at the harvesting site using a mobile chipper and then transferred to the roadside using small size forwarders. Transportation of the chips along the roadside to the storage place is done by small size trucks, transportation to the conversion facility by medium capacity trucks. Madlener and Bachhiesl (2008)

on the other hand state that a large-scale wood chipper produces wood chips at the manipulating site in the desired quality and quantity, which are then delivered just-in-time to the plant. A storage facility for solid roundwood and wood chips serves as a buffer.

Börjesson and Berglund (2007) assess that 5 to 10%, or even up to 20%, of the total amount of biogas produced at biogas plants is generated during the storage of digestates. Uncontrolled losses of methane may account for approximately 0.5 to 1% of the total methane flow at the plant. Therefore, it is of special importance to collect the biogas produced during storage, or to cleanse excess gas in a compost filter (Börjesson & Berglund 2006).

Logistics in general

Logistics is considered to have major impacts on the bio-energy plants' profitability, while scale effects are very significant. Main logistic variables are for example specific vehicle transport costs, vehicles capacity or distribution density (Caputo et al. 2005). Other operational issues of high relevance is finding effective storage and feeding mechanisms for the biomass (Perry & Rosillo-Calle 2008). Power generated from biomass is regarded to be more expensive than power from fossil fuels partly due to high logistic costs in the biomass supply chain. The low calorific value and low bulk density of biomass in comparison to coal and oil necessitates a larger number of lorry movements (Caputo et al. 2005). Thus, gasification is found to be more beneficial than combustion under adverse logistic conditions, marked by high biomass specific transport costs, low vehicles capacity and biomass distribution density, particularly in case of ample plant capacity (Caputo et al. 2005).

Ayoub et al. (2007) highlight the important competency of managing biomass logistics and power plant positioning by optimising the transport routes through network optimisation techniques. Sustainability of biomass exploitation is ensured by determining which biomass is feasible for collection in what quantities, the collection points and, hence, their geographical position. Puy et al. (2008) and Madlener and Bachhiesl (2007) also confirm that supply logistics play an important role and often constitute the restricting factor when establishing bio-energy systems.

System design

The biomass chain may be disassembled into biomass cultivation and harvesting, loading, transportation, handling and warehousing, processing of the feedstock, disposal or recycling of residues such as ashes and digestate, and production of ancillary inputs (agrochemicals, transport fuels, equipment) (Rentizelas, Tatsiopoulos & Tolis 2009; Elghali et al. 2007). Introducing domestic biomass supply systems require considerable logistical mobilisation as well as infrastructure for waste recovery and the use of multi-biomass feedstock (Perry & Rosillo-Calle 2008). On the other hand, multi-biomass supply chains also entail potential for cost reduction since they allow spreading capital costs and dropping warehousing

requirements when complementary seasonal biomass types are combined (Rentizelas, Tatsiopoulos & Tolis 2009).

Bio-energy supply chains involve many inter-dependencies between growers, intermediaries, plant operators, governmental bodies and the public. Hence, they are, on the one hand, vulnerable to risks regarding planning consent as well as to public and stakeholder concerns (Elghali et al. 2007). Stakeholders of bio-energy systems are namely “biomass feedstock producers and suppliers; heat, electricity and biofuel project developers, utilities and transport fuel suppliers, and end-users; the financial community; technology providers (e.g. processing plant); policy makers, regulators and planners; members of communities directly affected” (Elghali et al. 2007: 6076). For example, local opposition may prohibit the installation of bio-energy conversion facilities too close to the district heating and cooling customers (Rentizelas, Tatsiopoulos & Tolis 2009). On the other hand, upstream decision making heavily affects downstream activities in the chain. For example, a cheap harvesting method may require costly transportation and conversion facilities, overall increasing both costs and CO₂ emissions per produced energy unit (Ayoub et al. 2007). Börjesson and Berglund (2006) point out too that the need of extensive handling of the raw materials increases the CO₂ emissions significantly.

Uslu, Faaij and Bergman (2008) underline that well-designed supply chains facilitate energy-efficient and economic international trade of biomass. Madlener and Bachhiesl (2008) point to economic synergies when integrating the biomass cogeneration unit into an existing site due to (1) existing ancillary installations, such as road and rail access as well as connection to the electrical and district heating grid, and (2) requirements for plant operation and maintenance, such as a skilled workforce. The large variety of bio-energy system designs renders the search for the optimal solution a challenging task. In particular, there are various biomass sources (such as wood, agricultural crops and their by-products, municipal waste, industrial residues), various conversion approaches and varied end-use applications (power, heat, fuel) (Caputo et al. 2005). Börjesson and Berglund (2007) affirm that it is crucial that biogas systems have to be designed and located in a prudent manner. The choice of replacing other bio-energy systems by biogas must be carefully considered taking into account the specific conditions.

Supply security

Perry and Rosillo-Calle (2008) hint towards the phenomenon that rising global demand may increase the prices of by-products used as bio-energy feedstock. This is for example the case for distiller's dried grains with soluble and rapemeal which are currently world-wide consumed and traded as protein-rich animal feeds, thus causing competition between husbandry and bio-energy production. The paper states that using imported feedstock rather than relying on local biomass entails additional risks with regard to supply security due to the competition with rival buyers from other industry sectors. On the other hand, domestic biomass sources such as straw, short rotation coppice and wood fuel require building up dedicated supply chains and processing equipment. In contrast, some imported feedstock such as palm kernel

expeller, olive cake and wood pellet are commodities easily to be purchased and they require less processing for combustion. Elghali et al. (2008) report that security and stability of bio-energy supply chains may be enhanced by using both domestic and imported biomass. Madlener and Bachhiesl (2007) point to the availability and security of a local (regional) fuel supply as important issue for the establishment of bio-energy systems. In this context, Puy et al. (2008) mention the severe impacts of forest fires to supplier guarantees in the case of Mediterranean countries.

Other purposes of bio-energy supply chains

Some studies refer to additional major objectives apart from energy production when introducing bio-energy systems. In this respect, Berglund and Börjesson (2006) and Börjesson and Berglund (2007) highlight the reduction of plant nutrients leaching from arable land by anaerobic biogas production and the subsequent use of the digestate as a fertiliser. Furthermore, land filling may be replaced by more sustainable waste management systems, into which, for instance, biogas production (fermentation) of municipal or industrial organic waste are involved. In Sweden, the national waste handling policy bans landfilling with organic waste and stipulates the use of biological treatment methods (such as anaerobic digestion or composting) of wet organic waste. Sewage sludge and waste water represents indeed a considerable part of today's total biogas production in Sweden, amounting to approximately 3 PJ/year out of a total of 5 PJ/year.

Discussion

Given the large variety of different bio-energy system designs and, in addition, the rather high flexibility in operating them, a sustainability evaluation necessarily has to look at the specific conditions of the individual bio-energy system under examination, taking the whole system into account comprehending the components biomass resources, supply systems, conversion technologies, and energy services. Sustainability evaluation has to consider the "triple-bottom line", comprising and integrating economic, ecological and social aspects of sustainability (Elkington 1997). Our literature review shows that SCM and logistics issues are assigned a crucial role for ensuring the sustainability of bio-energy systems. This starts when deciding over the basic structure of the bio-energy system (feedstock, conversion technology, end application) (Caputo et al. 2005) and continues with specific questions of transport, handling, warehousing and storage systems (Ayoub et al. 2007) or of pre-treatment procedures of biomass feedstock (Uslu, Faaij & Bergman 2008).

The literature analysis shows that the energy balance (bio-energy output minus fossil fuel input) differs significantly according to transport distances, feedstock and conversion technologies (Börjesson & Berglund 2006, 2007; Caputo et al. 2005; Madlener & Bachhiesl 2008; Puy et al. 2008). Additionally, economic viability must be clearly distinguished from a positive energy balance. While the energy balance of

manure and slaughterhouse waste transports for biogas production turns negative after approximately 200 km and 700 km respectively according to the analysis of Berglund and Börjesson (2006), actual transport distances usually lie between 3 and 15 km (Börjesson & Berglund 2006), indicating that biogas production systems in most cases lose their profitability if the feedstock catchment area exceeds the radius of 15 km.

Sustainability innovations such as the establishment of modern bio-energy systems often point to the development, diffusion, and use of novel technologies. However, it is necessary to consider as well organisational and social aspects when designing strategies for sustainable development (McCormick & Kåberger 2005). This is confirmed by our literature sample, which highlights the tight inter-connectedness of actors in bio-energy chains (Ayoub et al. 2007) necessitating their co-ordination and collaboration (McCormick & Kåberger 2007) as well as well-designed logistics planning and management (Allen et al. 1998). These inter-dependencies expand beyond the sphere of the economic actors involved in the supply chain to other stakeholders such as regulatory authorities, local communities and the public in general (Elghali et al. 2007). The interests of all these stakeholders must be embraced when designing sustainable bio-energy systems, thus developing among all interest groups commitment and a common vision of a sustainable society while addressing and, if possible, rebutting social, health and environmental concerns linked to bio-energy production (McCormick & Kåberger 2005).

Conclusions

Our sample of papers reflects the wide range of possible feedstock for bio-energy production: dedicated energy crops, wood, industrial and municipal waste, agricultural and forestry residues. The conversion technologies treated in the papers also covers a broad scope from combustion systems over biogas production via fermentation up to the production of transport fuels. Energy end applications are electricity, heating and cooling, and vehicle fuels. Most of the papers take the whole bio-energy chain into consideration. Research methods are technical, economic and environmental assessments of different bio-energy systems, usually based on literature research; furthermore decision models/tools are developed, also based on literature reviews. Two papers use case study research in addition to other research methods and one paper exclusively presents a case study.

Issues and challenges concerning SCM and logistics of bio-energy systems are classified into the categories (1) transport, handling, pre-treatment, storage, (2) logistics in general, (3) system design, (4) supply security, and (5) purposes of bio-energy supply chains apart from energy production. Our literature review finds that pre-treatment technologies, transport distance and mode as well as storage and buffer systems impact strongly the economic feasibility and environmental compatibility of bio-energy systems. Generally, scale effects of bio-energy production systems are significant, while an economic break-even size of the biomass supply catchment area may exist. However, for certain types of biomass, pre-treatment technologies such as

torrefaction and pelletisation may render international trading possible and thus abolish those restrictions. There is a large variety of bio-energy systems, which makes the optimisation of the system design a challenging task. Finding an optimal solution necessitates taking into account the interests of various stakeholder groups affected by a certain bio-energy system. Security and stability of the bio-energy supply are an important issues for bio-energy plant operators and may be ensured by the establishment of either domestic/regional or international supply chains, or by a combination of both. Other purposes of bio-energy chains apart from energy production are particularly the introduction of more sustainable waste management schemes and the provision of fertilisers through biogas production (fermentation).

References

References of papers contained in the literature review

Ayoub, N., Martins, R., Wang, K., Seki, H. & Naka, Y. (2007). Two level decision system for efficient planning and implementation of bioenergy production. *Energy Conversion and Management* 48:3, 709-723.

Berglund, M. & Börjesson, P. (2006). Assessment of energy performance in the life-cycle of biogas production. *Biomass & Bioenergy* 30:3, 254-266.

Börjesson, P. & Berglund, M. (2006). Environmental systems analysis of biogas systems - Part I: Fuel-cycle emissions. *Biomass & Bioenergy* 30:5, 469-485.

Börjesson, P. & Berglund, M. (2007). Environmental systems analysis of biogas systems - Part II: The environmental impact of replacing various reference systems. *Biomass & Bioenergy* 31:5, 326-344.

Caputo, A. C., Palumbo, M., Pelagagge, P. M. & Scacchia, F. (2005). Economics of biomass energy utilization in combustion and gasification plants: effects of logistic variables. *Biomass & Bioenergy* 28:1, 35-51.

Elghali, L., Clift, R., Sinclair, P., Panoutsou, C. & Bauen, A. (2007). Developing a sustainability framework for the assessment of bioenergy systems. *Energy Policy* 35:12, 6075-6083.

Madlener, R. & Bachhiesl, M. (2007). Socio-economic drives of large urban biomass cogeneration: Sustainable energy supply for Austria's capital Vienna. *Energy Policy*, 35:2, 1075-1087.

Perry, M. & Rosillo-Calle, F. (2008). Recent trends and future opportunities in UK bioenergy: Maximising biomass penetration in a centralized energy system. *Biomass & Bioenergy*, 32:8, 688-701.

Puy, N., Tàbara, D., Bartroli-Molins, J., Bartroli-Almera, J. & Rieradevall, J. (2008). Integrated assessment of forest bioenergy systems in Mediterranean basin areas: The case of Catalonia and the use of participatory IA-focus groups. *Renewable and Sustainable Energy Reviews* 12:5, 1451-1464.

Rentizelas, A. A., Tatsiopoulos, I. P. & Tolis, A. (2009). An optimization model for multi-biomass tri-generation energy supply. *Biomass & Bioenergy* 33:2, 223-233.

Uslu, A., Faaij, A. P. C. & Bergman, P. C. A. (2008). Pre-treatment technologies, and their effect on international bioenergy supply chain logistics: Techno-economic evaluation of torrefaction, fast pyrolysis and pelletisation. *Energy* 33:8, 1206-1223.

Further References

Allen, J., Browne, M., Hunter, A., Boyd, J. & Palmer, H. (1998). Logistics management and costs of biomass fuel supply. *International Journal of Physical Distribution & Logistics Management* 28:6, 463-477.

- Berglund, M. (2006). *Biogas production from a systems analytical perspective*. Phd dissertation. Lund University, Sweden.
- Berndes, G., Hoogwijk, M. & van den Broek, R. (2003). The contribution of biomass in the future global energy supply: a review of 17 studies. *Biomass and Bioenergy* 25:1, 1-28.
- von Blottnitz, H. & Curran, M. A. (2007). A review of assessments conducted on bio-ethanol as a transportation fuel from a net energy, greenhouse gas, and environmental life cycle perspective. *Journal of Cleaner Production* 15:7, 607-619.
- Bräuninger, M., Leschus, L. & Vöpel, H. (2008). Nachhaltigkeit von Biokraftstoffen: Ziele, Probleme und Instrumente [Sustainability of biofuels: Objectives, problems, and instruments]. *Wirtschaftsdienst* 1, 54-61.
- CSCMP (Ed.) (n.d.). *CSCMP Supply Chain Management Definitions* [Online]. [Referred to 4.5.2009]. Available: <http://cscmp.org/aboutcscmp/definitions.asp>.
- Dyllick, T. & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment* 11:2, 130-141.
- Ecosense (Ed.) (2007). Klimafaktor Biokraftstoff. Experten zur Nachhaltigkeitszertifizierung [Bioenergy and its impact on the climate: experts discuss certification ensuring sustainability criteria]. *Schriftenreihe zu Nachhaltigkeit und CSR*, Volume 1, 2007.
- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review* 14:4, 532-550.
- Elkington J. (1997). *Cannibals with Forks: the Triple Bottom Line of 21st Century Business*. Oxford: Capstone.
- Fink, A. (2005). *Conducting Research Literature Reviews: From the Internet to Paper*. Thousand Oaks: Sage.
- Gerbens-Leenes, W., Hoekstra, A. Y. & van der Meer, T. H. (2009). The water footprint of bioenergy. *Proceedings of the National Academy of Sciences*, PNAS Early Edition, doi:10.1073/pnas.0812619106.
- GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit [German Technical Cooperation]) (Ed.) (2006). *Kraftstoffe aus nachwachsenden Rohstoffen – Globale Potenziale und Implikationen für eine nachhaltige Landwirtschaft und Energieversorgung im 21. Jahrhundert [Fuels from renewable resources – Global potentials and implications for sustainable agriculture and energy supply in the 21st century]*. Berlin.
- Kerckow, B. (2007). Competition between agricultural and renewable energy production. *Quarterly Journal of International Agriculture* 46:4, 333-347.
- Mayring, P. (2000, June). Qualitative Content Analysis [28 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* 1:2 [Online Journal]. [Referred to 24.4.2009]. Available: <http://qualitative-research.net/fqs/fqs-e/2-00inhalt-e.htm>.
- Mayring, P. (2003). *Qualitative Inhaltsanalyse – Grundlagen und Techniken (Qualitative Content Analysis – Basics and Techniques)*. Weinheim: Beltz Verlag.
- McCormick, K. & Kåberger, T. (2005). Exploring a pioneering bioenergy system: The case of Enköping in Sweden. *Journal of Cleaner Production* 13:5, 1003-1014.

- McCormick, K. & Kåberger, T. (2007). Key barriers for bioenergy in Europe: economic conditions, know-how and institutional capacity, and supply chain co-ordination. *Biomass and Bioenergy* 31:7, 443-452.
- Mentzer, J. T. & Kahn, K. B. (1995). A framework of logistics research. *Journal of Business Logistics* 16:1, 231-251.
- Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D. & Zacharia Z. G. (2001). Defining supply chain management. *Journal of Business Logistics* 22:2, 1-25.
- Meredith, J. (1993). Theory building through conceptual methods. *International Journal of Operations & Production Management* 13, 3-11.
- Puppan, D. (2002). Environmental evaluation of biofuels. *Periodica Polytechnica Ser. Soc. Man. Sci.* 10:1, 95-116.
- Searcy, D. L. & Mentzer, J. T. (2003). A framework for conducting and evaluating research. *Journal of Accounting Literature* 22, 130-167.
- Srivastava, S. K. (2007). Green supply-chain management: a state-of the-art literature review. *International Journal of Management Reviews* 9:1, 53-80.
- WBGU (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen [German Advisory Council on Global Change]) (Ed.) (2009). *World in Transition – Future Bioenergy and Sustainable Land Use*. London: Earthscan.
- WCED (World Commission on Environment and Development) (Ed.) (1987). *Our Common Future*. Oxford: Oxford University Press.

SUSTAINABILITY CYCLE ASSESMENT OF BIO - FUELS: SEWAGE THE ANSWER?

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Abstract

This research conducts a holistic sustainability life cycle assessment (LCA) comparison of different kinds of biofuels, integrating environmental, social, cultural and economic sustainability. The feasibility of a vision that households, companies and other organizations all over the world turn their sewage into biofuels instead of discharging it into the environment by year 2015 is tested through these comparisons. Semi-structured interviews of biofuels' experts in a Finnish company, industry associations, research institution and non-governmental organization were made.

Biogases are environmentally more sustainable than bioliquids, field biomasses, wood-based biomasses and turf, all of which cause loss of biodiversity. Bioliquids and field biomasses are socio-culturally unsustainable when they affect farming for food. Launching any kind of biofuel system is expensive, but running it reaps benefits. Biogases, bioliquids and liquid field biomasses use the cradle-to-grave approach; solid field biomasses, wood-based biomasses and turf use the cradle-to-cradle approach in their life cycles. However, biogases made of sewage have an endless supply with little need for an endless life cycle, which, however, could also be developed.

Refining sewage into biofuels solves two global environmental problems at once: carbon dioxide emissions from fossil fuels contributing to climate change and over-fertilization of waterways causing sea, lake and river deaths. Hence launching expenses are well worth the effort. Yet other biofuels compete so heavily that large-scale global turning of sewage into biofuels by 2015 is unlikely.

This is the first a holistic sustainability LCA comparison of biofuels which integrates environmental, socio-cultural and economic sustainability views of industry, research and civil society experts.

Keywords: sustainability, life-cycle assessment, LCA, cradle-to-cradle, biofuels, sewage

Introduction

Picture year 2015: households, companies and other organizations all over the world turning their sewage into biofuels instead of discharging it into environment? That would solve two global problems at once: over-fertilization of waterways causing sea, lake and river deaths, and carbon dioxide emissions from fossil fuels contributing to climate change.

This vision represents cradle-to-cradle approach in which nothing ever becomes waste but is endlessly recycled in different renewable, harmless forms. Maybe such

an idea will not be applied globally by 2015, but it certainly seems, at least to laypeople, an ideal solution to our world's major environmental, socio-cultural and economic problems. The feasibility of turning sewage into biofuels needs to be put into perspective by comparing it to other ways of producing, consuming and recycling biofuels.

The *purpose* of this research is to conduct a sustainability life cycle assessment (LCA) comparison of different kinds of biofuels.

Biofuels can nowadays be refined from dozens of different plants and different kinds of waste. The most common plants for biofuel include maize, wheat, barley, oats, potatoes, soya beans, palm oil, rapeseed oil, sunflower oil, sugar beans, sugar roots, switchgrass and alga. In addition, e.g. straw, wood, woodchips, forest residue and peat may be used. Almost any kind of biodegradable waste and sludge are suitable biofuel raw materials.

Sustainability means enduring through time. Sustainability has four dimensions: environmental, social, cultural and economic sustainability (WCED 1987, UNEP 1992). In a sustainability life cycle assessment all four dimensions need to be evaluated. Environmental sustainability comprises biodiversity, natural resource use, and the effects of production, consumption and products on the environment. Social responsibility deals with issues such as wellbeing, employment, alienation, aging, equality, justice and participation. Cultural sustainability encompasses values, attitudes and customs. Economic sustainability reaches from global, national and regional to corporate and household economy issues.

Life cycle assessment (LCA) is usually defined as merely an environmental LCA (Guinee 2002, Hendrickson et al. 2006). This research takes a more holistic perspective on LCA, allowing it to cover all aspects of sustainability. Sustainability LCA is a systematic evaluation of the environmental, social, cultural and economic consequences of a particular product, process, or activity from cradle to grave or, ever more frequently, from cradle to cradle. LCAs need to cover the whole life cycle of biofuels, starting from raw materials, production, transportation and distribution to usage, maintenance, reuse, recycling and disposal as well as energy production and consumption during all these stages.

A biofuel implementing the *cradle-to-grave approach* cannot be very sustainable because it is used only once in its life time, and, therefore, produces waste that is hard to get rid of sustainably (see figure 1). Moreover, biodiversity may suffer, as the biofuel needs new raw material all the time. A biofuel, which implements the *cradle-to-cradle approach*, supports life after use by being a nutrient to the nature or being reusable. This can be achieved through closed loop cycles of production, recovery and remanufacture (see figure 2). In the cradle-to-cradle approach the biofuel is sustainable economically, environmentally, socially and culturally.

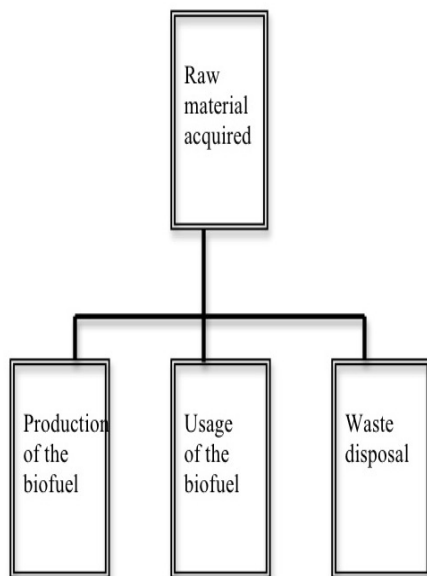


Figure 1. Cradle-to-grave approach.

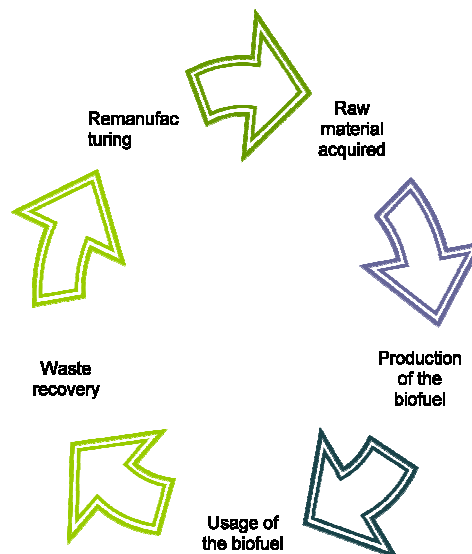


Figure 2. Cradle-to-cradle approach.

As yet there is no general agreement even of the criteria of environmental LCAs. For example the LCA section of the first version of the Nordic Swan Ecolabel covers only greenhouse emissions and energy use (Nordic Council of Ministers 2008). Comparative LCA research in the area has focussed on comparing some biofuels to some fossil fuels. For example, SenterNovem (2008), an agency of the Dutch Ministry of Economic Affairs, commissioned a biofuel LCA, which compared bioethanol from wheat to gasoline and MTBE, and biodiesel from rapeseed to diesel. On the other hand, analyses of greenhouse gas emissions from biofuels have been conducted (e.g. Delucchi 2006, Farrel et al. 2006, International Energy Agency 2004). In addition, Hill et al. (2006) have made environmental, economic, and energetic cost/benefit analyses of biodiesel and ethanol biofuels. In conclusion, partial LCAs of a number of biofuels have been carried out, particularly a variety of environmental LCAs, but also some economic cost/benefit analyses.

A holistic sustainability LCA comparison of biofuels made of the most common plants and wastes is still missing. This paper demonstrates the findings of the first part of this major endeavour: views from a company, industry associations, a research institution, and a non-governmental organization of the environmental, social, cultural and economic impacts of different biofuels during their life cycles. Semi-structured interviews were conducted in August and September 2009.

The Interviewees were:

Company: Simo Honkanen, Neste Oil;

Industry Associations: Ahti Fagerblom, Finnish Forest Industries Federation; Mia Wallen, Finnish Energy Industries (ET).

Research Institution: Pirkko Vesterinen, VTT Technical Research Centre of Finland

Non-Governmental Organization: Maija Suomela, Greenpeace Finland.

A Vision For 2015

The vision to be tested through the sustainability LCA comparison is: households, companies and other organizations all over the world turn their sewage into biofuels instead of discharging it into the environment by 2015.

This would solve two global problems at once:

1. Carbon Dioxide (CO₂) emissions from fossil fuels contributing to climate change;
2. Over-Fertilization of waterways causing sea, lake and river deaths.

In the following sections the feasibility of Tarja Ketola's vision is tested by Tiina Myllylä's comparisons of expert views of the sustainability impacts of different ways of producing, consuming and recycling biofuels.

Findings from Interviews: Biofuel Sustainability Compared

For the purposes of the empirical study, biofuels were divided into five categories:

- (1) Biogases: waste;
- (2) Bioliquids: different plant oils;
- (3) Field biomasses: farming waste, fields and swamps;
- (4) Turf: organic material;
- (5) Wood-based biomasses: industrial wood residue and industrial by products.

Some of these categories overlap, but this division gives a fair picture of the different kinds of available biofuels. The environmental, social, cultural and economic impacts of each biofuel category will be discussed on the basis of the interviews.

Biogases

Biogases refer to constituents like methane and carbon dioxide that are produced by the anaerobic fermentation of biological materials. Biogases are most commonly produced from agricultural and organic waste. Sewage gas is produced through sludge digestion in the tanks of sewage treatment plants. Landfill gas is produced from organic residues in garbage tips (GE Energy 2009). An example of this is from Vaasa, Finland, where the regional waste management company, Stormossen, has converted 100% of biogas into energy (Stormossen 2007). Table 1 summarizes the interviewees' opinions about the environmental, social, cultural and economic impacts of biogases at different stages of their life cycles.

Table 1. Environmental, social cultural and economic impacts of biogases.

<i>Environmental impacts of biogases</i>	<i>Social impacts of biogases</i>	<i>Cultural impacts of biogases</i>	<i>Economic impacts of biogases</i>
<ul style="list-style-type: none"> + Nature-friendly: uses existing sites, no unspoilt nature is conquered. + Clean: pollutes only at the beginning of life cycle. + Intelligent way of disposing waste - Requires space, infrastructure and heavy machinery. - Does not create enough energy to replace all other forms of biofuels. -Volatile. 	<ul style="list-style-type: none"> + Creates jobs. + Implementation is fast. + Generally accepted as a way to create energy. - Loss of jobs in areas in replaces. - Requires a change of ideology. 	<ul style="list-style-type: none"> + Easy to take into use in industrialized countries. - Requires a great deal of education in developing countries. - Adoption requires time. -Requires education of the dangers of methane. 	<ul style="list-style-type: none"> + Uses existing technology. + Cheap to use. + Converting existing landfills into energy centres - Start-up phase is expensive. - Requires big investments from bioenergy companies, car industry and governments.

Biogases are *environmentally* sustainable because they are nature-friendly and clean compared to fossil fuels. Biogas plants are built on existing sites, such as landfill sites and sewage plants, and consequently, they do not conquer any sites of unspoilt nature. Biogases pollute only at the beginning of their life cycle. However, to use biogases as an energy source requires a lot of space, an infrastructure and heavy machinery to be able to produce the product, which are the reasons for biogases not being so common. On the other hand, biogas generation is an intelligent way of disposing waste. Biogases improve waste management and have given biogas-fuelled engines a chance to improve waste management while maximizing the use of an economical energy supply. However, biogases are still volatile.

When considering the *social* sustainability of biogases, they create jobs in industrial working environments. Self-evidently, those areas biogases replace will suffer from job losses. As people are used to the conventional ways of refining fossil minerals into energy, widespread biogas utilization will need change of ideology. However, biogas production has already become a generally accepted way of creating energy. Since its implementation is fast it has good prospects.

From the *cultural* sustainability point of view, the status of biogases is also very good since biogases are well known amongst people and they can easily be adapted to any culture. In industrialized countries biogases are easy to take into use, but in developing countries a great deal of education and training are needed for biogas production. Consequently, starting up biogas production in different cultures requires

different amounts of time. In all countries the volatility of biogases needs to be emphasized in instructions: methane is quite dangerous and people need to be educated to its usage. Biodiesel is still better known than biogases and easier to adapt to people's needs.

As far as *economic* sustainability is concerned, biogases are still expensive to use at their start-up phase. It is very expensive to build the entire needed infrastructure, but once it has been started, it does not pollute so much and it is cheaper to use than the fossil fuel plants. Biogas plants use already existing technology. They do not need any sites of natural values but existing landfills can be converted into energy centres. In order that biogas becomes fully exploited in all possible energy need, big investments from the bioenergy companies, car industry and governments are needed. Biogases are a *cradle-to-grave* type of biofuels because they are not as yet designed to nourish the nature after use, nor can they be put into a recycle loop after being recovered and remanufactured. Biogases do have all the potential to be fitted into the cradle-to-cradle approach, but socially, culturally and economically they cannot as yet reach the approach.

Bioliquids

Bioliquids refer to biodiesel, which is based on plant oil refined into diesel. Hence such diesel is made out of biomass oils. Biodiesel can be used in diesel engines in private and public transport (Finbio 2005). An example of biomass oil used for biodiesel is palm oil, which is exploited for instance by Neste Oil. Palm oil is produced in South East Asia with a yearly production of about 40 million tons, soya oil in the USA and South America (37 million tons/year), rapeseed oil in Europe, Canada and China (18 million tons/year) and sunflower oil in Southern Europe and the USA (11 million tons/year) (Honkamaa 2008). Table 2 collects the opinions of the interviewees on the environmental, social, cultural and economic impacts of bioliquids.

Table 2. Environmental, social cultural and economic impacts of bioliquids.

<i>Environmental impacts of bioliquids</i>	<i>Social impacts of bioliquids</i>	<i>Cultural impacts of bioliquids</i>	<i>Economic impacts of bioliquids</i>
<ul style="list-style-type: none"> + Improvement compared to fossil fuels. + Low pollution levels during usage. - High pollution levels during production. - Damages the ground. - Loss of biodiversity. - Loss of rainforests. - Loss of natural swamps. 	<ul style="list-style-type: none"> + Creates jobs. - Creates disputes amongst people. - Food for fuel. 	<ul style="list-style-type: none"> + Known, good potential. + Easy to adapt to. - Creates cultural loss at the beginning of life cycle. 	<ul style="list-style-type: none"> + Uses known research method. + Cheaper in the future than fossil fuels. + Creates industry. - Might create loss of other industry. - Expensive to produce (rapeseed oil). - Life cycle prospect is short: will be replaced by more sustainable options.

Bioliquids are an *environmental* improvement compared to fossil diesel and fossil fuel although they are not yet a major step away from fossil diesel and fossil fuel. Nevertheless, biofuels are the first attempt to refine a less polluting liquid fuel than fossil fuel. This has materialized in the consumption side but not in the production side. Bioliquids reach low pollution levels during usage but high pollution levels during the different stages of production from raw material extraction to transportation and refining.

There are severe downsides to producing bioliquids from palm oil, as Neste Oil is doing. The worst environmental impact is that palm oil plantations destroy rainforests in South-East Asia: companies want business and people want jobs, so they destroy the rainforests in order to plant and grow palm oil trees. The alternative, which in reality is exploited parallel to rainforest destruction, is the capitulation of local farming grounds to plantations. In addition to loss of rainforest, some of the natural swamps are lost because the soil needs to be changed so that the palm oil trees can grow. The damage done to the ground is very serious: it can take up to 700 hundred years to get the soil back to its original state. Loss of biodiversity incorporates both plants and animals. Due to the monocultures of palm oil plantations, all native trees and the huge variety of other native plants are lost. In complex forest ecosystems plants and animals live interdependently and form symbiotic relationships. Most rainforest animals from insects, reptiles and fish to birds and mammals cannot survive on palm oil plantations. The large mammals get the best publicity: it has been forecasted that within five to ten years the endangered species of orangutan and tiger will die of extinction.

Socially, bioliquids creates jobs both in the industrial and farming side. Biodiesel has provided jobs to the whole value chain from palm oil farmers to the distributors. As palm oil is produced in areas where poverty is an issue, job opportunities can decrease hunger and locals can use palm oil as an energy and heat source. However, there is another side to this story: due to land rights issues, the farming of large palm oil plantations has created major disputes between companies/local authorities and native tribes in Indonesia, which has made the living conditions dangerous and very uncomfortable to local people. As palm oil is used for many purposes by food industry, cosmetics industry and chemicals industry – it does not really contribute to loss of food. Other oils used for bioliquids – soya oil, rapeseed oil and sunflower oil – are more important foodstuffs, particularly since they are essential ingredients of healthy diets. It is recommended that these oils should replace animal fat in cooking and salads and on bread. That is why using these oils as raw materials for fuels is questionable: many people think that food should not be used for fuel either in developed or developing countries.

Yet bioliquid types of biofuels have a potential *culturally* because they are well known and close to the basic fossil fuel and diesel, and, therefore, easy to take into use. Bioliquids are effortless for people to adapt to, as they do not require anything new from a consumer during usage. Their consumption pattern is the same as with fossil fuels – there is no need to do anything extra. During summer 2009 Neste Oil's biodiesel called NExBTL was taken into usage in some Neste Oil stations in the southern part of Finland, and people noticed no difference at all. The culturally negative side of bioliquids is that they have made some of the native tribes vanish in Indonesia. When large plantations are established, people spread around and tribes are scattered all over the island.

Another minus for bioliquids is the cultural biodiversity loss, which means that when palm trees are grown, all other forest is cut down, which of course creates loss of biodiversity in plants but also loss of cultural diversity among local people. There are plants that are culturally very important for indigenous peoples. They will stop growing the culturally important plants because they need the money attainable from growing palm trees.

It has been predicted that by year 2020 the major oil fields will be drying up and there will be much more demand for biofuels. Although bioliquids are now more expensive than the fossil fuels, this situation may turn into reverse then. However, the growing bioliquid business may endanger other biofuel businesses, such as biogas and biomass production.

Economically bioliquids are, in fact, at present sustainable for the oil companies because of their much larger production margins compared to fossil fuels. Furthermore, current bioliquid research is derived from basic fossil fuel and diesel research. These fuels have simply been improved to be more environmentally sustainable. But as mentioned earlier, bioliquids, particularly those made of palm oil, do not necessarily have such a long life span due to the fact they have many environmentally and socio-culturally malignant impacts. And they will not have economically such a good long-term effect because they are not as environmentally friendly as other options.

In summary, while biodiesel is causing lasting malignant environmental, social and cultural impacts, it will not have a lasting benign economic impact on companies (foreign or national), people or governments. Biodiesel will be forgotten faster than thought as soon as environmentally more friendly practicable alternatives emerge because nowadays people are willing to choose the most ecological, economically viable option.

Bioliqids are *cradle-to-grave* types of biofuels. They do not reach the cradle-to-cradle level, because bioliqids cannot be used as a nutrient to the nature after usage, on the contrary, they produce pollution. Bioliqids cannot be used in a closed-loop cycle of production nor recovered or remanufactured. Bioliqids do have some cradle-to-cradle aspects: they are designed to be healthy and restorative. Nevertheless, when looking at the complete sustainable development system, this biofuel dimension does not reach the level of cradle-to-cradle status.

Field Biomasses

The third biofuel category is field *biomasses*. They refer to ethanol produced from different crops, which are farmed either on fields or in swamps. A good example of a field biomass farmed on fields is barley ethanol. The field biomasses can be produced into either solid or liquid fuel. Field biomass production is not yet common in Finland where it is still being researched and tested, but for example in southern parts of Sweden and in Central Europe field biomasses are important sources of energy (Finbio 2005). The opinions of the interviewees on the environmental, social, cultural and economic sustainability of field biomasses along their life cycle are collected in table 3.

Table 3. Environmental, social cultural and economic impacts of field biomasses.

<i>Environmental impacts of field biomasses</i>	<i>Social impacts of field biomasses</i>	<i>Cultural impacts of field biomasses</i>	<i>Economic impacts of field biomasses</i>
+ Easy to produce. - Loss of biodiversity. - Farming becomes more unilateral.	+ Creates jobs. + An option to the consumer. - Food should not be a fuel.	+ Known type. - Difficult for people to adapt to. - Food should not be a fuel.	+ More business to the farming industry. + Uses existing products and machinery. + Creates jobs to the whole value chain.

Environmentally field biomasses are globally easy to produce. For example, barley and maize are types of crops that are easy to farm. But if biomass is produced for extensive use, it means that there will become larger farms, which leads to more and more forests to be cut down to make space for farming. This will cause extensive loss of biodiversity. As farming becomes more unilateral with maximum use of automation, fertilizers pesticides and herbicides, biodiversity will be destroyed completely.

Socially this kind of biofuel creates jobs and gives options to consumers to choose what kind of energy resources to use. One major social problem is that biomasses are mainly produced from crops, which can be, and according to many people and organizations, should be, used for food, not for fuel.

Culturally this food-for-fuel issue is a grave problem because many native foodstuffs may disappear into fuel tanks. Organizations have raised their voices about this: they say that food for fuel is wrong; it is unethical and kills the culture of farming for food. On the other hand, biomasses are not a very new biofuel type to people; hence it is easy for people to adapt field biomass fuel to their every-day life as an option to conventional fossil fuel.

Economically fuels refined from field biomasses are rather sustainable. They create more business to the farming industry. Since field biomass fuel production can use existing products and machinery, they do not necessarily require further investments. However, fuel production is usually large-scale production, which puts pressure on small-scale farmers to expand their business. Field biomass fuels create jobs to the whole value chain when considering the production of biomass from raw material to reuse.

Field biomasses belong both, *cradle-to-grave* and *cradle-to-cradle* approaches. The reason for this is that these biomasses are produced as both liquid and solid fuels. Biomasses that are liquid fuels, belong to the *cradle-to-grave* approach due to the fact that they are healthy to the environment and restorative but cannot be used as a nutrient or recovered or remanufactured. However, the solid fuel types of biomasses belong to the *cradle-to-cradle* approach, because they can be used as a nutrient for

nature after use: when the solid fuel has been used, the remains of the solid fuel (ashes, etc.) can be returned to the ground, giving the soil nutrients. Field biomasses have good potential to reach sustainable development in all the four dimensions of sustainability – although it has become well known that these types of biofuels affect the farming for food supplies to people and animals.

Turf

Peat fuel is produced from turf soil, which consists of at least 75 per cent of organic material. Turf develops gradually over centuries through humification from decomposing plant material in swamps. The best-known fuel of this type is peat diesel. Peat is mainly used for heat production. Table 4 integrates the interviewees' opinions concerning the environmental, social, cultural and economic sustainability of turf at its different stages of life cycle.

Table 4. Environmental, social cultural and economic impacts of turf.

<i>Environmental impacts of turf fuel</i>	<i>Social impacts of turf fuel</i>	<i>Cultural impacts of turf fuel</i>	<i>Economic impacts of turf fuel</i>
<ul style="list-style-type: none"> + Mostly produced by nature itself. - Major contributor of CO₂ emissions: methane. - Requires heavy machinery and infrastructure. - Changes the landscape. - Phosphor loading. - Limited number of swamps. - Loss of biodiversity. 	<ul style="list-style-type: none"> + Employment opportunities. - Negative beliefs. - Loss of pure nature, swimming areas, recreational areas. - Fear of changes in the landscape. 	<ul style="list-style-type: none"> + Easy to accept as a "natural" method of creating energy. - As a concept relatively unknown in several countries. 	<ul style="list-style-type: none"> + Locally very productive and effective. + Boosts local economy. - Requires high investment from the community and municipality. - Economic sustainability?

From the environmental sustainability perspective, turf is produced ecologically since it is mostly produced by nature itself in a natural process taking centuries. Use of turf has long traditions in Finland. However, the production of turf into peat fuel is not as environmentally friendly as often thought in Finland. The European Union (EU) and the Intergovernmental Panel on Climate Change (IPCC) classify peat as a fossil fuel while conservative Finnish politicians classify it as a slowly renewing biomass fuel. The reason is economic: peat accounts for about 6–7 per cent of annual energy production of Finland. Since nearly 30 per cent of the land area of Finland is turf swamp, peat fuel development potential would enormous. Globally swamps are rarer and need protection for the rich variety of rare plants and animals they support.

Turf soils are very valuable carbon absorbers: they absorb carbon approximately 10 times more per hectare than any other ecosystem. In reverse: the burning of peat fuel contributes to greenhouse emissions more than any other fuel. Hence e.g. biogases are much more environmentally friendly than turf-based fuels. In addition, the production method of peat is very slow compared to the production of biogases, bioliquids and field biomasses. Digging turf from swamps requires heavy machinery, which destroys wildlife habitats and biodiversity, and changes the landscape. Moreover, it causes phosphor loading in the remaining soil. From the environmental point of view, turf swamps should be protected, not used for fuel production.

Socially turf fuel production is more sustainable. It has created jobs and provided employment opportunities to entrepreneurs in Finland. Nevertheless, there are many negative beliefs and fears concerning peat production. Many people think that peat production accelerates loss of pure nature, swimming places and recreational areas, and changes the traditional landscape permanently.

Culturally turf has seemed to be easy enough for Finnish people to adapt to but they have also learned fast that it is not so environmentally friendly as other biofuels. In many other countries the concept of turf fuel is relatively unknown.

Turf may look like an *economically* sustainable fuel, but it requires substantial investments from the community and municipality. So far the return of investment has been excellent: peat production is very effective and profitable and it boosts local economy. However, the benefits from these long-term investments may be short-lived if mitigation of climate change becomes a priority globally, nationally and locally.

Turf can be classified as the *cradle-to-cradle* approach because it is ecologically intelligent, and it can be used over and over again. Turf has brought a new idea of a biofuel into the market, which has brought jobs and – of course – money. But as turf is slow to develop, pollutes during usage, and is, consequently, firmly classified as a fossil fuel by European and global authorities, it may be a fleeting solution.

Wood-Based Biomasses

Wood-based biomasses include industrial wood residues and industrial by-products, such as sawdust, wood waste, construction wood and other kind of demolition wood. Some wood-based biomasses are processed; these refined wood fuels comprise pellets and briquettes or charcoal, gas and pyrolysis oil (Finbio 2005). It is important to note that the effective use of wood-based biomasses varies a lot depending on countries, even among EU members. As Finland is one of the pioneers in utilizing wood and other wood-based masses as a source for energy, it will be used as a comparison point to other EU members that could utilize the source material in a better way.

The life cycle analysis takes into consideration both Finnish and foreign methods in

the creation, refinement, use and disposal of wood-based biomasses. These methods and how they affect each other during life cycle will be discussed through the four sustainability dimensions. Table 5 presents the opinions of the interviewees on the environmental, social cultural and economic impacts of wood-based biomasses at their different stages of life cycles.

Table 5. Environmental, social cultural and economic impacts of wood-based biomasses.

<i>Environmental impacts of wood-based biomasses</i>	<i>Social impacts of wood-based biomasses</i>	<i>Cultural impacts of wood-based biomasses</i>	<i>Economic impacts of wood-based biomasses</i>
<ul style="list-style-type: none"> +Created from wood by-products. + Residue (ashes) good nutrient for soil. + Pollution levels low in small-scale local use. -Large-scale use exacerbates environmental problems. - Intensive production. - Loss of biodiversity - Erosion. - Land sags. - Loss of nutrients. - Problems in irrigation. - Use of toxic substances. - Forest clearance. 	<ul style="list-style-type: none"> + Creates jobs. + Locally good. + Appreciation towards forests arises. - Reduces production of food. - Not democratic usage. 	<ul style="list-style-type: none"> +Familiar from being the source of energy and heat in many countries. + Can maintain traditional and create new lines of business. - Can destroy some traditional lines of businesses and ways of life - Not understood in many countries. - May affect cultural diversity negatively. 	<ul style="list-style-type: none"> + Creates jobs. + Easy to sell + Forest industry benefits. + Very good business for a country (when properly operated). - Poor cost-effectiveness if working conditions are difficult

From the *environmental* point of view wood-based biomasses are sustainable in the sense that they are created from wood by-products. They pollute during usage but emissions remain fairly low if the burning is pure. These kinds of biofuels are low in energy, which means that wood-based biomasses are good in household usage, but not in any large-scale use, such as industry or housing. What is left after the burning process, are ashes, which can be returned to the ground as nutrition. When looking at the life cycle of wood-based biomasses, they do not create a massive amount of waste or emissions when they are used as a local source of energy. For a local solution to create heat or electricity, this source of bioenergy would be excellent. When wood-based biomasses are produced in massive amounts and forests are being planted just to be cleared for mass production, the problems and emissions grow. Intensive production is a problem, i.e., heavy machinery is used, which causes emissions and loss of biodiversity. Toxic substances may be used to get rid of the unwanted species of plants (loss of biodiversity), and irrigation is used to make the raw material grow faster. This is when erosion, land sags and loss of nutrients will appear.

Socially speaking wood-based biomasses are good because they create lots of jobs. This is true especially in countries, where wood is a natural resource and where there is no intensive production. Employment opportunities can be found all through the life cycle, from planting trees to forest harvesting and refining wood to different types of energy resources: pellets, sawdust, etc. They are not very democratic because wood-based biomasses are produced and used mainly in rural areas. Locally they give work to many different occupations, because wood is used into many other things too, than just energy, for example furniture and as a packing material. Forest industry can also make a difference towards the attitude of wood-based biomasses. People see the good in them, both as an energy source and a livelihood. The danger behind production of wood-based biomasses is that when it becomes intensive production, it can reduce production of food. This problem is usually faced in the Asian countries, not so much in Europe.

From the *cultural* perspective, wood-based products have been known for a long time. Their exploitation started from plain wood; now it has developed into refined wood fuels. Wood-based biomasses are familiar from being the source of energy and heat in many countries. Yet one major problem of wood-based biomasses, especially in Europe, is that the industry is not understood, especially in countries where the forests are becoming extinct. Culturally wood-based biomasses have good aspects: they keep up traditional lines of business, like sawdust production, and create new lines of business, like the pellet industry. But they can also destroy some lines of business: it is the intensity of this industry that is destructive. If the focus is on producing wood to the industry, traditional ways of tending forests may be forgotten. And this is when it can affect cultures negatively: cultural diversity based on traditional ways of using forests as sources of food, materials and firewood, may be lost.

Economically, wood-based biomasses are great business for the forest industry. In addition, they create many kinds of other industry, and in this way, they can give jobs to many professions, which is good for a country's economy. Creating wood-based biomasses is a very good business for a country when it is properly operated, meaning that it is not intensive production, and many kind of industries and professions benefit from the business. Wood-based biomasses are easy to sell too, especially in countries where wood is used as the source of heat. However, in some countries cost-effectiveness may be very poor, due to difficult working conditions, which make the job dangerous and very slow (e.g. when the forests lie on steep hills).

Wood-based biomasses are one of the few biofuels that belong to the *cradle-to-cradle* approach. Wood-based biomasses are made of by-products or industrial residue. These types of biomasses pollute, but not in a very significant way because they are normally used only in households, not in industry. Thus the level of pollution remains small. As wood-based biomasses are burnt, their residue can be returned to the soil, which gives nutrition to the new, growing forest.

Test Results

Biogases are environmentally more sustainable than bioliquids, field biomasses, wood-based biomasses and turf, all of which cause loss of biodiversity. Bioliquids and field biomasses are socio-culturally unsustainable when they affect farming for food. Launching any kind of biofuel system is expensive, but running it reaps benefits. Biogases, bioliquids and liquid field biomasses use the cradle-to-grave approach; solid field biomasses, wood-based biomasses and turf use the cradle-to-cradle approach in their life cycles. However, biogases made of sewage have an endless supply with little need for an endless life cycle, which, however, could also be developed.

Hence Tiina Myllylä's comparisons partially support Tarja Ketola's vision. Globally sewage and waste can be, and should be, used as a source for bioenergy. However this will require lot of time and local actions. Think globally, act locally, is the motto. The use of bioenergy will reduce carbon dioxide emissions and diminish the death of waterways. It is important to note, however, that biogases alone are not the solution. Other forms of bioenergy are and should be used as an additional supplement to create energy and fuel by not destroying their natural capacities. Other biofuels compete with biogases so heavily that large-scale global turning of sewage into biofuels by 2015 is unlikely. This competition is both a threat and an opportunity: the advocators of different biofuels fight over limited research and development (R&D) resources blocking each others' advancement, but they also challenge each other for ever more sustainable performance environmentally, socially, culturally and economically.

Conclusions

Biofuels may not be the answer to curb climate change, but these fuels can reduce emissions and that way slow down global warming. That is the reason why environmental politics have recently focused on trying to find out new substitutes for fossil fuels and diesel. There have been some studies on how a particular biofuel affects the environment, but there exists neither a comprehensive comparison between biofuels nor a study covering also the social, cultural and economic dimensions of sustainability. This research is first of its kind and a beginning of a holistic life cycle analysis of different kinds of biofuels. The idea behind finding a substitute to fossil fuels and diesel is good, however the analyses of positive and negative effects of biofuels still have not been done so thoroughly that the ultimately best biofuel could yet be found. No form of biofuels can as yet substitute the use of fossil fuels as a dominant source of energy, although the mentioned bioenergy sources are excellent supplements as sources for energy to reduce the amount of fossil energy in use today. Biogases are the most effective way of creating energy: as waste already exists, why not use it effectively? And their existing infrastructure means smaller stress to the environment. There is no global solution in sight; instead local actions are important. These can lead to national progress in using bioenergy. Nations need to work individually to create a global solution to a common goal.

References

- Delucchi, M. A. (2006). *Lifecycle Analyses of Biofuels*. Davis, CA: Institute of Transportation Studies, University of California.
- Farrell, A. E., Plevin, R. J., Turner, B. T., Jones, A. D., O'Hare, M. & Kammen, D. M. (2006). Ethanol can contribute to energy and environmental goals, *Science* 311, 506–508.
- Finbio (2005). *Bioenergy in Finland*. [Visited on 16 April 2009]. Available at: <http://www.finbioenergy.fi/default.asp?init=true&InitID=398;0>.
- GE Energy (2009). *Biogases*. [Visited on 27 September 2009]. Available at: http://www.gepower.com/prod_serv/products/ recip_engines/en/gas_types/biogas_landfill.htm.
- Guinee, J. B. (Ed.) (2002). *Handbook on Life Cycle Assessment: Operational Guide to the ISO Standards*. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Hendrickson, C. T., Lester, B. & Matthews, H. S. (2006). *Environmental Life Cycle Assessment of Goods and Services*. Washington, DC: Resources for the Future.
- Hill, J., Nelson, E., Tilman, D., Polasky, S. & Tiffany, D. (2006). Environmental, economic, and energetic costs and benefits of biodiesel and ethanol biofuels. *PNAS* 25, 103-132.
- Honkamaa, J. (2008). Liikennepolttoaineiden vihreät lähteet (Sources of green traffic fuels). PowerPoint-presentation. *Suomalaisen Energian Päivä -seminaari (Finnish Energy Day Seminar, Helsinki, 10.9.2008)*.
- International Energy Agency (2004). *Biofuels for Transport*. Paris: Organization for Economic Cooperation and Development (OECD).
- Nordic Council of Ministers (2008). *The Nordic Swan Ecolabel*. [Cited on 11 December 2008]. Available at: <http://www.svanen.nu/Default.aspx?tabName=StartPage&menuItemID=7055>.
- SenterNovem (2008). Participative LCA on biofuels. *Rapport 2GAVE -05.08*. The Hague: The Ministry of Housing, Spatial Planning and the Environment (VROM), the Ministry of Economic Affairs and the Ministry of Transport, Public Works and Water Management.
- Stormossen (2007). *Stormossen's Environmental Objectives 2008*. [Visited on 27 September 2009]. Available at: <http://www.stormossen.fi/default.asp?id=6yd81f4scye>.
- UNEP (1992). *Rio Declaration on Environment and Development*. The United Nations Conference on Environment and Development, Rio de Janeiro 3–14 June 1992. Available also at: <http://www.unep.org/Documents.Multilingual/Default.asp?document>

ID=78&articleID=1163

WCED (1987). *Our Common Future*. Report of the World Commission on Environment and Development of the United Nations. Oxford: Oxford University Press. Available also at: <http://www.un-documents.net/wced-ocf.htm>.

CORPORATE SOCIAL RESPONSIBILITY PRIME MOVERS IN THE RENEWABLE ENERGY SECTOR: THE CASE OF MASDAR INITIATIVE IN ABU DHABI

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Abstract

Abu Dhabi, in United Arab Emirates (UAE), has set the first renewable energy policy in the region in January 2009. The policy calls for at least seven percent of the Abu Dhabi's power generation capacity to come from renewable energy sources by 2020. In 2006, the leadership of UAE and Abu Dhabi made a strategic decision to establish a globally competitive renewable energy sector in the country and hence the MASDAR Initiative was created. This paper will focus on corporate social responsibility of MASDAR and the role the firm is playing as the "Prime Mover" in the renewable energy sector in UAE and the region. First, the literature on corporate social responsibility is reviewed. Second, the environmental challenges of UAE are highlighted. Finally, the Masdar Initiative is highlighted and the role of Abu Dhabi Future Energy Company (ADFEC) as a "Prime Mover" in sustainability and corporate social responsibility is discussed.

Keywords: CSR, Renewable Energy, Masdar, Prime Mover, Abu Dhabi.

Introduction

Human activities are the most important factor that is affecting our climate. This was confirmed by the Third (2001) and Fourth (2007) Assessment Reports of the United Nations' Intergovernmental Panel on Climate Change (IPCC 2007). Carbon dioxide (CO₂) is one of the most important anthropogenic Green House Gases (GHG). Annual emissions, energy as the main source, grew by about 80% between 1970 and 2004. Reduction of CO₂ emissions from energy use can be done in three ways: energy efficiency, renewable energy (RE), and carbon capturing and sequestration. Renewable energy is an attractive option because it substitutes for fossil fuel and the economic feasibility of renewable energy technologies is improving with time (Clift 2007; Sims 2004). Fossil fuel will still remain the major source of energy for decades to come but eventually alternative sources of energy will surpass fossil fuels (Zerta et al. 2008).

Developing a renewable energy sector in a country will have a positive impact on its sustainability and will provide a wide variety of socioeconomic benefits, contribute to the diversification of energy supply, enhance regional and rural development, and create an opportunity for a domestic industry and job creation potentials (del Rio and Burguillo 2009). Newly established RE companies are considered to be in the

business of sustainability and corporate social responsibility (CSR). This paper will look at the CSR role of newly established RE companies and will discuss the case of MASDAR especially after the Abu Dhabi government announced that seven percent of power has to come from RE sources by year 2020. This paper starts by reviewing the CSR literature, and then looks at the environmental challenges in Abu Dhabi. The role of MASDAR as the “Prime Mover” in the RE sector is highlighted including its sustainability and CSR practices.

Literature Review of CSR

Since 2000, the European Union (EU) has been engaged in developing a framework for Corporate Social Responsibility with tools for assessing standards (Streimikiene et al. 2009). In their Green Paper, the Commission of the European Communities described CSR “as a concept whereby companies integrate social and environmental concerns in the business operations and in their interaction with their stakeholders on a voluntary basis.” Socially responsible means going beyond compliance, investing more into human capital, the environment and relations with stakeholders and not just fulfilling legal obligations (CUC 2001). CSR was acknowledged as an opportunity for enterprises in Europe to contribute to a sustainable growth and job creation. CSR can play a leading role in enhancing Europe’s innovation potential and competitiveness. Some of the proposed actions to promote CSR practices include awareness-raising and practice exchange, support to multi-stakeholder initiatives, cooperation with member states, consumer information transparency, research, education, and international dimension of CSR (CUC 2006). Better regulations, instruments, mainstreaming CSR with EU policies and programs, and Europe’s contribution to global CSR were also proposed (CUC 2007).

CSR has evolved over time since it was first debated in 1932 by Professor Dodd when he said that corporate managers have responsibilities to the public as a whole and not just to shareholders (Dodd 1932). CSR has also evolved through the years from philanthropy to strategic philanthropy, from investing to socially responsible investing (fund screening, social advocacy, community investment), from entrepreneurship to social entrepreneurship, from venture capital fund to social venture capital fund, from an MBA to an MBA in CSR, corporate social responsibility and profitability (employees, customers, governments, media), and the bottom line (Cochran 2007). At the global level, many international accords were initiated to promote voluntary CSR practices. Such accords include the UN Global Compact (UNGC), Global Corporate Citizenship Initiative (GCCCI), Equator Principles for Financial Institutions (EPFIs), and the UN Principles for Responsible Investments (UNPRI) (Sadler & Lloyd 2009). The UNGC, which was launched at UN headquarter in 2000, is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption as shown in Table 1 (UNGC 2000).

Table 1. United Nation Global Compact Principles (UNGC 2000)

Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and Principle 2: make sure that they are not complicit in human rights abuses.
Labor Standards	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; Principle 4: the elimination of all forms of forced and compulsory labor; Principle 5: the effective abolition of child labor; and Principle 6: the elimination of discrimination in respect of employment and occupation.
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges; Principle 8: undertake initiatives to promote greater environmental responsibility; and Principle 9: encourage the development and diffusion of environmentally friendly technologies.
Anti-Corruption	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

The GCCI was launched by the World Economic Forum in 2001. According to Professor Klaus Schwab, Founder and Executive Chairman of the World Economic Forum, corporations are having more influence over the lives of stakeholders which is due to diminishing role of the state due to advances in technology (Schwab 2008).

In 2003, ten major European project finance banks agreed a set of guidelines named the Equator Principles, aimed at incorporating environmental and social responsibility into their lending practices (Equator Principles 2003). The principles were formulated with the support of the International Finance Corporation, the private sector lending arm of the World Bank. In 2004 the UN also promoted its Responsible Investment Initiative which led in 2006 to agreement on six Principles for Responsible Investment in a global charter signed by 32 pension and investment funds (Sadler & Lloyd 2009). Table 2 shows the Equator and PRI principles.

Table 2. The Equator Principles and the UN Principles for Responsible Investment

The Equator Principles (Equator Principles 2003)	UN Principles for Responsible Investment (PRI 2006)
Principle 1: Review and Categorization Principle 2: Social and Environmental Assessment Principle 3: Applicable Social and Environmental Standards Principle 4: Action Plan and Management System Principle 5: Consultation and Disclosure Principle 6: Grievance Mechanism Principle 7: Independent Review Principle 8: Covenants Principle 9: Independent Monitoring and Reporting Principle 10: EPFI Reporting	Principle 1: We will incorporate ESG issues into investment analysis and decision-making processes. Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices. Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest. Principle 4: We will promote acceptance and implementation of the Principles within the investment industry. Principle 5: We will work together to enhance our effectiveness in implementing the Principles. Principle 6: We will each report on our activities and progress towards implementing the Principles.

CSR and Sustainability

Lynes and Andrachuk developed a conceptual model for corporate social and environmental responsibility (CSER). There are four parts of the model. Part I consists of four levels of influence: the market system, political–institutional system, scientific system, and social system. Part II consists of different firm’s motivation for CSER and they include: long-term financial strategy, eco-efficiencies, competitive advantage, good corporate citizenship, image enhancement, stakeholder pressures, and a desire to avoid or delay regulatory action. Part III consists of catalysts which help shape influences by acting as a medium for encouraging/discouraging CSER. Part IV consists of the level of commitment encompassing the degree to which a firm will participate in CSER in terms of its pledges to take a course of action, responsibility taken for its action, level of involvement with environmental and social issues, as well as its dedication to improve the firm's performance in these areas. The conceptual model was used for an in depth study and was applied to Scandinavian Airlines (SAS) (Lynes & Andrachuk 2008).

Responsible leadership plays a critical role in the sustainability of the firm. A company that embarks on the path of sustainability needs to carefully examine its mission, vision and values. It must be informed about legal constraints and assess all its management structures. Leaders should examine carefully the critical strategic sustainability factors. Internal factors include managerial, operational, and economical. External factors include market, government, and stakeholders expectations (Szekely & Knirsch 2005).

Corporations are driven by profits, but still, they should play a more proactive role in the sustainable development of the society. This means that they have to go beyond their profit-oriented commercial activities and increase the well being of the society around them (Malovics et al. 2008).

CSR and the Supply Chain

In response to customer and shareholder concerns for corporate social responsibility (CSR), many buying firms are implementing programs within their supply chains aimed at ensuring suppliers act in a socially responsible way with respect to such labor practices and/or environmental issues. To transfer supply chain partners' socially responsible behaviors, companies can use three management tools: establishing written supplier requirements, monitoring supplier performance to verify compliance with the requirements, and contributing to suppliers' awareness building and training on the company policy about CSR issues (Ciliberti, Pontrandolfo and Scozzi 2008). Monitoring suppliers' behavior to ensure compliance is important but may damage buyer-supplier relationship. Therefore, a CSR implementation regime characterized by procedural justice rather than by greater monitoring is more likely to increase supplier compliance, and can improve rather than damage a buyer's exchange relationships with their suppliers (Boyd et al. 2007). A study conducted in Italy reveals difficulties in transferring CSR behaviors to Small- and Medium-size Enterprises that operate in developing countries. Some of the obstacles to diffuse CSR practices in developing countries include: cultural differences, low interest showed by customer in CSR, located and operating in developing countries, and corruption in general (Ciliberti et al. 2008).

CSR Strategies

There are many external forces that drive organization to the path of CSR such as consumer demand for responsibly made products, challenges to organizations' reputations by nongovernmental organizations (NGOs), industry codes of conduct, assessments and rankings of CSR performance, pressure from socially responsible investors through public interest proxy resolutions, as well as the socially conscious values of organizational managers and employees (Heslin & Ochoa 2008). Heslin and Ochoa proposed seven principles where organization can embark on strategic CSR. These principles are: 1) cultivate needed talent, 2) develop new markets, 3) protect labor welfare, 4) reduce your environmental footprint, 5) profit from by-products, 6) involve customers, and 7) green your supply chain.

Strategic orientation of firms toward CSR philosophy can support both its financial and stakeholders interests (Burke & Logsdon 1996). Burke and Longsdon have proposed a model for strategic analysis of CSR which has five dimensions: 1) centrality (closeness to fit to the firms mission and objectives, 2) specificity (ability to capture private benefits by the firm), 3) proactivity (degree for to which the program is planned in anticipation of emerging social trends and in the absence of crisis, 4) voluntarism (the scope of discretionary decision-making and the lack of externally imposed compliance requirements), and 5) visibility (observable, recognizable credit by internal and/or external stakeholders for the firm). These dimensions should help managers develop CSR strategies that pay off.

Husted and Allen viewed Burke and Longsdon model as not fully developed with testable hypotheses. In their study, Husted and Allen examined three (visibility, appropriability, and voluntarism) of the five dimensions in more detail and set out a hypothesis of the relationship of each dimension to value creation. The other two dimensions, centrality and proactivity, do not affect value creation in the Spanish context where their empirical study was conducted. The conclusion of their study was that visibility is clearly understood to be related to value creation. To the extent that consumers and other stakeholders are perceived to observe CSR activity, they are able to reward firms for their participation. Appropriability also significantly affects the creation of value through CSR projects. In other words, firms perceive that designing CSR projects with the intent to generate benefits is necessary for value creation. Voluntarism is an essential element for the creation of value, but not in the direction hypothesized by Burke and Logsdon. They thought that greater voluntarism would lead to greater creation of value from strategic CSR projects (Husted & Allen, 2007).

To increase a firm's competitive advantage, CSR projects should be cost effective and produce a clear return on investment. CSR governance refers to organizing the activities of transferring of firm resources for the production of social goods and services. Husted describes three types of common modes of governance: 1) outsource CSR through corporate charitable contributions, 2) internalize CSR through in-house projects, or 3) use a collaborative model. When deciding on a mode, managers should consider two attributes, coordination (autonomous or cooperative) and motivation (incentive intensity or administrative control). The two drivers for internalizing CSR are the centrality and specificity as developed by Burke and Logsdon. A decision matrix was developed for choosing among the CSR governance structures where specificity and centrality are treated as being only high or low when in fact they are both continuous. For example, if specificity is high and centrality is high, then the best CSR governance structure is an in-house project (Husted 2003).

Falck and Heblich propose a planning process of strategic CSR action. Decision making is initiated by looking and evaluating a social trend. Once the trend is evaluated, then it will be determined whether any of the company's stakeholders are interested in it and its impact on the financial system of the company. Depending on what is at stake and the type of committed resources, the company will choose a strategic action without any risk of opportunistic behavior on the part of competitors (exclusive stake) (Falck & Heblich 2007).

McWilliams and Siegel conducted an empirical study based on a framework of supply and demand model and CSR. They hypothesize that a firm's level of CSR will depend on its size, level of diversification, research and development, advertising, government sales, consumer income, labor market conditions, and stage in the industry life cycle (McWilliams & Siegel 2001). A study conducted in the US modeled corporate investments in environmental research and development (R&D) as investments in corporate social responsibility. The theory and the empirical study support the hypothesis that socially responsible corporate investments in environmental R&D increase with corporate self-interest in reducing pollution caused by toxic emissions. Consequently, corporate environmental R&D investments depend on both public policy and the structure of markets (Scott 2005).

CSR and Energy

A study in the Baltic States (Lithuania, Latvia, and Estonia) investigated the problems and challenges of CSR in the energy sector revealing that the main barriers to CSR development in the social sphere include: weak co-operation with stakeholders; weak NGOs, insufficient care in competence and motivation of personnel; low awareness of society about energy companies' activities; indebtedness of heat consumers, high energy prices comparing with low average income of population reducing initiatives to pay higher price for green (renewable) energy or white energy (saved) support for socially responsible business in energy sector; and the lack of information and awareness. The indicators used to monitor the sustainable development of the Baltic States include both sustainable and energy development ones. The main sustainable development indicator used is the Human Development Index (HDI) provides information on the main economic and social trends of the country and represents economic and social dimensions of sustainable development. The sustainable energy development indicators are increase in energy efficiency expressed by energy intensity of GDP (primary energy/GDP, final energy/GDP); and use of renewable energy sources can be expressed by share of renewables in electricity generation, share of renewable in total primary energy supply and in use of biofuels in transport (Streimikiene et al. 2009).

Environmental Challenges of Abu Dhabi, UAE

The United Arab Emirates (UAE) is located in the Middle East and in the eastern part of the Arabian Peninsula. The land is largely hot, dry desert. The UAE consists of the seven emirates. Abu Dhabi is by far the largest and controls 90 percent of all oil and natural gas reserves in the UAE. The UAE federal government recognizes that diversification of its economy plays a key role in maintaining growth. The other main industrial activities in the country include construction, aluminum, chemicals and plastics, metals and heavy equipment. According to the state of the environment (SOE) report of Abu Dhabi (EAAD 2007), the main source of air pollution in the country comes from the oil and gas industry followed by electricity and water desalination production. Over 90% of the water consumed in the country comes from desalinated water and this shows the coupling between energy and water.

Natural gas fuels over 99 percent of total electricity generation, the remainder being based on oil. UAE and other Gulf states have the highest CO₂ emissions per capita and UAE has the second highest water consumption per capita after the United States of America (EAAD 2007). Fig. 1 shows the historical CO₂ emission in UAE (CDIAC 2009).

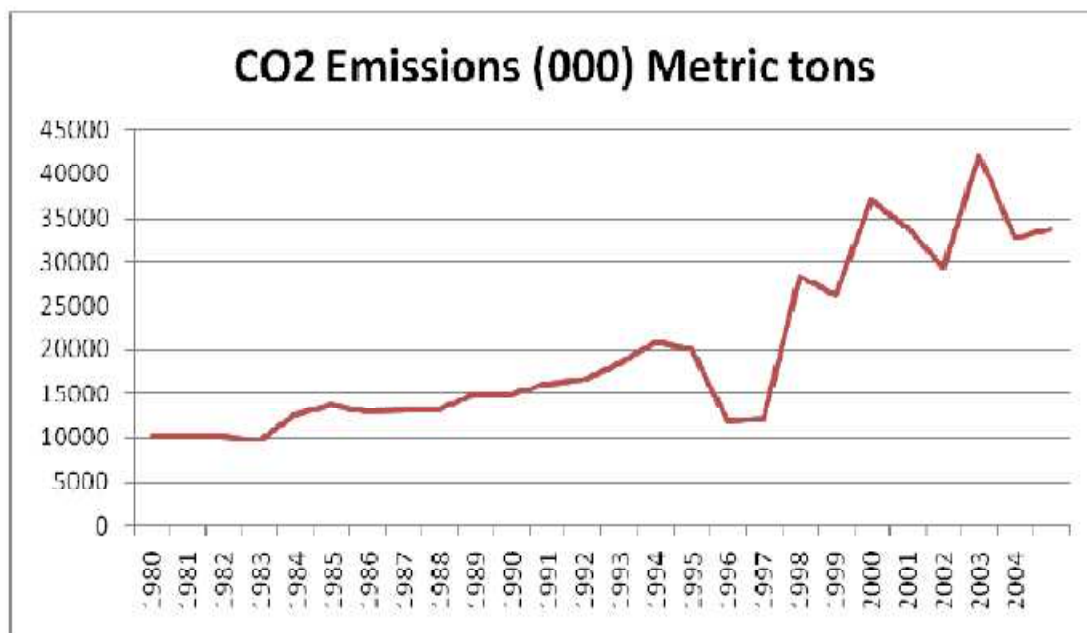


Fig. 1 Historical CO₂ Emissions in UAE (CDIAC 2009)

The Abu Dhabi Urban Planning Council (ADUPC) has developed the “Plan Abu Dhabi 2030” (ADUPC 2007). It is the most comprehensive visionary plan for the city of Abu Dhabi. This Urban Structure Framework Plan is first and foremost grounded in the cultural and environmental identity of Abu Dhabi. The city’s population may grow to three million or it may exceed five million by 2030. Clearly this situation will have important implications and will assert more pressures on existing infrastructure and institutions – even without drawing upon the demand for RE technology. At the same time, it is clear that even though the plan covers most aspects of urban planning, it still lacks attention to the energy required to meet the comprehensive development plan. This omission could have serious consequences. Abu Dhabi’s energy demand and supply to meet electricity generation and water desalination is critical to the sustainable development of the city and must be dealt with very wisely because it could be the tipping point between success or failure of the plan. Abu Dhabi Water and Electric Company (ADWEC) is the government agency dealing with electricity and water needs not only for the Emirate of Abu Dhabi but for the whole country. Based on Plan Abu Dhabi 2030, ADWEC developed a projection plan for electricity and water demand which will almost triple by the year 2030. The mandate of ADWEC is to “ensure that, at all times, all reasonable demands for water and electricity in the Emirates are satisfied” (ADWEC 2008).

The MASDAR Initiative in Abu Dhabi: A Bold Move

In April 2006, Abu Dhabi took a bold and historic decision to embrace renewable and sustainable energy technologies. Hence the MASDAR Initiative was created. It is a multi-billion dollar comprehensive economic development program designed to leverage Abu Dhabi's considerable financial resources and energy expertise into innovative solutions for cleaner, more sustainable energy production and resource conservation. The MASDAR Initiative has four primary objectives:

1. To help drive the economic diversification of Abu Dhabi.
2. To maintain, and later expand, Abu Dhabi's position in evolving global energy markets.
3. To position the country as a developer of technology, and not simply an importer.
4. To make a meaningful contribution towards sustainable human development.

To implement the MASDAR Initiative, Abu Dhabi government has created the Abu Dhabi Future Energy Company (ADFEC). ADFEC is a private joint stock company wholly-owned by the government of Abu Dhabi through Mubadala Development Company. The following is a brief description of the different business units of ADFEC.

1. Property Development Unit. Overseeing the building of MASDAR City. MASDAR's Special Free Zone (SFZ) is a unique, integrated 'Green Community' in the heart of Abu Dhabi and will be completed in 2016. Renewable energy is main source of energy, 230 Megawatts, to power the city. The main RE technology used in the PV, about 90%, which will be installed on the roofs of the buildings. The other 10 percent will come from other RE technologies such as CSP, biomass, and geothermal. MASDAR City has commissioned in April 2009 its first 10 MW PV power plant that will used to power the first phase of the city. This is the first power plant of its kind in the region. The plant is also register in the United Nations as a CDM project eligible for carbon credits⁹⁸.
2. Industries. Main objectives is to invest in RE manufacturing plants around the world for both money making operations and to develop the technology know how and transfer it later to Abu Dhabi. ADFEC has identified both Wind and Solar as the most profitable between all RE technologies. For example, ADFEC has already invested and built a Thin Film manufacturing plant (to use in PV) in Germany using new technology that was developed by German scientists with ADFEC funding. Today, ADFEC will be building a second thin film manufacturing plant in Abu Dhabi. ADFEC is investing in a Wind turbine manufacturing plant in Finland and London Array Offshore wind farm.
3. Carbon Management. ADFEC signed several projects related to Carbon Capture and Storage in Abu Dhabi and Bahrain. In addition, ADFEC is

²³ <http://cdm.unfccc.int/Projects/registered.html>

building a Hydrogen Energy plant in joint venture between British Petroleum (BP) Alternative Energy and Rio Tinto. They are working together on the front-end engineering design of an industrial-scale hydrogen-fired power generation project with capture of the carbon dioxide (CO₂), which would then be available for transportation and storage. The plant would be located in Abu Dhabi. Many of the CDM projects that are implemented in Abu Dhabi will contribute to the reduction of CO₂ per capita emissions especially in the oil and gas industry.

4. Utilities and Asset Management. The objective of this unit is to build and operate RE (wind and Solar) power plants in Abu Dhabi and abroad. The power is sold to local utility companies. One of their major investments in Abu Dhabi is Shams 1 (100 MW), which is one of a several CSP power plants that will be built in Zayed City. ADFEC is planning to build about 1600 MW of CSP plants by 2020. CSP is the most proven technology when it comes to a large scale power generation in desert-like country. In addition, ADFEC has direct investment in 12 clean tech companies and invested in four leading green funds focusing on cutting-edge clean technology.
5. MASDAR Institute of Science and Technology. Located in MASDAR City and developed in cooperation with the Massachusetts Institute of Technology (MIT), the MASDAR Institute emulates MIT's high standards and offers Master's and Doctoral-level degree programs focused on the science and engineering of advanced energy and sustainable technologies. The MASDAR Institute aims to become a centre of high-caliber renewable energy and sustainability research capable of attracting leading scientists and researchers from around the world and to develop a pool of highly skilled scientists, engineers, managers and technicians capable of accelerating the development of indigenous technology and enterprise in the region and globally.

MASDAR Innovation and Benefits to Economy and Society

The project represents a paradigm shift, a Middle Eastern oil-producer nation making a visionary and long-term commitment to the development of new forms of clean and sustainable energy. MASDAR is a highly-structured Initiative, ensuring that all critical elements for success (workforce, technology, infrastructure and institutions) are put in place to create a sustainable and synergistic community capable of achieving tangible results of world-scale significance. The project is innovative in its open engagement model, pooling an impressive array of some of the world's best scientific and corporate resources to maximize the potential for impact, creative breakthroughs and eventual scale-up and broad deployment of new energy solutions for the global community⁹⁹.

²⁴ <http://www.cleanenergyawards.com/top-navigation/nominees-projects/nominee-detail/project/74>

Although difficult to precisely measure, the following direct results are expected from the project by 2016:

- 10,000 new high-quality jobs in the clean energy and sustainable technologies sector in Abu Dhabi,
- 500 full-time Masters and PhD students, and 80 high caliber faculty at the MASDAR Institute specializing in clean energy and sustainable technologies,
- a multibillion-dollar expansion of the Abu Dhabi non-oil economy, and
- the creation of a world-class scientific and research hub which is currently non-existent in the Gulf region; such a hub can become the core of other knowledge-based activities and industries in addition to clean energy.

The whole society will certainly benefit from the creation of the renewable energy sector through job creation, research and development in RE technologies, and graduate educational opportunities at the MASDAR Institute. Society and the environment will benefit through the accelerated use of renewable energies developed and/or produced at MASDAR.

ADFEC as The “Prime Mover” in Sustainability and Social Responsibility

CSR is not new to UAE, the Emirates Environmental Group (EEG)¹⁰⁰ which has been active in the country since 1991 has established a CSR network in 2004. The objective of the network is to establish collaboration with leading public and private enterprises on solving environmental problems and promoting sustainable development through the concept of CSR. In addition, many UAE organizations are current participants in UNGC.

Building a renewable energy industry is a big challenge especially when workforce, institutions, and infrastructure don't have the experience. Therefore, the country will need the private sector to take the leadership role in close partnership with the public sector by providing technical expertise, financial capability, and political power to safe sail UAE in the right direction. ADFEC is considered to be a “Primary Mover” and will leap-frog Abu Dhabi into the renewable energy sector and will ensure that the 7 percent target that was set by the government of Abu Dhabi by 2020 is met. That is why ADFEC is trusted by the government to implement the MASDAR Initiative. This initiative since its inception had a positive and a propagating impact on local, regional, and global levels. The MASDAR Initiative has been called many “names” that reflect its global importance such as a “Lighthouse,” a “Hydrogen Bomb,” a “Sustainability Laboratory,” etc. Table 3 summarizes ADFEC's role on the local, regional, and global sustainability levels. This is not a complete mapping of ADFEC sustainability and CSR practices but only a high level listing of the primary activities that shows how sustainability is core to ADFEC. Most of the activities listed in the table are in accordance to the United Nations Global Compact (UNGC)

¹⁰⁰ <http://www.eeg-uae.org/csr>

principles that are related to human rights, labor, environment, and anti-corruption. ADFEC will be a participant in UNGC soon. In addition, ADFEC is working with an international consultant to establish CSR policy and procedures for all its units and will be publishing its first CSR report this coming December. Also, ADFEC is working on getting all the needed ISO certifications that will increase its credibility among its stakeholders. CSR in Masdar extends beyond the common understanding of social responsibility, corporate philanthropy and green washing, it is the core and the integral part of ADFEC's business. It is corporate responsibility that covers sustainability, societal norms, and strives to be the change in a local and a global platform.

Table 3. ADFEC's Role and Impact on Local and Global Sustainability

	ADFEC as a "Prime Mover"
Workforce	
Skilled	Will reply in the short term on Expatriate but also ensuring the developing of national expertise by hiring and training UAE nationals
Unskilled	Will remain depending on expatriates
Human Rights and Corruption	Establishing Code of Conduct and Contractors' Temporary Living Quarters Guideline and other related policies for employees and establishing decent labor villages in MASDAR City for the unskilled labor force living quarters in the city. Other related policies will follow
Institutions	
Government Agencies	Working and advising government agencies on energy reform policies, land use planning reform, etc.
Laws, Regulations, and Legislations	Advising the legal branch of the government to create laws that will facilitate and speed up RE projects
Private sector	Building the capabilities of the local private sector in UAE by allowing it to participate in the different projects and in implementing green supply chain
Financial Institutions	Advising local banks, with the assistance of global financial banks, on how to participate in financing RE projects in the UAE and abroad.
Taxes and Tariffs	Negotiating with the local government to come up with the best tariff reform policy that will benefit all the stakeholders.
High School Education	Building environmental awareness
Tertiary Education	Building relations with all local universities through MASDAR Institute to help develop their programs. 10-15% of students from local universities are considered to be main recruiting target for MASDAR Institute
Research and Development Institutions	MASDAR Institute in the heart of the MASDAR Initiative. Full financial support to R&D. Hiring

	top faculty and recruiting top caliber students.
Government-Private sector Cooperation	A good model for Government and private sector partnership.
Innovation factors	R&D spending, university-industry collaboration, the number of patents generated from different projects, driving technology change, etc.
Infrastructure	
Power plants	Investing in CSP plants in Zayed with a capacity reaching 1900 MW in 2020. Building the first 10 MW PV power plant, registered at the UN as a CDM project eligible for carbon credits, in MASDAR City.
Distribution networks	Already UAE has an excellent conventional distribution networks and grids but need to connect RE projects to them.
Connectivity	Working with ADWEA and other related institutions and companies, by providing the expertise, to build the RE connectivity infrastructure and dealing with logistics, tariffs, and regulatory issues.
Impact at the local level	<ol style="list-style-type: none"> 1. Creating the first sustainable city in the world, MASDAR City, where the quality of life is of importance. 2. Creating the “Silicon Valley” of the renewable energy in UAE 3. Developing the local human capabilities and capacities 4. Developing local institutions and infrastructure 5. Building a unique thin-film (PV) manufacturing plants in Abu Dhabi 6. Creating the RE Market in an oil rich country which is a unique endeavor and a bold move. 7. ADFEC is partnering with local NGOs including Emirates Wildlife Society (EWS) and the local branch of WWF to build environmental awareness, and energy savings and efficiency in UAE. 8. Reduction of CO2 per capita emissions
Impact on the Global level Some people are calling MASDAR as a “Lighthouse” “Hydrogen Bomb” “Sustainability Laboratory”	<ol style="list-style-type: none"> 1. Making UAE a global leader in the RE sector 2. MASDAR is becoming a well known “brand” around the world 3. Investing in the best RE companies around the world 4. Investing in RE infrastructure projects around the world 5. Many countries regionally and globally are profiting from MASDAR’s experience and

	<p>initiating similar projects (Dubendorf, Swiss Hub).</p> <ol style="list-style-type: none"> 6. Signaling a positive sign that oil rich countries can be sustainable. 7. ADFEC has direct investment in 12 clean tech companies and invested in four leading green funds focusing on cutting-edge clean technology. 8. MASDAR City is a partner with One Planet Living
Impact on Climate Change	Contributing to reduction of global CO ₂ emissions by investing in projects around the world related to Energy Efficiency, Renewable Energy, and Carbon Capturing and Sequestration.

Conclusion

This paper discussed the sustainability and the corporate social responsibility of MASDAR in Abu Dhabi and UAE. The success of MASDAR will encourage others to start investing in renewable energy which will eventually contribute to the social welfare of the society at large. But in order to ensure sustainable development and social prosperity of the country, all stakeholders (government institutions, private sectors, NGOs, public, universities, etc.) must be engaged in direct coordination and collaboration in order to develop the right energy policies, incentives to invest in RE projects, ensure the funding is available for research and development to develop RE technologies, put in place the needed market mechanisms for diffusing RE technologies, build public awareness, etc. MASDAR has the ability to leverage its own actions into the GCC, MENA and Southeast Asian regions. By providing the leadership and demonstrating that concrete results are possible. MASDAR's "spillover effect" can be quite substantial. MASDAR is driving the transition from an oil-based economy to more knowledge-based technology and service industries. The environment will also be a key beneficiary of MASDAR and the different RE and water resources technologies developed and applied by MASDAR can greatly enhance sustainable human development in the arid countries of the MENA region. Finally, MASDAR is striving to be a benchmark for others in sustainability and CSR practices in the region but many challenges still remain and must be dealt with. Some of the challenges include cultural differences, low consumer interest, and other challenges that are common in developing countries.

Acknowledgement

The support of MASDAR Institute of Science and Technology (MIST) in Abu Dhabi, UAE, is gratefully acknowledged.

References

- ADUPC(2007). *Plan Abu Dhabi 2030*, Available: <http://www.upc.gov.ae/en/MasterPlan/PlanAbuDhabi2030.aspx> (accessed August 2008).
- ADWEC (2008). *Abu Dhabi Electricity and Water Forecasts 2008-2030*. Available: <http://www.adwec.ae/forecast>.
- Boyd, D. E., Spekman, R. E., Kamauff, J. W. & Werhane P. (2007). Corporate Social Responsibility in Global Supply Chains: A Procedural Justice Perspective. *Long Range Planning* 40, 341-356.
- Burke, L. & Logsdon, J.M. (1996). How Corporate Social Responsibility Pays Off. *Long Range Planning* 29:4, 495-502.
- CDIAC (2009). *Carbon Dioxid Information Analysis Center*. Available: <http://cdiac.ornl.gov/>.
- Ciliberti, F., Pontrandolfo P. & Scozzi, B. (2008). Investigating corporate social responsibility in supply chains: an SME perspective. *Journal of Cleaner Production* 16, 1579–1588.
- Clift, R. (2007). Climate change and energy policy: The importance of sustainability arguments. *Energy* 32, 262-268.
- Cochran, P.L. (2007). The Evolution of corporate social responsibility. *Business Horizons* 50, 449-454.
- CUC (2001). Green Paper: Promoting a European Framework for Corporate Social Responsibility. Commission of the European Communities. COM(2001) 366.
- CUC (2006). Implementing the Partnership for Growth and Jobs: Making Europe a Pole of Excellence on Corporate Social Responsibility. Commission of the European Communities. COM (2006) 136.
- CUC (2007). European Parliment Resolution of 13 March on Corporate Social Responsibility. Commission of the European Communities. 2006/2133(INI).
- Del Rio, P. & Burguillo, M. (2009). An empirical analysis of the impact of renewable energy deployment on local sustainability. *Renewable and Sustainable Energy Reviews* 13,1314–1325.
- Dodd, E.M. For whom are corporate managers trustees? *Harvard Law Review* 45:7, 1145-1163.
- EAAD (2009). *State of the Environment*. Avaiable: <http://www.soe.ae/>.
- Equator Principles (2003). Avaiable: <http://www.equator-principles.com/>.

Falck, O. & Heblich, S. Corporate social responsibility: Doing well by doing good. *Business Horizons* 50, 247–254.

Heslin, P.A., & Ochoa J.D. (2008). Understanding and developing strategic corporate social responsibility. *Organizational Dynamics* 37:2, 125–144.

Husted, B.W. (2003). Governance Choices for Corporate Social Responsibility: to Contribute, Collaborate or Internalize? *Long Range Planning* 36, 481–498.

Husted, B.W. & Allen, D.B. (2007). Strategic Corporate Social Responsibility and Value Creation among Large Firms: Lessons from the Spanish Experience. *Long Range Planning* 40, 594-610.

IPCC (2007). Intergovernmental Panel On Climate Change. Available: www.ipcc.ch.
Lynes, J.K. & Mark A. (2008). Motivations for corporate social and environmental responsibility: A case study of Scandinavian Airlines. *Journal of International Management* 14, 377–390.

Malovics, G., Csigene, N.N. & Kraus, S. (2008). The role of corporate social responsibility in strong sustainability. *The Journal of Socio-Economics* 37, 907–918.

Masdar (2008). *Masdar*. Available: <http://www.masdar.ae>.

McWilliams, A. & Siegel, D. (2001). Corporate Social Responsibility: A Theory of the Firm Perspective. *Academy of Management Review* 26:1, 117-127.

PRI (2009). *Principles for Responsible Investment*. Available: <http://www.unpri.org/>.
Sadler, D. & Lloyd, S. Neo-liberalizing corporate social responsibility: A political economy of corporate citizenship. *Geoforum*, Article in Press.

Schwab, K. (2008). Global Corporate Citizenship: Working With Governments and Civil Society. *Foreign Affairs* 87:1, 107-118.

Scott, J. T. (2005). Corporate social responsibility and environmental research and development. *Structural Change and Economic Dynamics* 16, 313–331.

Sims, R.E.H. (2004). Renewable energy: a response to climate change. *Solar Energy* 76, 9-17.

Streimikiene, D., Simanaviciene, Z. & Kovaliov, R. (2009). Corporate social responsibility for implementation of sustainable energy development in Baltic States. *Renewable and Sustainable Energy Reviews* 13, 813–824.

Szekely, F. & Knirsch, M. (2005). Responsible Leadership and Corporate Social Responsibility: Metrics for Sustainable Performance. *European Management Journal* 23:6, 628–647.

UNGC (2009). *United Nations Global Compact*. Available: <http://www.unglobalcompact.org>.

Zerta, M., Schmidt, P.R., Stiller, C. & Landinger, H. (2008). Alternative World Energy Outlook (AWE0) and the role of hydrogen in a changing energy landscape. *International Journal of Hydrogen Energy* 33, 3021 – 3025.

ROBIN HOOD THEOREM: A WAY FOR ENERGY DISTRIBUTION IN GHANA

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Abstract

The Robin Hood theorem borrows the essence of the strategy used by a character in a British folklore by the same name, in providing resources for the deprived. This study aims at exploring the same notion in a realistic way, thus giving power to the people. As a proposed theorem the study aims at promoting strategies that could help the Energy Commission of Ghana (ECG) to deploy protocols enabling a fair distribution of energy to every consumer.

In Ghana, people living in the rural areas are usually considered as having irregular source of income, lack of credit and loan facilities, thus making it relatively impossible for them to afford almost any form of renewable energy solutions. On the other hand, majority of the urban dwellers are home and /or business owners who spend huge amounts of money on energy especially electricity. These urban dwellers have access to aggressive credit and loan schemes which some take advantage of for the acquisition of house, creation of business and buying of cars, just to mention a few. Furthermore, the Robin Hood theorem helps promote social responsibility as a means of curbing due to the high density of pollution in the urban areas. The article is thus aimed at translating theorem into a systematic practice for the benefit of the economy of Ghana.

Keywords: *Robin Hood, social responsibility, energy, distribution, Ghana.*

Introduction

Rapid increase in population and the consumption patterns of people at rural areas as well as urbanized centers have had its toll on the general resources of any given economy. Energy seen as the bedrock of every society is needed for a growing economy to flourish. In Ghana, many rural sectors do not have access to electricity (*see also White, 2008; Abavana, 2004 and Leite et al, 2000*). The government often spread out the hope of embarking on an extensive electrification project. However, lack of capacity, quality planning and sound framework always turns up to become the “Achilles’ heel” in economic development and sustainability. For those rural areas that are reached with the national grid, lack of capacity undermines the efficiency and reliability of systems; these are plagued with unauthorized excessive power outages making it impossible for the citizens in these communities to be able to utilize the full potential of the energy to increase productivity.

Over the years there had been advocacy for a solar home solution (SHS) for the rural communities of developing countries. As thoughtful as some of these arguments and proposed models might sound, they most often than not miss the point in their generalization of systematically unproven panacea for the entire energy situation in

all rural communities in developing countries. These experts end up re-grouping at the *theory-formulation* table to either revise their theories or come up with newer perceived solutions convinced that it will work the next time round.

For instance; *Surinivasan(2005)*; proposed pre-payment system as a way to curb SHS acquisition defaults as well as enhance the degree of acquisition in the rural communities. However, his proposal ignores or did not anticipate the complex nature of the whole process as well as the uniqueness of each country's infrastructure, economic and social configuration, per-capita income with special emphasis on individual/household income and purchasing power.

How can the Robin Hood (RH) theorem be applied in disseminating energy to rural and urban communities and what benefits can be derived from it?

The objective of this study is to develop and present a proposal on an efficient energy distribution protocol with the aim of helping especially the energy administrators of Ghana to re-structure the current energy policies as well as to test the propose theorem.

Definitions

Robin Hood: 'Taking' from the rich and giving to the poor is a theorem proposed by the study to serve as a strategy in the distribution of energy (*see also Blamires, 1998 and Knight, 1994*).

Social responsibility: Solar energy is perceived to reduce pollution since it promises green sources of energy through the reduction of carbon emission. The conventional energy system uses other types of fuel (gas, diesel, petroleum products and wood) in generating energy, thus depleting the natural resources and causing environmental harm. For this reasons, adapting green energy sources promotes social responsibility.

For this study, ***energy*** refers to both conventional and renewable solutions. More emphasis is laid on renewable energy, solar.

Distribution of solar energy identifies all the efforts made to deploy the solution to the end—user. The processes involved in distribution details down to where and how to make the solar available to the customers. These include: packaging, transportation, installation among others (*Ndzibah, 2009*).

Framework Of The Study

The essence of the theorem: In most developing countries, the urban communities enjoy a relatively large percentage of the national cake in the forms of basic amenities and infrastructures like: roads, access to good drinking water, affordable housing and a reasonable access to modern health care unlike their rural counterparts. This situation is compounded with an ongoing problem in that most of the rural

communities have to contend and be content with an under-developed agro-based industry. This agro-based industry lacks proper incentives to help them add value to their produce. Inadequate infrastructure in the context of storage facilities as well as good transport network exposes these rural dwellers to opportunist middlemen who offer to take their produce at less than the realistic market price. Consequently, rural economic development is hindered since they lack enough compensation for their hard work resulting in their inability to save some of their earnings – resulting in a cyclical nature of poverty.

Robin Hood as a theorem – denotes taking from the rich and giving to the poor thus becoming a proposed model recommended by this study to help policy makers to resolve energy distribution for both urban and rural sectors of the Ghanaian economy. The concept of ‘taking’ in the theorem denotes weaning the urban dwellers off the main grid to help allocate the excess capacity to the rural area. The urban dwellers then are then encouraged to adapt to renewable energy. The benefits of this proposal thus become sound due to the fact that the urban dwellers possess the highest share of the ‘national cake’ in the context of energy usage. Thus it is presumed that, such urban dwellers are in better position to afford renewable energy.

An Overview Of Rural-Urban Energy Situation In Ghana

To ascertain the different types of energy used and why the Robin Hood theorem merits consideration, a qualitative research was initiated. The objective of the study is to carefully compare especially retail prices of most secondary energy systems available to both urban and rural communities in Ghana: candles, dry cell batteries, rechargeable lamps, car batteries and generators. For each of the energy system a sample size of 10 retail outlets at different regions were considered.

The questions used to derive at the objective include:

1. How much does a XXX costs?
2. What are the main uses of XXX?
3. How often do people buy the specific XXX?
4. Why is a particular secondary source of energy purchased?

The same questions were coined from this premise for the different energy systems

Table showing secondary sources of energy in Ghana

Source of energy	Capacity	Usage	Price range	Consumption category
Candle/kerosene lamp		Light during power failure	1- 3 GHc ¹⁰¹	Both rural and urban communities affordable by the poor.
Dry cell batteries	1– 9 v	Radio and flashlight	2 - 4 GHc per set	Both rural and urban communities affordable by the poor.
Rechargeable lamps	6 v	Light, radio (embedded) and TV	5.5 - 30 GHc	Rural and Urban
Car batteries	12 – 24 v	Light, Radio and TV	50-200 GHc	Rural
Generator – diesel or petrol	2-7.5 kva ¹⁰²	220 v(table-top Specific household appliances including lights	590 GHc	Urban households and SMEs

The table above represents the results of the study. However, it was evident that, the reason behind the choice of a particular secondary energy source varied greatly. Two main reasons were identified - *the household income* and *the purpose for which the secondary energy is needed*. Although the purpose was clear and easy to understand, the issue of household income proved to be very difficult to ascertain. This is due to the fact that, most Ghanaians are reluctant to reveal how much they earn.

These two underlining reasons are applicable for both urban and rural dwellers. The household income of the urban dwellers in Ghana varied heavily based on academic qualification and nature of work. Meanwhile, a giving range could be deduced from the lowest income level to the highest income level using the basis identified. The monthly income level within the urban dwellers ranged from as low as 50 dollars to about 2000 dollars (approx. 75 - 3500 GHc). Upon this finding one can easily draw conclusion as to the type of secondary source of energy one can afford. Based on this premise the conclusion is that, the higher the income the more expensive the type of secondary source of energy used. A typical situation in the urban centers of Ghana is found in numerous high and low capacity generators and rechargeable lamps in contrast with those living in the poorer communities using candles, kerosene lamps, flash light, low priced rechargeable lamps as well as low capacity car batteries.

For the purpose for which the secondary energy is needed, finding revealed yet two more underlining reasons: what triggered the purchased and why the particular purchase. The finding concludes that regular power outage, brown-out and inaccessibility to grid were the main triggers. Power outage affects both rural and urban dwellers that have access to the national grid. For this reason, lack of power appears to be the major cause for the need of secondary sources of energy. Moreover, there are situations whereby there is power, yet with insufficient voltage (brown-out)

¹⁰¹ 1 GHc is equivalent to 10,000 old Ghana Cedis (1 dollar = 1.5 GHc)

¹⁰² Kva – kilovolt – ampere: is a unit of electrical power equal to 1000 volt – amperes.

to power basic devices like TV and refrigerators among others. For this reason, the need of back-up energy increases at such times. At the extreme end of situation are sections of both the urban and rural dwellers that do not have power at all due to inaccessibility of national grid. The situation leads such dwellers without choice than a secondary source of energy, thus the need of these sources becomes a daily concern.

A probe into the uses of secondary sources of energy also vary greatly based on the type of secondary source of energy available to the user. Candles are primarily needed for lighting. Batteries are used to power radios and lamps whereas car batteries are used to power TV sets and other smaller appliances. Generators are on the other hand highly used for various needs based on their capacities. Therefore, the issue of usage also triggers the purchase of these secondary sources of energy to a greater extent.

The situation in the rural communities is relatively different compared to the urban dwellers. Within the rural communities, the main sources of income are peasant farming. Such peasant farmers basically generate their income through seasonal sales of crops and yields. The study established that some rural dwellers' livelihood is highly dependent on their farming activities with virtually no source of extra/other income. It therefore leads to yet a more positive conclusion that, their need of secondary sources of income highly varies. The basis for the usage of both primary and secondary sources of energy is purely based on powering lights, radios, TV sets and in few circumstances refrigerators.

Conclusion

Considering these parameters and the configuration of energy usage gives a glimpse into reasons why the study is viable for a reasonable distribution of energy in the country. It is noteworthy to mention that people often adopt and adapt different forms of energy systems due to desperation and the unreliability of the national grid. Although the purpose for using these energy systems might not often be seen or directed to productive activities, it was observed that the bottom line of the quest for acquiring such systems is for the end user to have their peace of mind.

Interestingly, from this research a different sense of sharing was realized. It became obvious that households who own generators have device their own distributed energy solution, in that they share excess capacity of their system with their neighbor for a small fee. Although the original objective was to avoid being a nuisance to one's neighbor due to the noise made by generators, the individual/household have found a mutual way to share both the pain and gain from this specific energy system.

Obviously, the study helps in identifying certain shortcomings of the secondary sources of energy discussed in the study. Clearly, the following disadvantages are embedded within the secondary sources of energy available to both the urban and the rural dwellers:

1. Cost factors (fuel and recharging car batteries etc)
2. Environmental pollution and unfriendliness (noise from generators, burning of fuels, disposal of batteries etc)
3. Unreliability of supply etc.

From the aforementioned points, the Robin Hood theorem has the inherent possibility to bring an end or to a large extent reduce the purchase of solutions like candles, generators, batteries etc. which are erratic at best, with seemingly shorter life-cycle compared to a lasting solution (solar) which in itself could promote tremendous amount of savings on energy over a realistic period of time. Giving power to the people is a caring solution that devoid itself of any patronizing tendencies. Such tendencies are rampant in developing countries whose government, NGO and other advocates tend to propose, build and launch laudable but limited energy programs to the few only to repeat the phenomenon at their political whims. Giving power to the people promotes individual and social responsibility as well as fosters a conscious effort to building a viable platform for economic development and growth.

Since there are virtually no industrial activities in the rural areas and the need of the energy are simple, the concept of Robin Hood is applicable in the situation where a portion of the national grid weaned from the urban communities is used in resolving the energy situation in the rural communities. The urban dwellers are then introduced to solar solutions.

References

Abavana, G. C, (2004). Ghana: Energy and Poverty Reduction Strategy. *Facilitation Workshop and Policy Dialogue, Ouagadougou, Burkina Faso, 26-29 October 2004.*

Blamires, David (1998). Robin Hood: A Hero for All Times. J. Rylands Univ. Lib. Of Manchester. ISBN 0-86373-136-8.

Knight, Stephen T. (1994). Robin Hood: A Complete Study of the English Outlaw. *Blackwell Publishers. ISBN 0-631-19486-X*

Leite, P.S; Pellechio, A; Zanforlin, L; Begashaw, G; Fabrizio, S; and Harnack, J (2000). *Ghana: Economic Development in a Democratic Environment. IMF, Washington D.C.*

Ndzibah, E. (2009). Diffusion of solar solution in developing countries – focus group study in Ghana. *Conference Proceedings of the Greening of Industry – JAOCC, Aalborg, Denmark, 8 – 10 June 2009.*

White, H (2008). The welfare impact of rural electrification: a reassessment of the costs and benefits. *An IEG impact evaluation - The World Bank, Washington D.C.*

Surinivasan, S (2005). Solar Home Systems: Offering Credit and Ensuring Recovery. *Refocus*, Jan-Feb. Vol. 6, No. 1, pp. 38 - 41.

PART TEN: RESPONSIBLE REPORTING

INTRA-INDUSTRY IMITATION IN ENVIRONMENTAL REPORTING IN THE ELECTRICITY SECTOR

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Abstract

The aim of this paper is to observe the intra-industry differences to the environmental performance, considering the institutional approach. To do this, a content analysis is carried out from a methodological comparative and longitudinal perspective related to environmental reporting disclosures of the main Spanish electricity companies. More recent environmental and sustainability reports (2005-2007) of these companies have been analysed, checking the level of compliance with the Global Reporting Initiative (GRI) indicators and other relevant standards related to emissions, environmental expenses and investments, impacts on biodiversity, relations with the stakeholders, environmental management awards and level of verification.

Results show a positive evolution of the environmental reporting of these companies, but without significant differences between the amount and the quality of the information disclosed among them. An isomorphic process can be also checked by the level of compliance with GRI guidelines during these years in this sector.

Keywords: Environmental Reporting, Isomorphism, Institutional-Theory

Introduction

The significance of the energy sector in an economy is growing since energy is an increasingly necessary to social well-being, especially in developed countries which are highly energy-dependent (Vass 1992).

The relevance of this sector is increased by their nature, as in many cases we are speaking of natural monopolies or oligopolies (Hohmeyer 1988). These markets tend to be normally regulated by the government through price-fixing imposed from social, political and macro-economic reasons, and not from cost or market factors (Rowe et al 1995).

The activity of power generation is one of the most socially sensitive activities because it is carried out with a high impact on the environment. Some of the main impacts that question the sustainability of the current energy model can be summarised as (Sundqvist 2004): Environmental problems arising from the generation, problems arising from the construction of generation facilities and distribution of electricity through power lines (Hohmeyer 1988; Hohmeyer et al. 1995).

Interest in environmental issues from the point of view of accountancy has expanded within European Union mainly due to 2 milestones The European Commission's Recommendation for the recognition, measurement and disclosure of environmental aspects into account annually and the annual report of companies, and the Kyoto Protocol, for regulating the trade in greenhouse gases (Llena et al. 2007). In this context a framework for promoting corporate social responsibility has been developed, requiring them not only to act in a socially responsible manner, but also to be transparent in their dealings with different special interest groups (Hohmeyer 1988).

Economic, social and environmental responsibility by companies makes it necessary to have environmental information that goes beyond financial reports (Gray et al. 1996). Growing interest among stakeholders in environmental issues is widely spread in Europe (Bebbington et al. 2000; Aerts et al. 2006). This concern is causing an even-larger demand for information (DeTienne et al. 2005), to which businesses are responding either from obligation or voluntarily. (Llena et al. 2007; KPMG 2008).

Such volunteering, which should show differences between companies empirically, are not being observed; on the contrary a process of isomorphism has been noticed, reflected in clear and standardized reporting practices between firms (DiMaggio et al. 1983). Companies prefer to use social to use a voluntary report on sustainability rather than a more concrete environmental information (KPMG 2008). In this way, they can make use of qualitative and avoid the quantitative data that would show up the lack the unsustainability of their business (Fernandez et al. 2005). This type of qualitative information in annual accounts enables them to bias it towards the positive aspects of their performance (Deegan et al. 1996). This phenomenon is accentuated in the electricity sector, one with the greatest impact on the environmental impact where companies, where companies tend to show a positive social image for their activities, in order to legitimise themselves to society (Moneva 2001).

To prepare sustainability reports, companies tend to follow the the Global Reporting Initiative (GRI) guidelines, based on a methodology aimed at providing a set of indicators based on the demands of stakeholders (Moneva et al. 2000). Gray et al, (1996) suggest that companies consider social and environmental information to be complementary to the economic and financial, and use it only as a legitimacy device. The emergence and increase in the number of additional separate reports disseminate by companies and dealing with environmental and social issues, enables the traditional stakeholders (shareholders and investors, customers and suppliers) to expand towards other, new special interest groups such as society, administration, the mass media, etc ... (Gray et al. 1996; Adams et al. 2007). A new point of view in accounting management is being conformed by environmental accounting, this is a component of the company policy, control and management (Burritt 2004).

The legislation has also contributed to encourage companies to give social and environmental information (Moneva 2001), and has forced companies to report on business activities in the environment, energy saving projects, criteria for evaluating revenues, environmental contingency plans. In this context, the aim of this paper is to observe the imitation process in the electricity sector, considering the institutional conceptual approach.

Below, we shall give a brief theoretical approach and a review of the conceptual framework from which we have tackled this work. We will describe the method used to establish the reference and the select the sample. Next, there is a content analysis of information reported by these companies. The results of the empirical analysis are presented and discussed in this section, and finally, the main conclusions of the study are presented.

Background and the Theoretical Framework

Despite the extensive literature written about Corporate Social Responsibility (CSR) (Crane et al. 2008), and although the concept is not easy to describe, there is no doubt that so it is clear that at the core of CSR is the idea that it reflects the social imperatives and the consequence of business success (Matten et al. 2008). Thus, CSR is a clearly articulated and communicated policy and practices of corporations that reflect business responsibility for someone of wider societal good (Matten et al. 2008). The role that business plays in society has been the subject of several studies (Frederick 1987; Wartick et al. 1985; Huntington 1969; Gray et al. 2005).

The company has traditionally been seen as a voluntary association of shareholders who own it, and the only ones considered in the decision-making process. This concepts contrasts with the new one which provides the company as an institution, defined as stable, valued, recurring patterns of behaviour with a great adaptability, complexity, autonomy and coherence (Huntington, S. 1969), considered as a thriving business that takes into account different stakeholders, attending and responding to their long-term interests, being sensitive to the operating structure of the authority (Selznick 1996).

The organization exists in an institutional environment that defines and delimits social reality (Selznick 1996), the overall theme of the institutional theory used as a main argument that the survival of the organization requires both the recognition performance according to social rules and standards efficient production (Mostaque et al. 2002).

Thus, the traditional vision of the company shows us as an organization focused on shareholders, with the sole aim to maximize returns to investors either via dividends or increasing the value of share (Selznick 1992), the new vision of the organization as an institution represents a much broader and integral concept. Besides increasing financial performance, it is also necessary to maximize social and environmental performance to the same level in order to be a responsible corporation. Identifying different stakeholders is not enough to be a responsible corporation, it must also know which are the most significant stakeholders and up to what points their needs have been integrated into the management and business objective (Freeman et al. 1995; Carroll 1979; Freeman et al. 2004).

An institution is the natural product of some determined social pressure and needing, the organization adapts itself to its own function rule and external demand (Selznick 1996). The firm, as an institution, should contribute to sustainable development; this concept includes, among others, corporate policies, different codes of conduct, support for humanitarian causes, ethics in business, environmental impact and improving the living conditions of the various stakeholders forming the community where the company carries out its activities (AECA 2004). Social support is essential and to get it companies should be transparent in their management (Gray et al. 2005). From the institutional perspective, performance can be viewed as institutionally defined as institutional factors determine the interest being pursued by organizations (Scott 1987).

Literature shows that adopting corporate principles such as transparency in business and taking into account the interests of different stakeholders in the organization's culture is positive for the company's efficiency (Freeman et al. 2004). Reporting is the main tool that can be used as the basis for managing relationships with stakeholders in order to obtain their support and approval (Bebbington et al. 2001).

According to the institutional theory, some sectors contain agents with enough power to impose structures or practices on subordinate organisational units (Mostaque et al. 2002). Changes in information are normally adopted by older, larger organisations, as they can reach a point where, rather than adapt to the surroundings, they dominate them (Freeman 1992). The performance of these large companies that are leaders in their sector causes a process of constraint over the community they are involved in, forcing other companies in the sector to become like them, as they face the same environmental conditions (DiMaggio et al. 1991). Thus, organisations gradually alter their behaviour to increase their compatibility with the characteristics of the environment, competing for resources, also to gain political power and institutional legitimacy in order to achieve financial and social objectives (Aldrich 1979; DiMaggio et al. 1983). On having to provide information when the standard defined or demanded by the public is still not very clear (Gray 2005), it is the agents themselves who are carrying out the institutional isomorphic change. Institutional pressure impels organisations to change, tending to follow the standards and behaviour of the leading organisations (DiMaggio et al. 1983; DiMaggio et al. 1991), achieving results that are reasonably viable with little effort (Cyert et al. 1963; DiMaggio et al. 1991).

From the institutional perspective, one consequence of institutional isomorphism is that organization needs to be accepted by its external environment (DiMaggio et al. 1983; Deephouse 1996).

Certain sectors of business have constituted themselves as the champions of management aimed at protecting the environment to the full, as a consequence of factors concerning the responsibility of the company arising from its activities (Bebbington et al. 2007; Snider et al. 2003). In addition to the impacts caused by specific activities, other factors are also involved in the presentation of data on environmental and social performance, such as belonging to a regulated sector (Hohmeyer 1988; Llena et al. 2007). The annual information provided by the company has been increasing in volume now that there are separate special reports on ethical and ecological issues aimed at agents other than the traditional ones (Gray et al. 1996; Moneva et al. 2001).

In general, the larger the organisation or the greater number of clients it has, the greater the pressure it is under to give information (DiMaggio et al. 1983).

As stated by DiMaggio and Powell, there are formal and informal pressures exerted on organisations in the shape of force, persuasion or invitations to collude. Some countries have altered their laws to cover recommendations from the European Commission (EC), by introducing new rules on environmental information in financial statements. These common legal requirements affect several aspects of company organisation and structure (Weber 1958), although the results have not been as expected, since the level of compliance with the current regulations is really low, (Alciatore et al. 2006).

This situation has helped to develop environmental information given voluntarily by the company (KPMG 2008). The purposes of this information have been questioned in written works, also their capacity to justify company responsibility, due to the company not being neutral and objective (Adams 2004; Deegan et al. 1996).

The information offered by companies does not always satisfy special interest groups, and normally lacks objectivity (Gray 2006) and has poor content (EC, 2002). This has led academics working with ethics and the environment in business to ask for greater regulation of environmental information (Deegan 2002; Gray et al. 1987; Bebbington 1999; Möbus 2005), likewise, they also want greater standardisation of information (DeTienne et al. 2005).

Methodology

Research question

The main research question of this work is to find out if there is an isomorphic process in reporting done by companies belonging to the same sector, the electricity sector, through sustainability reports issued during the period 2005-2007. A content analysis has been done with reference of the Global Reporting Initiative (GRI) indicators. The GRI is a centre that collaborates with the United Nations environmental programme, which is a worldwide, working network of experts belonging to various groups of stakeholders. These experts take part in work groups and government teams who have drawn up a guide and some principles to contribute to social and environmental reporting by companies. The institution hopes to create an international reference framework for writing reports and annual reports that include financial, social and environmental performance. The aim of the GRI is to define and homogenise the content of the reports and annual reports to ensure the correct quality of the information disclosed. Until now, over 1,500 companies have adopted these principles (GRI, 2008). However, there are also academics who question the role and objectivity of these organisations when disclosing the interests of the different interest groups (Gray et al. 2005), and professionals who are reluctant to apply these when drawing up the annual report (Adams et al. 2007).

Another research question of this work suggests that there is a lack in the reporting done by these companies to meet the demands of the environment, specially talking about quantity and quality characteristics. Conduct a content analysis of environmental information provided by organisations requires a reference framework,

and although at present there is no consensus (Gray et al. 2005), GRI standards are the most widely accepted. These principles, even though they are far from being the ones wanted by society, are currently the ones making up the standard most generally accepted throughout the world. It is the organization, the one which indicates itself, that they are still far from meeting the requirements of environmental reporting (GRI, 2006). Due to the constant evolution of information needs on the part of society, principles and GRI guidelines are in a continuous evolving process, this paper focuses on the latest version, and the G3 made in 2006 has been taken as a reference. This is the most complete version developed so far. Since, in some specific cases, companies have used the G2 guide to draw up sustainability reports, version G2 has been adapted to G3, with the equivalent standards identified.

Sample Selection

The companies selected are the seven main producers of electricity in Spain. Acciona, Endesa, Gamesa, Gas Natural, Hidrocarburo, Iberdrola and Unión Fenosa. All are quoted on the Stock Exchange, six of them on the IBEX35, proving that they are a strong economic force. Furthermore, five produce gas and electricity as their main business, another (Gamesa) also makes products for wind energy companies, and Acciona is one of the largest construction companies in Spain.

Given the diversity and complexity of these large industrial groups, and also their heterogeneity, this study only takes into account data that is relevant and specific to the power generation in Spain

The main producers of electricity have been selected, based on their size and production capability, covering about 90% of the national market (UNESA 2007). Although they have all worked with sustainability reports, it should be pointed out that some companies, such as Gamesa and Gas Natural use the words Annual report and Corporate Social Responsibility report, respectively

Also influencing the selection process is the fact that these companies are considered to be leaders in their sector and the first to follow the new standards in the GRI guide, and to create imitation within the sector (Adams et al. 2007), which can be explained by the isomorphism process described in institutional theory (DiMaggio et al. 1983; DiMaggio et al. 1991).

To see how these organisations have evolved over time, reports have been chosen from the last three years, published 2005-2007. This information is usually available on the corporate web pages, and all have a direct link from the GRI website. It should be noted that in some cases, such as Unión Fenosa, only the last year's (2007) report is available online, and it has been necessary to contact two heads of the communications department in the company before being able to gain access to the 2005 and 2006 reports.

Content Analysis

In order to be able to examine reports published by these companies, a work tool has been devised in the form of a file/questionnaire with the G3 environmental standards. The structure of the file/questionnaire is based on the quality and quantity of the environmental and social information supplied by the companies in their sustainability reports.

Analyzing these sustainability reports of the Spanish energy companies, is a brainstorming exercise with respect to all the main indicators both side as determined by the GRI at present. Given the purpose of this study, the analysis focuses on the environmental dimension. Despite the complexity and indivisibility of business interests are only those considered most relevant environmental aspects and see how they have dealt with companies trying to meet the demands of different interest groups.

Analysing the sustainability reports from Spanish energy companies involves an exercise in thought regarding all the standards currently set by the GRI; explaining the reasons why this type of report and information has been made is not as significant as their disclosure. Given the aim of the study, the analysis focuses on environmental dimensions, although these are largely difficult to separate from the social and financial ones. It is necessary to know how these companies have faced up environmental aspects that awaken the greatest interest and are most important for the stakeholders and society as a whole.

Reports

A clear, positive development can be observed in writing reports in accordance with the GRI standards. It is evident that the companies have made an effort to adapt to the new standards; while in 2005, almost all of them followed the G2 guide, published in 2002, in 2006, 6 companies followed the new G3 standard published in the same year, which rose to 100% in 2007. Such effort in complying with the latest standards set by the GRI creates pressures within the sector which tend to reduce differences within it, making the companies tend towards similarity with each other in responding to a demand for information which still has no definite shape (DiMaggio et al, 1983). Ample evidence of the growth in the amount of information provided is proved by the volume of reports, as shown in table 1. The differences in the volume of information are being reduced over time, following Iberdrola, the main producer (UNESA 07)

Table 1. Type and amount of environmental reporting

Companies	Type of document	Number of pages per year		
		2005	2006	2007
Acciona Energía	Sustainability report	105	171	203
Endesa (Spain & Portugal)	Sustainability report	140	156	188
Gamesa Energía	Rest Annual Report	131	341	329
Gas Natural	Corporate Sustainability Report	163	226	148
Hidrocantábrico Energía	Sustainability report	96	124	112
Iberdrola	Sustainability report	295	236	271
Unión Fenosa Generación	Sustainability report	71	160	214

Verifiability and Management Systems

This sector shows us the growth in audits and verification processes in environmental performance that has been made recently, probably due to increased implementation of environmental management systems, which are later certified to international standards, mainly ISO 4001 and EMAS (Llena et al. 2007). It can be seen that there are significant differences concerning information on environmental management supplied by the companies. With some, there is a total lack of information, while others show an increase in certification of the system. Information is also given that has little relevance to environmental management in some cases, such as H-C and Gas Natural, proving their scant interest in the issue.

Table 2. Environmental management system

Companies	2005	2006	2007
Acciona	-	-	-
Endesa	86.69% production	87,50% production	89,18% production
Gamesa	76.5% windfarms	100% windfarms	100% windfarms
Gas Natural	11 companies	11 companies	11 companies
Hidrocantábrico	-	-	11 installations
Iberdrola	24 certifications	29 certifications	40 certifications
Unión Fenosa	67% power	93% power	98,30% power

One of the key questions in assessing the credibility of the data supplied by the companies is the trust placed in it by the special interest groups. This credibility relates to two factors: the involvement of the special interest groups in how information is collected, and deciding on the needs and intervention of an independent expert to ensure that the data reflects reality (Adams 2004; Adams et al. 2007). Given the poor involvement of stakeholders in the process (Larrinaga et al. 2002), the weight of credibility rests primarily on the verification by third parties. The trust that can be placed in the companies is closely bound to the reliability of the information on offer. Efforts made in verification are displayed in the table 3, in 2007; all the companies are at A+ level, although only two have been checked by a third party.

Table 3. Verification of the sustainable report

	2007			2006			2005		
	1	2	3	1	2	3	1	2	3
Acciona	G 3	A+	GRI- checked	G 3	A+	GRI- checked	G 2	Content Index only	
Endesa	G 3	A+	GRI- checked	G 3	A+	GRI- checked	G 3	C	Third- party- checke d
Gamesa	G 3	A+	GRI- checked	G 2	In Accordanc e	GRI- checked	G 2	In Accordanc e	GRI- checke d
Gas Natural	G 3	A+	GRI- checked	G 3	A+	GRI- checked	G 2	In Accordanc e	GRI- checke d
Hidro- cantábric o	G 3	A+	Third- party- checked	G 3	A+	Third- party- checked	G 2	In Accordanc e	GRI- checke d
Iberdrola	G 3	A+	Third- party- checked	G 3	A+	Third- party- checked	G 2	In Accordanc e	Self- declare d
Unión Fenosa	G 3	A+	GRI- checked	G 3	A+	GRI- checked	G 2	In Accordanc e	GRI- checke d

1 = Guideline; 2 = Adherence level; 3 = Declared as; + = Report Externally Assured

Stakeholders Considered

Several empirical works show a clear relationship between working with different special interest groups and efficient management of finances (Greenley et al. 1997; Freeman et al. 2004).

After checking the information provided by these companies and according to the indicators revealed, almost all companies meet the requirements of GRI about identification of different interest groups, without significant changes over the period

analysed. It is noteworthy that just two companies that consider the environment as stakeholder. Furthermore, four of them have omitted it, which means that in the making decisions process these organizations do not take into account environment needs. The environment as interest group is represented by different associations and groups mainly environmentalists, and just Iberdrola and Gas Natural consider it.

The mere list of the various stakeholders does not imply social responsibility on the company's part. We have to know which are the most important stakeholders, and up to what point their needs have been integrated into company management systems (Donaldson et al. 1995; Freeman et al. 2004). Information offered by the company is the main tool used in managing relations with different special interest groups when wishing to legitimise its activity and obtain the groups' support and approval (Bebbington et al. 2001).

Information referring to stakeholders also presents differences, with four companies explicitly taking two groups into account: one top priority group consisting of clients, workers, shareholders and investors, and another non-priority group, consisting of society, the environment, public administration, the media and others.

However, this distinction is also implicit in the other companies; the information offered in reply to the demands of these groups is not treated with the same importance, as in these cases, the information is seen to be limited solely to listing and describing the channels of communication used with these groups. The guide itself encourages this distinction by asserting that not all groups will make use of the report, although they must be considered in it.

Following the GRI guide's recommendation, companies should describe how they respond to the expectations and interests of the groups. Except for Iberdrola, Gamesa and Gas Natural, the companies limit themselves to a standard script on the means and instruments of communication with the special interest groups. The common denominator of the communication channels is the low cost of mass communication, with the basic tools used being the corporate website and press briefings. In addition to these methods, all the companies have a complaints and suggestions box. Iberdrola and Gas Natural also give informational talks to the various special interest groups. The companies who think of public administration as stakeholders put the required legal information first; Iberdrola and Gas Natural also hold meetings and regular contact with them.

Iberdrola, Unión Fenosa and Gas Natural have notices of readers' opinions, from which they try to obtain information on the profile of the user of this type of information, also on areas of interest, and the value they place on this.

Table 4. Stakeholder considered by companies

	shareholder and investors	clients	suppliers	workers / employee	society	media	environment	public administration
Acciona	123	123	123	123	123	23		23
Endesa	123	123	123	123	123	123		123
Gamesa	123	123	123	123	123			12
Gas Natural	123	123	123	123	123			
Hidro – cantábrico	123	123	123	123	123			123
Iberdrola	123	123	123	123	123	123	123	123
Unión Fenosa	123	123	123	123	123		123	123
main ones are in bold type; 1 = year 2005; 2 = year 2006; 3 = year 2007								

Information Provided

A positive evolution overall has been observed in the information supplied by companies within the brief of the study (Table 5), as there are an increasing number of standards provided. Analyzing these indicators in more depth, we see that the effort done focuses primarily on the core indicators and the secondary ones have been less developed. In this area we see as Iberdrola (leader) applies and shows more complete information on both indicators from the beginning of the period. Noting GRI scoreboard, it is possible to guess how the rest of companies are reaching the level of information disclosed by the leader. Within the secondary indicators we can see that the most developed ones are those that can show positive aspects as EN 6, 7, 13 and 14. On the other hand those involving secondary indicators that show environmental, damages, discharges and impacts achieved a lower level of information (15, 24, 25, 29).

A deeper analysis of these standards shows that effort mostly centres on the main ones, to the detriment of the secondary ones. Within the secondary standards, it can be seen that those worked with most are the ones where the company can demonstrate positive aspects, such as EN 6, 7, 13 and 4. On the other hand, secondary standards involving the identification of damage, spills and impact have a lesser degree of information (EN 15, 24, 25, 29).

One of the GRI guidelines is that the information supplied must allow stakeholders to analyse changes in the organisation, and to be able to compare data using the company benchmarking. In spite of the plethora of information given by the companies, we cannot make comparisons, as the same units are not always used. To cite a few of the most common, as an example (Tn CO₂, KTn of CO₂; MT CO₂; Kg of CO₂/Kwh, gr CO₂/Kwh for standards EN 16 and 17). Some companies even use different measurements for different years, making it difficult to make even longitudinal comparisons.

From the detailed analysis of the data given on emissions and impacts, the organisations opt to show relative, rather than absolute, data with these usually hidden in other pages of the reports, especially when talking of emissions and negative data (EN 16, 17, 19 and 20).

Concerning provisions and contingencies, the trend in the sector is to disclose very few specific data, with many cases being limited to a set script, clearly following a formula, assuring us that "...many of its activities do not affect the environment, and should they do so, these are amply covered by insurance." This indicates that the disclosed information is insubstantial (Deegan et al. 1996; Gray 2006; Adams 2004; Criado et al. 2008). Companies when they make reference to possible contingencies (EN 28), tend to reveal a little diffuse and specific information to quantify as little as possible, in several cases they argue that these amounts are not significant enough to modify the balance.

Impact on biodiversity indicators (EN, 11 and 12), shows a positive trend in both the quantity and quality, although substantial differences between them can be noticed. Emphasizing the positive information provided by Iberdrola, Gamesa and Gas Natural during all the period, in contrast, other companies offer partial and very little information at the starting point of analysis, reaching similar levels at the end of the three years. In all cases there is the effort made by companies over time in terms of information. To summarise, it must be said that, despite the plethora of data supplied by the companies, there is a certain similarity, in addition to ambiguity, in the information, which makes it of doubtful use (Adams et al. 2007).

Table 5. GRI indicators according to G3 Guidelines used by companies.

GRI INDICATORS	Acciona		Endesa		Gamesa		Gas Natural		H-C		Iberdrola		U-Fenosa		
	G2	G3	G2	G3	G2	G3	G2	G3	G2	G3	G2	G3	G2	G3	
	05	06	07	05	06	07	05	06	07	05	06	07	05	06	07
c = core indicators, the others are considered as additional ones.															
ENVIRONMENTAL															
Environmental indicators															
Materials															
c EN-1 Materials used by weight or volume.	NA	1	1	1	2	1	1	1	1	1	1	1	1	1	1
c EN-2 Percentage of materials used that are recycled input materials.	NA	1	2	1	2	NA	NA	NA	NA	1	1	1	1	2	2
Energy															
c EN-3 Direct energy consumption by primary energy source.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
c EN-4 Indirect energy consumption by primary source.	NA	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EN-5 Energy saved due to conservation and efficiency improvements.	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2
EN-6 Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2
EN-7 Initiatives to reduce indirect energy consumption and reductions achieved.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Water															
c EN-8 Total water withdrawal by source.	NA	1	1	2	2	1	1	2	1	1	1	1	1	1	1
EN-9 Water sources significantly affected by withdrawal of water.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EN-10 Percentage and total volume of water recycled and reused.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Biodiversity															
c EN-11 Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	NA	1	1	NA	1	1	1	1	1	1	1	1	1	1	1
c EN-12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	NA	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EN-13 Habitats protected or restored.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EN-14 Strategies, current actions, and future plans for managing impacts on biodiversity.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EN-15 Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.															
Emissions, Effluents and Waste															
c EN-16 Total direct and indirect greenhouse gas emissions by weight.	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
c EN-17 Other relevant indirect greenhouse gas emissions by weight.	NA	NA	3	1	1	1	1	1	1	1	1	1	1	1	1
EN-18 Initiatives to reduce greenhouse gas emissions and reductions achieved.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
c EN-19 Emissions of ozone-depleting substances by weight.	NA	NA	NA	2	1	1	1	1	1	1	1	1	1	1	1
c EN-20 NOx, SOx, and other significant air emissions by type and weight.	NA	1	1	1	1	1	1	1	1	1	1	1	1	1	1
c EN-21 Total water discharge by quality and destination.	NA	1	1	1	1	1	1	1	1	1	1	1	1	1	1
c EN-22 Total weight of waste by type and disposal method.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
c EN-23 Total number and volume of significant spills.	NA	1	1	NA	1	1	1	2	NA	1	1	1	1	1	1
EN-24 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.															
EN-25 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Products and services															
c EN-26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
c EN-27 Percentage of products sold and their packaging materials that are reclaimed by category.	NA	3	NA	NA	NA	1	1	2	NA	NA	NA	1	NA	NA	1
Compliance															
c EN-28 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	NA	1	NA	1	1	1	1	1	NA	1	1	1	1	1	1
Transport															
EN-29 Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Overall															
EN-30 Total environmental protection expenditures and investments by type.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

1 = Information OK; 2 = Partial Information; 3 = Not considered material; NA = Not available

Conclusions

The importance of the behaviour of electricity companies with high environmental impact has been the main influence on the amount of information that has been gradually released in recent times (Moneva et al. 1996). At first, this was linked to the need to legitimise their behaviour before society, by offering abundant information on their activity (Moore 2001; Golob et al. 2007).

Having analysed the sustainability reports from the main Spanish electricity producing companies, for which the criteria of the GRI (version G3) have been used for environmental information, a positive, overall evolution has been observed for the period under study. At the first stage some differences in reporting can be appreciated both in quantity and quality, However, these differences are reduced in the following years following the tendency drawn up by the leaders of the sector, this seems to corroborate that an isomorphic process tending towards homogenisation of the information supplied and oriented to reach the worldwide accepted GRI standard.

Regarding the information given, the companies are clearly preoccupied by sustainable development and aware of the effects caused by their activities. They provide a great deal of information, but the reason for breaking it down seems to be far from a response to the interests of the stakeholders, much more a response to imitational behaviour, where the organisation faces a problem with ambiguous causes or solutions which are not completely clear, and their main desire is for viable solutions found through very little effort.

However, and in spite of the fact the amount of information dumped by the companies is sufficient in quantity, there is a certain lack of quality regarding the degree of objectivity and comparability, which prevents stakeholders from effectively backing up business decisions. Basically, the companies are taking advantage of the positive data provided by renewable energies to disclose their best results, while at the same time masking the negative impacts from the sector. It has been observed that their commitment to the environment is poor, and is usually linked to complying with a particular standard or regulation. Limited interest from the financial markets in this type corporate behaviour contributes to the situation.

Finally, complying with the GRI standards has meant a revolution in business management, and the companies to which we are referring are not an exception. Despite the amount of data relating to the standards and a certain degree of fulfilment by the companies analysed, a large number of technical problems and ethical dilemmas have been found, arising from the data, and which businessmen, managers, middle management and workers must all confront.

References

- Adams, C.A. (2004). The Ethical, Social and Environmental Reporting-Performance Gap. *Accounting, Auditing and Accountability Journal*. 17:5, 731-757.
- Adams, C.A. & Larrinaga, C. (2007). Engaging with Organisations in Pursuit of Improved Sustainability Accounting and Performance. *Accounting, Auditing & Accountability Journal*. 20:3, 333-355.
- Adams, C.A. & McNicholas P. (2007). Making a Difference, Sustainability Reporting, Accountability and Organisational Change. *Accounting, Auditing & Accountability Journal*. 20:3, 382-402.
- Adams, C. A., Coutts A., & Harte G. (1995). Corporate Equal Opportunities (Non-) Disclosure. *British Accounting Review*. 27:2, 87-108.
- AECA. (2004). Conceptual Framework on Social Responsibility. Anon. Madrid: AECA.
- Aerts, W., Cormier D., & Magnan M. (2006). Intra-Industry Imitation in Corporate Environmental Reporting: An International Perspective. *Journal of Accounting and Public Policy*. 25, 199-331.
- Alciatore, M.L. & Dee C.C. (2006). Environmental Disclosures in the Oil and Gas Industry. *Advances in Environmental Accounting and Management*. 3, 49-75.
- Aldrich, H. (1979). *Organizations and Environments*. Anon. Englewood Cliffs: Prentice-Hall.
- Bebbington, J. (1999). Compulsory Environmental Reporting in Denmark: An Evaluation Social and Environmental Accounting. *Critical Perspectives on Accounting*. 19:2, 2-4.
- Bebbington, J. & Gray R. (2001). An Account of Sustainability: Failure, Success and Reconceptualization. *Critical Perspectives on Accounting*. 12:5, 557-587.
- Bebbington, J., Brown, J., Frame, B., & Thompson, I. (2007). Theorizing Engagement: The Potential of a Critical Dialogic Approach. *Accounting, Auditing & Accountability Journal*. 20:3, 356-381.
- Bebbington, J., Gray, R. & Larrinaga C. (2000). Environmental and Social Accounting in Europe. *European Accounting Review*. 9:1, 3-6.
- Burritt, R. L. (2004). Environmental Management Accounting: Roadblocks on the Way to the Green and Pleasant Land. *Business Strategy and the Environment*. 13:1, 13-32.
- Carroll, A.B. (1979). A Three Dimensional Conceptual Model of Corporate Performance. *Academy of Management Review*. 4:4, 497-505.
- Crane, A., McWilliams, A., Matten, D., Moon, J. & Siegel, D. (2008). *The Oxford Handbook of CSR*. Anon. Oxford: Oxford University Press.
- Criado, I., Husillos, F.J. & Larrinaga, C. (2008). Compliance with Mandatory Environmental Reporting in Financial Statements: The Case of Spain (2001-2003). *Journal of Business Ethics*. 79, 245-262.

- Cyert, R.M. & J. G. March. (1963). *A Behavioral Theory of the Firm*. Anon. Prentice-Hall.
- Deegan, C. (2002). The Legitimasing Effect of Social and Environmental Disclosures, a Theoretical Foundation. *Accounting, Auditing and Accountability Journal*. 15:3, 282-311.
- Deegan, C. & Rankin, M. (1996). Do Australian Companies Report Environmental News Objectively?: An Analysis of Environmental Disclosures by Firms Prosecuted Successfully by the Environmental Protection Authority. *Accounting, Auditing & Accountability Journal*. 9:2, 50-67.
- Deephouse, D.L. (1996). Does Isomorphism Legitimate? *Academy of Management Journal*. 39:4, 1024-1039.
- Detienne, K.B. & Lewis, L.W. (2005). The Pragmatic and Ethical Barriers to Corporate Social Responsibility Disclosure: The Nike Case. *Journal of Business Ethics*. 60, 359-376.
- Dimaggio, P.J. & Powell, W. (1983) The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*. 48:2, 147-160.
- Dimaggio, P.J. & Powell, W. (1991). *The New Institutionalism in Organizational Analysis*. London: University of Chicago Press.
- Donaldson, T. & Preston, L.E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence and Implications. *Academy of Management Review*. 20:1, 65-91.
- European Commission, (2002), A Business Contribution to Sustainable Development, *Communication from the Commission, Concerning Corporate Social Responsibility* (Online). (Referred to 12.5.2006) available: [http://europa.eu.int/comm/employment_social/soc_dial/csr/csr2002_en .pdf](http://europa.eu.int/comm/employment_social/soc_dial/csr/csr2002_en.pdf),
- Fernández, M. & Larrinaga, C. (2005). Percepciones Sobre Contabilidad De Costes Ecológicos Completos: Análisis Empírico Del Sector Energético Español. *Revista Española de Financiación y contabilidad*. 131, 225-254.
- Frederick, W.C. (1987) Theories of Corporate Social Performance. in: S.P. Sethi & Falbe, C.M. (Ed). *Business and Society: Dimensions of Conflict and Cooperation*. New York: Lexington Books.
- Freeman, A.M. & Rowe, R.D. (1995). Ranking Electric Generating Technologies with External Costs. *The Electricity Journal*, 8:10, 48-53.
- Freeman, J.H. (1992). Organizational Life Cycles and Natural Selection Processes. En: B. Staw and L. Cummings, (eds). *Research in Organizational Behaviour*, 4. Greenwich: JAI Press.
- Freeman, R.E., Wicks, A.C. & Parmar, B. (2004). Stakeholder Theory and the Corporate Objective Revisited. *Organization Science*. 15:3, 364-369.
- Global Reporting Initiative (2006), *Sustainability Reporting Guidelines, Global Reporting Initiative*, 2006.
- Gray, R. (2005). Taking a Long View on what we Now Know about Social and Environmental Accountability and Reporting: Of Don Quixote, Placebos and Capitalism. *Electronic Journal of Radical Organisation Theory*. 9.

- Gray, R. (2006). Does Sustainability Reporting Improve Corporate Behaviour? Wrong Question? Right Time? *Accounting and Business Research*. 36:4, 65-88.
- Gray, R. & Milne, M. (2005). Sustainability Reporting: Who's Kidding Whom? *Chartered Accountants Journal of New Zealand*. 81:6, 66-70.
- Gray, R., Owen, D. & Adams, C.A. (1996). *Accounting & Accountability : Changes and Challenges in Corporate Social and Environmental Reporting*. Anon. London etc.: Prentice Hall.
- Gray, R., Owen, D. & Maunders, K.T. (1987). *Corporate Social Reporting: Accounting and Accountability*. Anon. Prentice Hall International UK.
- Greenley, G. & Foxall, G. (1997). Multiple Stakeholder Orientation in UK Companies and the Implication for Company Performance. *Journal of Management Studies*. 34(2), pp 259-284.
- Hohmeyer, O. (1988). *Social Costs of Energy Consumption*. Anon. Berlin: Springer.
- Hohmeyer, O., Ottinger, R.L. & Rennings, K. (1995). *Social Costs and Sustainability. Valuation and Implementation in the Energy and Transports Sector*. Anon. Manheim: Springer.
- Huntington, S. (1969). *Political Order in Changing Societies*. Anon. New Haven CT.: Yale University Press.
- KPMG. (2008). *KPMG International Survey of Corporate Social Responsibility Reporting*. Anon. Amsterdam: KPMG Global Sustainability Services and University of Amsterdam Graduate Business School.
- Larrinaga, C., Carrasco, F., Correa, C. & Llana, F. (2002). Accountability and Accounting Regulation: The Case of the Spanish Environmental Disclosure Standard. *European Accounting Review*. 11:4, 723-740.
- Llana, F., Moneva, J.M. & Hernández, B. (2007). Environmental Disclosures and Compulsory Accounting Standards: The Case of Spanish Annual Reports. *Business Strategy and the Environment*. 16:1, 50-63.
- Matten, D. & Moon, J. (2008). Implicit and Explicit CSR: A Conceptual Framework for a Comparative Understanding of Corporate Social Responsibility. *Academy of Management Review*. 33:2, 404-424.
- Mobus, J.L. (2005). Mandatory Environmental Disclosures in a Legitimacy Theory Context. *Accounting, Auditing and Accountability Journal*. 18:4, 492-517.
- Moneva, J. M. (2001). El Marco De La Información Social y Medioambiental De La Empresa: En Análisis De La Global Reporting Initiative (GRI). *Revista Interdisciplinar de Gestión Ambiental*, Junio.
- Moneva, J. M. & Llana, F. (1996). Análisis De La Información Sobre Responsabilidad Social En Las Empresas Industriales Que Cotizan En Bolsa. *Revista Española de Financiación y Contabilidad*. 87, 361-401.
- Moneva, J. M. & Llana, F. (2000). Environmental Disclosures in the Annual Reports of Large Companies in Spain. *European Accounting Review*. 9:1, 7-29.
- Moneva, J.M., Fuertes, Y. & E. Pascual. 2001. Información De Base Social En El Sector Eléctrico Español: Análisis De Su Evolución y Factores Explicativos. *Cuadernos de Economía y Dirección de la Empresa*. 9(separata), 227-248.

- Mostaque, H. & Gunasekaran, A. (2002). An Institutional Perspective of Non-Financial Management Accounting Measures: A Review of the Financial Services Industry. *Managerial Auditing Journal*. 17:9, 518-536.
- Rowe, R.D., Lang, C.M., Chestnut, L.G., Latimer, D.A., Rae, D.A., Bernow, S.M. & White, D.E. (1995) *New York State Environmental Externalities Cost Study*. Empire State Electric Energy Research Corporation (ESEERCO), Oceana, New York.
- Scott, W. (1987). The Adolescence of Institutional Theory. *Administrative Science Quarterly*. 32 , 493-511.
- Selznick, P. (1992). *The Moral Commonwealth: Social Theory and the Promise of Community*. Anon. Berkeley: University of California Press.
- Selznick, P. (1996). Institutionalism "Old" and "New". *Administrative Science Quarterly*. 41:2 (40th Anniversary Issue), 270-277.
- Snider, J., Hill, R.P. & Martin, D. (2003). Corporate Social Responsibility in the 21st Century: A View from the World's most Successful Firms. *Journal of Business Ethics*. 61:3, 263-281.
- Sundqvist, T. (2004). What Causes the Disparity of Electricity Externality Estimates. *Energy Policy*. 32, 1753-1766.
- UNESA, 2008, *Información del sector eléctrico. Avance estadístico de 2008*, (Online). (Referred to 22.4.09) Available: www.unesa.es
- Vass, P. (1992). Establishing a Conceptual Framework for Regulated Industries Accounting and Accountability. *Financial Accountability & Management*. 8:4, 299-315.
- Wartick, S.L. & Cochran, P.L. (1985). The Evolution of the Corporate Social Performance Model. *The Academy of Management Review*. 10:4, 758-769.
- Weber, M. (1958). *The Protestant Ethic and the Spirit of Capitalism*. Anon. New York: Scribner.

SUPPLY CHAIN CORPORATE RESPONSIBILITY REPORTING: A EXTENT OF INDUSTRY REPORTING OF BIODIVERSITY ISSUES

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Abstract

Industrial development has had a major role in creating the situation where bio-diverse materials and services essential for sustaining business are under threat. A major contributory factor to biodiversity decline comes from the cumulative impacts of extended supply chain business operations. There is an increasing call for companies to manage and report on the potential risks and opportunities that may affect sustainable production, corporate responsibility and reputation. However, within Corporate Responsibility (CR) reporting impacts on biodiversity due to supply chain operations have not traditionally been given equal weighting with other environmental issues. The situation is seeing little change despite widely publicised assessments of deteriorating natural resources aimed at increasing business and public awareness.

This paper investigates the extent of CR reporting in managing and publicising company biodiversity supply chain issues by reviewing a cross-sector sample of publicly available CR reports. The report contents were examined for suggestions of industrial sectorial trends in the level of biodiversity consideration. The reporting of environmental management system use within company supply chain management is assessed in the samples and is considered as a mechanism for responsible supplier partnership working.

Keywords: Corporate Responsibility; Biodiversity; Supply Chain; Environmental Management Systems.

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Introduction

The 2005 Millennium Ecosystem Assessment (MA) found that industrial development has had a major impact on the biodiversity that underpins natural ecosystems and this is threatening the provision of services and materials essential to business (MA, 2005). The increasing scarcity of natural resources, often affecting the availability of material goods in supply chains, is forcing a stronger association between environmental issues and overall financial bottom lines (MA, 2005; MA, 2007).

In addition, businesses are under mounting pressure to think about their wider environmental responsibilities from various specific directions, such as, regulators, government, special-interest groups (SIGs), NGOs and consumers (Madsen and ULHØI, 2001).

This situation is changing social attitudes towards the way companies operate and is forcing industry to revisit the way they report on their corporate responsibilities to society, shifting the emphasis from purely financial performance measures to those that also incorporate wider environmental and social issues (Jonker *et al*, 2007; Marshal *et al*, 2007). However, as Bishop *et al* (2008) pointed out, biodiversity has not traditionally been a central focus of Corporate Responsibility (CR) reporting.

In view of the Millennium Ecosystem Assessment (MA) findings, alongside increasing business and public recognition of the potential impact of global supply chains, a pertinent question is: 'To what extent is biodiversity consideration, in a sustainable procurement context, now included within CR reporting?'

This paper addresses the above question via a survey of published CR reports from a cross-sectorial sample of 120 companies and forms part of a PhD Thesis investigating biodiversity impact in supply chains (Whatling, 2009). Specifically the extent of CR reporting concerning company biodiversity supply chain issues is investigated. The use of environmental management systems (EMSs) within company supply chain management is also assessed as a mechanism for responsible supplier partnership working.

Method

In order to investigate the level of biodiversity consideration in CR reports, a sample of cross-sector publicly available company CR reports were reviewed. The survey assessed the level of biodiversity consideration both within the focal company (sample companies selected for the survey) and with respect to its supply chain.

One approach to managing biodiversity impact in the supply chain is the use of EMSs, especially when assessing risk, as the UK Government suggests properly implemented EMSs will help with managing risks, liabilities and legal compliance (Defra, 2005). These may be externally accredited systems such as ISO14001 and EMAS or internally developed systems. Thus, in order to get an indication of the extent of EMS use relating both to biodiversity and general environmental issues, the survey also reviewed the reporting of accredited and non accredited EMSs in supply chain management.

Biodiversity Consideration Survey

The survey reviewed the website published CR reports of 120 leading national and multinational companies from various industrial sectors. The reports selected covered the financial years 2003/4 and 2005/6.

The sample was selected from three sources: (i). a company list compiled by Aston University's Environmental Systems and Safety Management Research Group – from an undergraduate assignment to assess environmental policies and statements; (ii) A Business in the Community (2006) top 100 companies list for corporate responsibility; and (iii) from CorporateRegister.com, a web-based directory of corporate non-financial reports. The sample was chosen to include 40 companies in each of three Biodiversity Risk Zones (material risk to companies), as defined by the Earthwatch Institute (Europe) and ISIS Asset Management, on behalf of F&C Asset Management (2004): high (Red), medium (Amber) and low (Green) biodiversity risk by sector zones - see Table 1. Within each zone, sectors are presented in alphabetical order. The ordering does not reflect different levels of risk.

Table1 Level of Biodiversity Risk by Sector

Source: F&C Asset Management (2004, p13)

RED ZONE High-Risk Sectors: Most companies exposed to Risk. Risks likely to be significant	AMBER ZONE Medium-Risk Sectors: Some companies exposed to Risks. Risks may be significant	GREEN ZONE Lower-Risk Sectors: Risk variable and significance unknown
Construction and Building Materials Electricity Food and Drug Retailer Food Producers Forestry and Paper Leisure and Hotels Mining Oil and Gas Utilities	Beverages Chemicals Financial Services General Retailers Household Goods and Textiles Personal Care and Household Products Pharmaceuticals and Biotech Support Services Tobacco Transport	Aerospace and Defence Automobiles and Parts Diversified industries Electronic and Electrical Equipment Engineering and Machinery Health Information technology and Hardware Media and Entertainment Software and Computer Services Steel and Other Metals Telecom Services

In the analysis of the survey results the F&C risk by sector table is used only as a general guide of industrial sectors most likely to have an impact on biodiversity. It is recognised that sectors in all 3 biodiversity risk zones can have varying impacts on biodiversity and that their position is not fixed to a particular zone. As the F&C report (F&C Asset Management, 2004) points out, biodiversity may not only be a

material high risk to companies in the red zone, but also to companies in the amber and green zones.

It is recognised that the biodiversity consideration survey sample size of 120 is relatively small, and that no formalised random sampling method was employed. Therefore the analysis is limited to providing an indication of trends concerning how business is using CR reporting as a means of conveying its biodiversity consideration.

Survey Category and Rationale

The assessment of each CR report was undertaken according to the five survey categories, A to E, given below in Table 2 with a rationale for their selection shown *in italics*.

Table 2 Survey Categories used to Evaluate Sample Companies CR reports

SURVEY CATEGORY	KEY	CRITERIA (defining level of biodiversity consideration) and Rationale
Supply Chain	A	<p>Is biodiversity a consideration when dealing with environmental issues in the supply chain? Is biodiversity consideration part of the supplier selection criteria or code of conduct of the focal company?</p> <p><i>The results give an indication of the level of understanding and importance given by the sample companies' indirect biodiversity impacts relating to the supply chain.</i></p>
CR Report	B	<p>Is biodiversity mentioned as part of the general environmental section and in relation to the overall company policy but not specifically in an EMS context. No connection to the wider impact of the supply chain.</p> <p><i>Considers the CR Report in general and looks for specific consideration of biodiversity in any context other than the supply chain. These results show the overall level of biodiversity consideration and awareness within the focal company.</i></p>
Focal Company EMS	C	<p>Are Environmental Management Systems (In-house, ISO 14001, EMAS, 3rd party accredited management systems) in place? Do they directly mention and include biodiversity in an EMS context in the report?</p> <p><i>Examines evidence of Environmental Management System use in a biodiversity context. Are biodiversity issues discussed as part of an EMS framework? These results will show the level of structured management of biodiversity issues in areas such as targets and timeframes.</i></p>
Sustainability	D	<p>Is Sustainability mentioned in the context of biodiversity consideration or general environmental issues?</p> <p><i>Confirms acknowledgement of the link between biodiversity and sustainability, for example in terms of security of supply, or sustainable management of ecosystem goods or services.</i></p>
Landholdings	E	<p>Is biodiversity consideration specific to land owned by the sample focal company?</p> <p><i>Identifies companies with landholdings, whether their biodiversity consideration is restricted to a landholding context and how broad this is, ie. land owned and leased by the focal company or used by suppliers.</i></p>

These categories were designed to demonstrate a comprehensive coverage of the area of biodiversity consideration and EMS use, in terms of company responsibility. The main emphasis was to assess the biodiversity consideration of the main published company CR report, as opposed to more disperse information. This is the document that the majority of stakeholders (with general interest rather than specific interests in biodiversity issues) are most likely to read and is often where public perception of an organisations biodiversity management is formed. Companies selected for the survey

may well have published other documents in addition to their CR report, such as general environmental impact reports, but these were not considered in the survey.

Scoring

In reviewing each of the sample company CR reports with respect to the five evaluation categories, a score was assigned that reflected the level of criteria consideration. The scoring system shown in Table 3 ranges from 0 to 3, reflecting - No, Poor, Moderate and Good Consideration.

Table 3 Biodiversity Consideration Scores for Survey Category

LEVEL OF BIODIVERSITY CONSIDERATION IN REPORT	BIODIVERSITY CONSIDERATION CRITERIA (Assessed against each survey category A to E)	Biodiversity Consideration Score (BCS)
No Consideration	Mention of biodiversity in survey category in any context not found in report or linked to any general environmental issues	0
Poor Consideration	Supply chain mentioned in general environmental terms only - biodiversity or related issues (e.g., ecosystems) not mentioned within survey category.	1
Moderate Consideration	Mention of biodiversity related issues, e.g., sourcing of raw materials; security of supply; text eluding to biodiversity related consideration e.g. species or habitat protection or genetic context with respect to survey category.	2
Good Consideration	Specific mention of biodiversity that meets or is close to an individual category (A to E) rationale.	3

Each of the sample CR reports was electronically word-searched for a direct mention of biodiversity or any related words such as ecosystem(s), ecology, or sustainable, with respect to the supply chain. These words and any sections of the reports explicitly relating to natural environment issues were then assessed in detail directly,

by reading the relevant sections. The results are presented in tabular form showing companies scored against specified criteria.

Results

Taking each survey category at a time, a simple frequency analysis was undertaken to determine both the maximum frequency scores within each biodiversity risk zone, and the modal frequency scores across all zones, in order to highlight the most common biodiversity consideration. The results are shown in Table 4. In each case, apart from survey category E (Landholdings), maximum and modal frequency scores coincided. The exception was due to the disparity between red zone companies with a high consideration for landholdings, and amber and green zone companies, which showed no consideration in this area. Other survey categories were not so polarised across risk zones.

Table 4 Results by Survey Category and Biodiversity Risk Zone

Survey Category Key	Red Risk Zone BC Score (40) Highest Score Bold				Amber Risk Zone BC Score (40) Highest Score Bold				Green Risk Zone BC Score (40) Highest Score Bold				Total BC Score Across all risk zones (120)			
	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3
A	1 0	1 4	1 0	6 6	1 5	1 3	6 6	6 6	9 9	1 6	8 8	7 7	34 34	43 43	24 24	19 19
B	3 3	8 8	2 2	2 7	5 5	1 2	4 4	1 9	1 1	8 8	5 5	1 5	20 20	28 28	11 11	61 61
C	1 8	9 9	6 6	7 7	1 4	1 8	6 6	2 2	1 7	1 2	9 9	2 2	49 49	39 39	21 21	11 11
D	3 3	1 1	1 2	1 4	3 3	1 5	1 5	7 7	7 7	1 8	1 1	4 4	13 13	44 44	38 38	25 25
E	7 7	9 9	1 1	2 3	1 5	4 4	8 8	1 3	1 4	1 0	7 7	9 9	36 36	23 23	16 16	45 45
Total Score Across All Categories	4 1	5 1	3 1	7 7	5 2	6 2	3 9	4 7	5 9	6 4	4 0	3 7	15 2	17 7	11 0	16 1

Notes: 40 CR reports were considered in each of the three risk zones giving a maximum score of 40 for each survey category, with a total of 120 reports being surveyed.

The distribution of Biodiversity Consideration Score (BCS) (0 to 3 - taken from the criteria given in Table 3), is shown within each risk zone. Maximum frequency scores are in bold, modal frequency scores are shaded grey.

Overall Analysis of Results

Table 5 is a synthesis of the findings from Table 4 and summarises the most common levels of consideration in each biodiversity risk zone with respect to the survey categories.

Table 5 Most Common Level of Biodiversity Consideration in Survey Reports

Survey Category	Red Risk Zone Level of Biodiversity Consideration	Amber Risk Zone Level of Biodiversity Consideration	Green Risk Zone Level of Biodiversity Consideration	Most common level across risk zones
A (Supply Chain)	Poor	None	Poor	Poor
B (CR Report)	Good	Good	Good	Good
C (F C EMS)	None	Poor	None	None
D (Sustainability)	Good	Poor / Moderate	Poor	Poor
E (Landholdings)	Good	None	None	None
Most common level across all survey categories	Good	Poor	None/Poor	

Perhaps not surprisingly companies representing high (red) biodiversity risk produced CR reports with greatest consideration for biodiversity and scored highest, with a most frequent score of good (3) for each survey category, whereas amber and green zone companies generally scored poorly (≤ 1). However all companies, including those in the red zone scored poorly or failed to consider biodiversity impacts in the supply chain or with respect to EMSs. Averaging the biodiversity consideration scores across risk zones (Table 5, final column) also highlighted the use of EMSs and the consideration of sustainability and landholdings as being deficient overall (ie poor or no score). It appears that organisations placed in the red zone are more likely to have significant landholdings than companies in other risk zones and therefore they are probably more immediately aware of business risks concerning biodiversity and with respect to other survey categories, compared to amber and green listed companies.

Across all risk zones biodiversity receives the most attention under survey category B (general consideration in CR reports). Companies often mention biodiversity as part of the general company policy, but go no further in publishing detailed information within the report. Although this gives the impression that the report is giving good consideration to biodiversity, the detail is missing concerning how the company manages the risks. It is possible that in some cases more detail on biodiversity issues is published elsewhere.

Biodiversity Consideration in the Supply Chain

Out of the survey sample of 120 companies, 19 scored the maximum rating of 3 (Good Consideration) in survey category A - supply chain (Table 4).

Further analysis of these 19 focal companies (Table 6) showed that they were spread evenly across the three biodiversity risk zones, and hence the consideration of supply chain biodiversity

Table 6 Review Categories and Results

FURTHER ANALYSIS OF SURVEY		Red Zone (6)	Amber Zone (6)	Green Zone (7)	Total (19)
Category A - BCS 3					
1	Accredited Environmental Management System used by focal company – ISO 14001 or EMAS?	5	6	7	18
2	In-house EMS. Own code of conduct; expect suppliers to meet own standards. Own supplier quality partnership system including a biodiversity element?	5	6	6	17
3	ISO 14001 required in supply chain - 1 st or 2 nd Tier?	2	2	4	8
4	Acorn or BS8555 recommended to suppliers?	2	0	0	2
5	Obligation for a supplier to require biodiversity criteria from their own suppliers?	0	1	2	3

The results also show that with one exception, each of these 19 companies employed an accredited EMS such as ISO14001 or EMAS. Nevertheless the one non-accredited company operated its own in-house system. In fact a total of 17 companies had internal systems, which contained specific biodiversity elements and involved, amongst other things, working in partnership with suppliers. These in-house systems are often based on ISO 14001 and tailored either to the industrial sector the company operates in, or to a type of product.

Strategic suppliers are often expected to comply with the company EMS via a due diligence process. Various titles for such processes are used, for example, Responsible Care Management (ACC, 2007), Electronic Industry Code of Conduct (HP, 2009), Vendor Code of Conduct, Supplier Relationship Management, Responsible Sourcing Standards, Supplier Management and Assessment Systems, Supplier Ethical Data Exchange (SEDEX, 2009) and Global Compact Sustainable Supplier Management System (GC, 2003). However, only 8 of the 19 companies required their first or second tier suppliers to adopt accredited EMS systems. Interestingly four of these eight cases were low risk (green zone) companies. Therefore in the majority of cases, the requirement of focal companies for suppliers to have accredited EMSs may currently be viewed as too restrictive in terms of supplier sourcing. The operation of purchaser-supplier partnerships and contractual agreements or assurances may be more workable solutions in the current business climate.

The results indicated an upward trend in red risk zone focal companies requiring ISO 14001 by a staged approach, through Acorn (IEMA, 2009) or BS8555 (BSi, 2009). Overall the data are too sparse, with a total of only 2 companies reporting across all 3 Risk Zones, for any meaningful conclusion to be drawn however. The overall (cross-zone) indication is that encouragement to start a staged approach to achieving ISO 14001 is not widely recommended to suppliers.

Only 3 companies reported the extended requirement for their main suppliers to ask for information on biodiversity issues of their own suppliers. None of these companies were from the red risk zone, but two were from the green zone, giving a further indication that biodiversity risk zone boundaries are not strictly defined. With only 3 companies out of the 120 in this category, there is a strong suggestion that focal company influence diminishes with distance down the supply chain. This situation has to change and keep pace with changing business attitudes towards sustainability (Whatling et al., 2009).

Discussion

Supply Chain Biodiversity Management Partnerships

The indication from the companies reporting good biodiversity consideration is that a structured environmental management system (EMS) is the most effective way forward. However, the use of EMSs is not mandatory and there is no requirement for accredited systems to be used by purchasing departments on any regular basis. Their effectiveness versus non-accredited (in-house) systems, in terms of including adequate processes, has been questioned (Andersen and Skovgaard, 2008). A study by Hewlett-Packard (HP, 2008) into small and medium sized enterprises (SME) use of EMSs in their Eastern European supply chain, found that organisations using only accredited systems fared no better in environmental management solutions than those with an in-house designed system. HP emphasises to their suppliers that a well-functioning EMS, tailored to the size of the company, is more important than having certification. For HP the processes in SMEs do not necessarily have to be as comprehensive as those in larger companies (Andersen and Skovgaard, 2008). Counter to the HP findings, a Remas (2006) study found a significant link to specific regulatory performance, with sites using EMSs performing better, although results varied throughout Europe.

Whichever approach is used, the role of supply chain management (SCM) of biodiversity should be to take into account the dual role of businesses as buyers and sellers, facilitating the sharing of best practice and preventing duplication of effort along the supply chain as much as possible. With every product or service category in the supply chain there is the potential for a focal (buying) company to have a direct impact (positive or negative) on biodiversity. These potential impacts can be considered cumulative and may be summed within the focal company supply chain or more specifically a single product line. In practice, however, apportioning an impact to a focal company or product is difficult, when the supplier may be supplying the same materials to a number of other (often cross sector) companies. Therefore, cooperation is required within industry sectors, to balance issues of confidentiality and monopolisation with efficiency and environmental gains throughout product life-cycles. Combining purchasing power and sharing best practice and expert opinion, whilst preventing duplication of effort, could also create additional leverage to drive improvements and reduce biodiversity impact on the part of the first tier supplier, as well as further down the supply chain. This all sounds challenging, but the concept is not entirely without precedent as the following examples illustrate.

New European regulations concerning the Registration, Evaluation, Authorisation and restriction of Chemicals (REACH), permit/require the creation of "Substance Information Exchange Fora" comprising industrial stakeholders (suppliers and users of specific chemicals), in order to streamline the approval process and ensure that all safety, health and environmental criteria are comprehensively considered (EC, 2007). Successes and failures experienced during this process should help pave the way for improved supply chain management in the chemical/pharmaceutical industry in general. Other examples are found in the IT industry, with the Waste Electrical and Electronic Equipment (WEEE, 2007) Directive and related electronic industry-wide Code of Conduct (EICC, 2005). This type of product or service related enforcement ensures that every supplier follows a set of audited industry criteria in order to operate within that industry.

In Germany a group of internationally renowned businesses from a wide range of business sectors has acknowledged their responsibility for the protection and sustainable use of biodiversity (gtz, 2008). A group of some 35 global 'trailblazing' companies have taken on the IUCN initiative 'Business & Biodiversity' (Bishop *et al*, 2008), and joined in a partnership agreement under the motto of 'Biodiversity in Good Company' (BiGC). The initiative envisages the integration of biodiversity into SCM and encourages cooperation on non-sensitive and non-financial operations in common supply chains in order to formulate common sector biodiversity criteria in supplier selection. Advice and practical help on biodiversity issues could be extended to their smaller suppliers, with the knock-on cumulative impacts on biodiversity assessed, and conservation contributions made towards reducing biodiversity decline.

Business Incentives

Business attitudes and responsibilities to the natural environment and the way it portrays and reports on its own behaviour are having to change. Driving change are intangibles, such as company and brand reputation, the social and financial elements of materiality and market value, all of which are now linked with sustainable procurement and environmental responsibility. Responsibility by shared association with suppliers is a material risk for example to a focal company's reputation and licence to operate (in its broadest sense). However, there will be a cautious approach to change, with information flow being constrained by concerns over risk of failure and/or losing competitive advantage. For example, Brown *et al* (2005) found most companies that consider general environmental issues tend to introduce only small initiatives, which show obvious benefits for the short-term but affect their reputation in the longer term. As a study by BearingPoint (2008) concluded, '*Changes in attitudes to greening the supply chain are likely to be ones of evolution and not revolution*'.

Added business incentives similar to those aimed at reducing carbon emissions could provide mechanisms for adding material value to biodiversity. An example comes from the United Nations Environment Programme (UNEP), the World Conservation Union (IUCN) and Secretariat of the Convention on Biodiversity (SCBD), which has launched an initiative to research options for an International Payment mechanism for Ecosystem Services (IPES). IPES will now have a special emphasis on

biodiversity (IPES, 2008). The IPES research would benefit from including the supply chain in assessing impacts on ecosystem services and biodiversity.

F&C Asset Management suggest that suppliers themselves need to be more proactive, and realise that by failing to take some initiative they may lose competitive advantage and business opportunities (Barrington, 2008). However, the potential for associated market gains could also present a barrier in terms of instigating biodiversity partnerships and information exchange with suppliers, from buyers afraid of losing market differentiation. Conversely, competitive advantage could be strengthened by linking a chain of suppliers with the focal company and the product, for example, in publicising the reduction in cumulative impacts.

A case study on Center Parcs (UK), in the leisure industry, found that first and second tier suppliers already work within a partnership culture on general environmental issues, such as, waste, recycling, and logistics (Whatling, 2009). Suppliers are also encouraged to extend this culture to their own suppliers. The reductions on cost and contribution to sustainable development are proving to be of mutual benefit to all players. Center Parcs are keen to extend this to include biodiversity aspects of their outsourcing operations.

The home improvement company B&Q use a life cycle environmental approach to their products. The company operates a partnership programme with its suppliers and as part of the organisation's vendor assessment programme (QUEST) it operates Critical Failure Points (CFP), which must be met as a condition of supply. The B&Q environmental CFP does not mention biodiversity in their CR report and the focus is on compliance. B&Q is part of the Kingfisher Group who demand active engagement with suppliers and set environmental improvement targets for suppliers, focusing on timber and chemical products (KF, 2008).

These systems are not seen as a 'bullying' tactic by focal companies on their suppliers, but as a mutually beneficial part of doing business consistent with other management frameworks concerning health and safety, equal opportunities, working conditions and fair trade.

The process of contributing to halting biodiversity loss within supply chains could form the basis of profitable new business models. These include the supply of commodities and services according to emerging standards of biodiversity-friendly production, supported by independent certification or assurance mechanisms, as well as the supply of ecosystem restoration and management services to both public and private customers. Reciprocal business benefits potentially include *inter alia* securing the supply of sustainable goods and services, end-user appeal and increased product marketability, financial gain via tax incentives, reputational gain, attracting and retaining the best employees.

Conclusions

Transparency in reporting plays an important role in marketing company reputation and brand value, which are major drivers for differentiation in competitive markets. CR reporting can be used to emphasize and provide overall reassurance on ethical trading as well as giving stakeholders detailed information on the sustainable procurement of key individual products. According to the survey results the indication is that biodiversity is poorly included within CR reporting across a wide section of industry, suggesting a lack of transparency in this area. Companies are missing a marketing opportunity if they do not include their full biodiversity management processes or achievements (particularly beyond compliance) in their reports, or they do not provide electronic links to other related CR documents.

Despite the millennium ecosystem assessment report (2005), companies may also be unaware of the risks and opportunities with respect to supply chain biodiversity issues. This situation could be compounded by the general lack of communication within industry. This suggestion is supported by a CR survey conducted by IBM of senior cross-sector business executives, which found there are significant information (including environmental) gaps between companies and their suppliers. Few of the IBM survey respondents were engaging with their supply chain partners often enough, and as a result missing an opportunity to reduce environmental impact and turn risks into opportunities (Riddleberger and Hittner, 2009).

Most companies are themselves part of a supply chain and every company will have an impact on the environment and hence biodiversity to some extent. It follows that companies should consider methods of managing and reporting the opportunities available in understanding these impacts. However, the reality is that despite the urgency surrounding the situation, as McCarthy (2007) says, '*Biodiversity is a compliance issue and generally not a priority for business management*'.

As a consequence there is a lack of business clarity and imperative concerning biodiversity and many companies have not developed or implemented strategies and action plans with respect to their supply chains for its preservation, in terms of cumulative impacts, or sustainable use. Those organisations that are more likely to consider biodiversity are sector specific, representing businesses with an obvious vested interest to be transparent in considering biodiversity. With these organisations there is a clear link between each business sector and biodiversity impacts and opportunities, for example companies in the high risk sectors in Table.1. There is potential for the wider operations of these company supply chains to add considerably to halting biodiversity decline, whereas for other companies or business sectors the link is perhaps less clear.

The implication, taken from the survey of company CR reports presented in this paper, is that where a chain of companies is commercially managing the supply and manufacturing of a common product, and where they have an accredited EMS, they operate them independently. This creates the potential for individual companies to expend precious resources on duplication of EMS objectives and targets, which may be common throughout organisations within a whole product supply chain. The overlap concerns *inter alia*, company in-house expertise, budgets, information,

business level playing field and, where outside consultation is needed - negotiation and buying power.

Allenby (2000) suggests that if business is to meet the level of quality of environmental information demanded from stakeholders in the future, then integrating information systems, organisation and environmental initiatives, is a key basis for doing so. The Millennium Ecosystem Assessment (MA, 2005) provides enough evidence of the urgency surrounding biodiversity loss and related risks to business viability, to suggest that a revolution is needed within business to action partnership working, with the aim of reducing biodiversity loss throughout their product supply chains. The next step is to provide industry with the necessary management tools for accomplishing this, together with the independent expertise to ensure the quality of related assessments of risks and opportunities and thereby provide reassurance to the CR report reader.

References

- ACC (2007). American Chemistry Council. Responsible Care Management Systems and Certification.[online]. (Referred to 11.7.2009). Available: www.americanchemistry.com/s_responsiblecare/doc.
- Allenby, B.R. (2000). Implementing Industrial Ecology: The AT&T Matrix System. In: *Interfaces – Journal of the Institute of Operations Research and the Management Sciences*. 30:3, 42-54.
- Anderson, M. and Skovgaard, R. G. (2008). Small Suppliers in Global Supply Chains. How multinational buyers can target small and medium sized suppliers in their sustainable supply chain management: A report by Danish Commerce and Companies Agency in Cooperation with Hewlett-Packard and Suppliers in Central and Eastern Europe. Danish Center for CSR. Copenhagen V. Denmark. 102p.
- Barrington. R. (2008). Biodiversity and Ecosystem Services: a City view. Director, Governance and Sustainable Investment F&C Asset Management. F&C Asset Management London UK.
- Biodiversity in Good Company (2009). An Initiative of the Federal Ministry of Environment, Nature Conservation and Nuclear Safety and Leading Companies. [online]. (Referred to 8.6.2009). Available: www.business-and-biodiversity.de/en/the-good-companies.htm.
- Bishop, J., Kapila, S., Hicks, F., Mitchell, P. and Vorhies, F. (2008). Building Biodiversity Business. Shell International Limited and the International Union for Conservation of Nature: London, UK, and Gland, Switzerland. 164 pp.
- Brown, D., Dillard, J. and Marshal, R.S. (2005). Strategically informed, Environmentally Conscious Information Requirements for Accounting Information Systems. In: *Journal of Information Systems*. 19:2, 79-104.
- BSi. (2009). Environmental Management BS 8555. [online]. (Referred to 11.7.2009). Available: www.bsi.global.com.
- CorporateRegister. (2008). Corporate Register Reporting Awards 2007. Global Winners and Reporting Trends March 2008. Corporate Register.com Ltd. London. UK.
- Defra. (2005). Government Position Statement on Environmental Management Systems. Environment Strategy Directorate Environment, Business and Consumers Division. Crown Copyright 2005.
- EC, (2007). European Commission. European Directorate General. REACH in brief. Data sharing in the supply chain. [online]. (Referred to 4.2.2009). Available: www.ec.europa.eu/environment/chemicals/reach/pdf/2007_02_reach_in_brief.pdf.

EICC. (2006). Electronic Industry Code of Conduct [online]. (Referred to 11.7.2009). Available: www.eicc.info.

F&C Asset Management. (2004). Is biodiversity a material risk for companies? An assessment of the exposure of FTSE sectors to biodiversity risk. F&C Asset Management. London. UK.

GC. (2003). Global Compact Policy Dialogue: Supply Chain management and Partnerships. UN. New York. [online]. (Referred to 20.1.2009). Available: www.globalcompact.org.

gtz. (2008).The Deutsche Gesellschaft für Technischer Zusammenarbeit GmbH. Biodiversity in Good Company. Business and Biodiversity Initiative. The Convention on Biological Diversity Conference of Parties – May 2008. Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit.

HP. (2009). Hewlet Packard. Electronic Industry Code of Conduct. Global Social and Environmental Responsibility Operations Supply Chain Social and Environmental Responsibility.[online]. (Referred to 6.7.2009). Available: www.hp.com/environment/pdf.

IEMA. (2009). Institute of Environmental Management and Assessment. Acorn. [online]. (Referred to 11.7.2009). Available: www.iema.net.

Jonker, J., Cramer, J. and van der Heijden, A. (2007). (Re) Constructing the Process of Embedding Corporate Social Responsibility within Companies. A work in progress contribution for the International Research Conference on corporate social responsibility (CSR), Managing on the Edge, September 25-26, 2007, Nijmegen University, The Netherlands. [online]. (Referred to 28.9.2007). Available: www.cscentre.net/index.

KF. (2008). Kingfisher Group. Steps for a Sustainable Future. Corporate Responsibility Summary Report 2007/2008. Kingfisher plc. London. [online]. (Referred to 20.1.2009). Available: www.kingfisher.com/CR.

MA, United Nations Millennium Assessment. (2007). First report of session 2006/07. Par 52. [online].(Referred to 4.1.2007). Available: <http://www.publications.parliament.uk/pa/cm200607/cmselect/cmenvaud/77/77.pdf>.

Madsen, H. and Ulhøi, J.P. (2001). Integrating Environmental and Stakeholder Management. In: Business Strategy and Environment. 10:2, 77-88.

McCarthy, S. (2007). *Pers comm*. Action Sustainability Director, Commission for a Sustainable London 2012. Meet the buyer event. London, September 2007.

Millennium Ecosystem Assessment. (2005). Ecosystems and Human Well-being. Opportunities and challenges for business and industry. Also: A Framework for Assessment. A Report of the Millennium Ecosystem Assessment: [online]. (Referred to 20.7.2005). Available: <http://www.millenniumassessment.org//proxy/document.353.aspx>.

Remas, (2006). Linking Environmental Management and Performance. Project results. Final Issue, 2006. [online]. (Referred to 9.12.2006). Available: <http://remas.ewindows.eu.org/pdf/newsletters/12.pdf>.

Riddleberger, E, and Hittner, J. (2009). Leading a sustainable enterprise. Leveraging insight and information to act. IBM Institute of Business Value. IBM Global Services, NY, USA.

SEDEX. (2009). Supplier Ethical Data Exchange. [online]. (Referred to 8.7.2009). Available: www.sedex.org.uk.

WEEE Directive, (2007). Environmental Protection. The Waste Electrical and Electronic Equipment (Amendment) Regulations 2007. [online]. (Referred to 7.6.2008). Available: www.opsi.gov.uk.

Whatling, D.R. (2009). Managing the Impact on Biodiversity of Supply Chain Companies. PhD Thesis (Awaiting publication) Aston University Birmingham UK.

Whatling, D.R., Brown, A.R, and Hedges, P. (2009). Considering Biodiversity Risks and Opportunities in Company Supply Chains. In: The Economics of Ecosystems and Biodiversity (TEEB). Outline D3 Report for Business and Industry (In press).

PART ELEVEN: RESPONSIBLE LEADERSHIP

RESPONSIBLE LEADERSHIP: BUILDING BLOCKS OF INDIVIDUAL, ORGANISATIONAL AND SOCIETAL BEHAVIOUR.

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Abstract

Responsible leadership achieves best results when high levels of individual, organizational and societal leadership responsibility coincide. How to find one's responsible leadership identity in the midst of the changing and chaotic world? The building blocks can be found in psychologist Erik Erikson's way of resolving individual identity crises.

The purpose of this paper is to adapt Erikson's model to individually, organizationally and societally responsible leadership and integrate them to achieve the best results. When working towards a responsible leader's identity, six areas of difficulty should be solved: (1) value basis, (2) self-image vs. external image, (3) time perspective, (4) role experimentation, (5) anticipation of achievement, and (6) leader-follower relation.

Responsibility and irresponsibility are contagious. Individuals, organizations and societies boost or repress responsible behaviour: inspiring leaders pull others to higher ethical levels of behaviour; greedy leaders push others back to lower levels of behaviour. Be a responsible leader: care and dare.

Keywords: responsibility, leadership, individual, organization, society, behaviour

Building Blocks of Responsible Leadership Identity

There are several good responsible leader examples to follow: some individuals, organizations and societies have found their responsible leadership identity. At individual level, we can learn responsible leadership from political, corporate and non-governmental (NGO) leaders, such as Mahatma Gandhi, Wangari Maathai, Al Gore, Anita Roddick and Muhammad Yunus. At organizational level, good responsible leadership examples to follow include e.g. The Body Shop (even after Anita Roddick), Grameen Bank and Green Belt Movement. At societal level, it is possible to compare for instance the USA and Bhutan. Contrary to common belief, individuals, organizations or societies do not have to be rich to be responsible. Wealth may seduce to irresponsible behaviour, like disregard for the disadvantaged and wasteful consumption patterns. The six building blocks of responsible leadership identity are based on individual psychologist Erik H. Eriksson's (1957, 1969, 1974) model of solving identity crises.

Value Basis

Finding one's true identity requires an in-depth examination of one's value basis. The question is: Have you found a set of basic philosophical or religious values that your outlook on life can be based upon? Your mission should spell out the values which you build work on. At individual level this is a meditation exercise on how to take personal responsibility for one's actions.

At organizational level the company or other organization needs to find a set of values that all its members can accept and identify with. This happens if the organizational values match the individual values. Hence the best outcome can be achieved by allowing all members to participate in the creation of the organizational values. The problem is that this grass-root value creation takes a long time, for large organizations even a year or two, to accomplish. Most top managers cannot wait that long and instead draft a list of organizational or corporate values on their own. If these top-down values are created with a large heart, the employees and other organizational members may accept them, but their in-depth commitment succeeds only through their personal involvement. Well-established organizations have a long history with a strong organizational culture, which implicitly reflect their true organizational values that may not coincide with the explicitly expressed values drafted by current top management.

Societal values are even more deeply rooted in culture and slower to change than organizational values. Yet at societal level, powerful leaders often set an example, good or bad, for citizens to follow. This example may inspire massive-scale altruistic or egoistic behaviour in societies. For example, Mahatma Gandhi's (1869-1948) values of non-violent resistance to tyranny still inspire civil rights and freedom movements all over the world while Adolf Hitler's (1889-1945) egoistic and racist values still inspire parties, groups and individuals for tyrannical behaviour towards people of other cultures across the world.

Self-Image vs. External Image

The self-certainty question for responsible leadership to answer is: Do you feel that your self-image is consistent with the image you present to others? Or is your self-image better/worse than your external image? Arrogant boasters or cringing subordinates cannot become responsible leaders. Taking humble pride in oneself and in one's achievements creates a healthy image. Superficially glittering images become easily scratched and may sometimes be so badly battered that the responsible leadership identities built on them collapse. Many individuals, organizations and societies are presenting green- and whitewashed images to others while acting unethically and/or demanding others to act unethically behind the scenes. This does not remain unnoticed for long.

Hence there becomes a huge gap between the self-image upheld and the way the image is seen by others. For example, Hitler's grandiose self-image as a good saviour and external image as an evil oppressor did not match in the long run, which was his

and the Third Reich's ruin. Mahatma Gandhi's self-image and external image matched well all through his life because he lived as he preached: he followed the non-violence (ahimsa) principle even in the most critical situations, swore always to tell the truth, lived modestly and remained a vegetarian. In this way he gained trust, respect and influence. This resulted in independent India, and, although violent bursts could not be prevented during the country's division into India and Pakistan, present-day India is the world's largest democracy and most of its inhabitants are living modestly with hardly any harmful impact on the environment.

How the gap between self-image and external image is bridged forms a part of the solution to finding a responsible leadership identity. This often involves a review of one's time perspective.

Time Perspective

When an individual, organization or society reconsiders its time perspective, the following questions should be answered: Can you distinguish immediate gratification from long-term goals? Have you learned to balance between jumping at opportunities as soon as they are presented and working steadily and patiently towards a long-term goal? While many of us react on ad hoc impulses and have to bear the consequences, wise people, organizations and societies can see years and even decades into the future.

Mahatma Gandhi adopted a long-term approach to making a difference. He, as a lawyer, started his work for independent India in 1915 by empowering farmers and villagers to improve their living conditions and to stand up to the exploitation by British authorities. His grass-root peaceful resistance strategies made him famous all over India and the leader of Indian National Congress in 1921. Gandhi was imprisoned for 1922-24 for organizing a massive civil disobedience campaign (Gandhi 1940). He continued encouraging and preparing Indians for independence by campaigns such as the Salt March in 1930 and Quit India Movement during the Second World War. He was arrested again in 1942 and held in custody for two years (Gandhi 1956). In 1947 India gained independence and its Muslim-majority areas formed Pakistan. Gandhi strictly opposed the partition of the country into India and Pakistan because of the violence it would cause, and launched a fast to advocate his point of view, but in vain. Yet his 30-year long campaign to give India to the Indians shows how a genuinely responsible leader's patient, altruistic work towards a goal can bring remarkable outcomes.

Adolf Hitler also had a long-term plan: he wanted to create an all-powerful Third Reich with him as the Dictator. The humiliations suffered in the First World War made Germans susceptible to his grandiose dream. He was an excellent orator and dramatic performer, which earned him a Chancellorship in 1933. Like most psychopaths, he fooled reasonable citizens and world leaders alike to believe that he had good motives, but the reality of his egoistic goals was gradually revealed from his actions – too late, though, to prevent the Holocaust, Second World War and loss of over 70 millions lives. By 1942 the Allies had gained the upper hand, and in 1945, at the end of the war, Hitler committed suicide instead of taking responsibility for his actions.

The lure of quick profits, status and power often blinds individuals, organizations and societies from the sustainable long-term solutions that are needed to survive and prosper in the long term. Role experimentation may help them to find a suitable approach.

Role Experimentation

For role experimentation the question is: Have you tried different roles in search of the one that feels right? Role experimentation gives a chance to experience how different kinds of roles feel and how they fit your values and self-image. Some roles fit better and feel more comfortable than others. Those roles are worth taking. If you find a good role in society that suits both you and society well, you can become a leader in that role.

During 1888-91 Mahatma Gandhi studied law at University College London – successfully – and experimented with adopting English customs – unsuccessfully. When he returned to India, he did not get any proper legal work, so he took a three-year law job offered by an Indian company in South Africa in 1893. In South Africa Gandhi faced the discrimination against Indians and extended his stay to address the issue. He assisted Indians settled in South Africa who wanted the right to vote and started to practise non-violent resistance in other campaigns to improve the rights of Indians (Gandhi 1940). He pulled the South African Indian community together and became their leader. The discrimination he saw and experienced first hand in South Africa made him question the status of Indians under the British Empire. Gandhi's 22 years in South Africa prepared him for his great mission to free India. He found his role as an inspirational Mahatma (Great Soul) and trustworthy Bapu (Father) who never succumbed to the power, status or monetary temptations of politics but always remained true to his values of non-violence, truthfulness and simplicity.

Role experimentation helps us to find the most suitable role in society. A suitable role makes it easier for us to believe in our success.

Anticipation of Achievement

The anticipation of achievement question – Do you believe that you will be successful in what you choose to do? – is linked to the other questions. Success depends on your values, on the match between your self-image and external image and on your time perspective, and how they correspond to those of the others. If you are believed to provide solutions to its others' current and anticipatory problems, you will be a success in society. Success seldom comes immediately; and it does not have to, as long as it is to be expected. Be patient. If you believe in yourself and society believes in you, you will succeed. It took Mahatma Gandhi 22 years to practise for his responsible leadership role and another 32 years as a responsible leader before his dream of the independent India came true. He believed in his cause and made Indian people believe that it was possible to achieve independence.

Leader-Follower Relation

Leadership-follower relation involves a question: Are you able to become both a leader and a follower, whichever is called for in a given situation? While pioneering is no doubt needed to combat grave injustices and environmental crises, it may sometimes be wise for an individual, organization and society to cooperate with others and together become ethical successes. Often pioneering responsible leaders find it difficult to give up their leadership position once they have convinced the majority of the gravity of the situation.

Mahatma Gandhi was a uniting figure of India all through the struggle for independence during 1915-1947. He moderated the extreme views of younger Indian activists and calmed them down for peaceful campaigns and plans. The Indian National Congress usually followed his advice. Only at the very moment of independence a major leader-follower challenge cropped up: Gandhi opposed the partition of the country into India and Pakistan. Gandhi was so popular among Indians that the Congress could not decide against his views; therefore, Jawaharlal Nehru and Sardar Patel had to convince Gandhi that this was the only way to avoid the civil war. For once Gandhi, with a heavy heart, gave in. As violence broke out, Gandhi began to fast until the Hindu, Muslim and Sikh leaders promised that they would stop violence and call for peace. We do not know how the leader-follower relations would have developed between Gandhi and Indian political leaders during the independence because Gandhi was assassinated in January 1948. Gandhi never cared about formal leadership positions, but led the country informally from his modest home.

In the crucially important matters one needs to set an example for others as a responsible leader. This calling often comes naturally to those with the necessary expertise, skills, spirit and commitment. Yet it may require long-term work to gain enough experience to become a leader. In other important issues it may be advisable to be a follower and let others lead the way. You cannot be a leader of everything or a follower of everything. That would result in either overexertion or emptiness. Healthy individuals, organizations and societies find a balance.

Individuals: Building Blocks of Some Responsible Leaders

Al Gore

Al Gore (1948-) is famous for making the facts and consequences of climate change known and understood all over the world. He starred in a documentary, *An Inconvenient Truth*, which won an Academy Award in 2007, and he was awarded together with the Intergovernmental Panel on Climate Change (IPCC) the Nobel Peace Prize in 2007. Climate concerns have belonged to his *value basis* ever since 1967 when he studied climate sciences at Harvard before focussing on political sciences (Ireland 2008). Politics occupied him for decades, and he became Senator, Vice President and Presidential Candidate of the United States of America before devoting all his time to climate change issues. Yet even during the years in the

politics he talked and wrote about environmental issues, e.g. the New York Times bestseller book *Earth in the Balance* in 1992 (Gore 1992). After politics Gore established and chairs Generation Investment Management, which invests in environmentally friendly initiatives, and founded the Alliance for Climate Protection to find solutions to the climate crisis, which launched the We Campaign that advocates strict reductions in greenhouse gas emissions (Gore 2009).

Gore's *time perspective* for his responsible leadership issue, climate change, has been twofold: he practiced climate change awareness enhancement almost like a hobby during his political years, but once he committed solely to promoting it, he has been adamant that climate change is a pressing problem to be solved urgently before it is too late. This change in urgency is partially due to the increased knowledge about the issue and partially due to the change in Gore's own priorities. After the controversial loss in US presidential elections in 2000, he found a satisfying publicity niche in becoming the world's leading climate change spokesman.

It was easy to *anticipate achievement* in this hot, worldwide issue: success was practically guaranteed. During his career Gore *experimented* with the *roles* of statesman and climate change spokesman; he became successful in both, but world-famous in the latter. He likes to be the *leader*, not the *follower*; hence he prefers the role of Mr. Climate Change to the role of Mr. Vice President, although he has been good and cooperative in both roles. Like most wealthy Americans, Al Gore has been having difficulties in trying to match his green *self-image* to his *external image*. Gore has been criticized for having a large energy-consuming house, but he has turned it as energy-efficient as possible and uses only renewable energy.

Wangari Maathai

Wangari Maathai (1940-) is an environmental political activist who founded the Green Belt Movement in Kenya in 1977. The Green Belt Movement engages poor people all over Africa in planting trees, which prevents erosion, enhances biodiversity, enables sustainable small-scale farming, gives directly and indirectly work to local women, and boosts women rights (Green Belt Movement 2009, Maathai 2003). The movement integrates economic, socio-cultural and ecological responsibilities in practice. The Green Belt Movement combines genuine sustainable development with entrepreneurship. Wangari Maathai was the first African woman and first environmentalist to be awarded the Nobel Peace Prize in 2004 for her contribution to sustainable development, democracy and peace.

Wangari Maathai's (2006) autobiography sheds light on the origins of her responsible leadership. Her parents were farm workers. She excelled at school and was one of the 300 Kenyan students chosen to study in the USA within an Airlift Africa programme on a Kennedy scholarship in 1960. She took a B.Sc. in biology and M.Sc. in biological sciences, and returned to Kenya where she took a Ph.D. in veterinary anatomy. She became Associate Professor at the University of Nairobi and joined many associations through which she realized that the root of many problems in Kenya was environmental degradation. This realization was the start of the Green Belt Movement, which she launched with the support of the National Council of

Women of Kenya (NCWK), the chair of which she became. Hence Wangari Maathai's *value basis* developed from childhood experiences, education and active involvement in environmental and women rights issues.

President Daniel arap Moi of Kenya tried to restrict the influence of the Kikuyu during 1978-2002, which caused Wangari Maathai many problems. She lost her university job when trying to run for the parliament in 1982, but the Norwegian Forestry Society employed her as a coordinator of the Green Belt Movement in which they wanted to be partners. The UN gave funding to the Green Belt Movement, particularly after the UN global women's conference in Nairobi in 1985 during which Maathai introduced the Green Belt Movement to the conference participants and organized visits to the tree nurseries. The conference made the movement African-wide, and the Pan-African Green Belt Network was founded.

Wangari Maathai and the Green Belt Movement opposed the Kenyan government's exploitative and destructive construction development plans, which led to the closing down of the Movement's office. The bad publicity ended foreign funding in 1990. Her name appeared on a list of individuals targeted for assassination. She was arrested and charged for sedition and treason, but after pressure from international organizations and US senators, including Al Gore and Ted Kennedy, the charges were dropped. Despite problems in Kenya, Maathai's work continued to be internationally recognized and she was chosen a chief spokesperson for the UN Conference on Environment and Development in Rio de Janeiro in 1992.

Wangari Maathai's *self-image* as an environmental and women rights activist was upheld by the *external image* by her local and international supporters although the Kenyan government tarnished her image continuously during the 1990s through the media. In Kenya Maathai was arrested many times until the 2002 elections in which the National Rainbow Coalition defeated the ruling party. She became an elected Member of Parliament and worked as the Assistant Minister for Environment and Natural Resources. She founded the Mazingira Green Party of Kenya.

In *role experimentation* it has been natural for Wangari Maathai to integrate the roles of an environmental activist, women's rights activist and politician in the circumstances of Kenya. She worked against the ethos of the Kenyan government until 2002 with little realistic *anticipation for achievement*, but succeeded anyway, despite the governmental opposition, because she believed in her cause, which was recognized crucial locally and internationally, if not nationally.

Wangari Maathai's *time perspective* has remained realistic: she has worked hard ever since 1977 for the Green Belt Movement and has overcome a huge number of problems and hardships during which she has not lost sight of the goal. In her latest book, *The Challenge for Africa*, Maathai (2009) emphasizes the responsibility and accountability of all Africans in the development of the continent. She is a responsible *leader* who encourages her *followers* to become responsible leaders in their lives.

The Responsible Leadership Identities of Al Gore and Wangari Maathai

There are similarities and differences between the identities of the two responsible leaders, Al Gore and Wangari Maathai. Both leaders adopted their *value bases* early on and developed and strengthened them during their lives. Both have had to struggle to gain acceptance to their *self-image* – Wangari Maathai as a woman much more than Al Gore – when critics have portrayed an opposite *external image* of them. The *time perspective* of both leaders has been long, although Wangari Maathai seems to have had her vision clearer in her mind from the start than Al Gore. Both leaders have *experimented with roles* and both have integrated environmental activism and politics – Wangari Maathai much more deeply than Al Gore. Both *anticipated achievement*; yet while Wangari Maathai's Green Belt Movement succeeded well locally and internationally but it had to fight nationally against the government for 25 years, success for Al Gore's Inconvenient Truth about Climate Change was practically self-evident at every level. Both Gore and Maathai are strong *leaders* who can cooperate with others but might not be good *followers*. The fact that they do not burn out despite not succumbing to followership in some issues implies that they can focus on the essential and delegate. – Responsible leaders, Al Gore and Wangari Maathai, have built responsible organizations around them. Responsible organizations often have strong leaders.

Organizations: Building Blocks of Some Responsible Leaders

The Body Shop

One of the pioneers of environmentally and socio-culturally responsible leadership has been The Body Shop, which was founded by Anita Roddick in 1976. It is the second largest cosmetic franchise of the world. The *value basis* of The Body Shop is built on five core values: activate self-esteem, stand against animal testing, support community trade, protect our planet and defend human rights (The Body Shop 2009).

Over the years and decades many critics have attacked the environmentally and socio-culturally responsible *self-image* of the Body Shop by making various claims to portray the company's *external image* as environmentally or socio-culturally irresponsible. Most of the claims have been unfounded, but the company has responded to those with factual backing by correcting the problems (Roddick 2000). None of the claims have permanently tarnished the company's green and caring image despite the fact that cosmetics do not really belong to necessities of life but could be seen as luxury items.

The Body Shop grew rapidly from one store company in the United Kingdom to a 2,400 store corporation in 61 countries (The Body Shop 2009). Anita Roddick took business opportunities and created them while maintaining and developing the company's environmentally and socio-culturally responsible identity. Thus the company's *time perspective* has been twofold: business has been run for profit, but not at the expense of taking responsibility. Long-term responsibilities have

outweighed short-term profits, if conflicts between them have arisen. However, most of the time community trade, environmental protection, non-animal testing and human rights have been business opportunities for The Body Shop, niches the competitors have not been able to utilize.

The Body Shop has been active in *role experimentation*. The company has been very creative in inventing both new cooperative ways to do responsible business and new ways of actively influencing environmental and socio-cultural causes. Community trade is The Body Shop's own invention, which commits the company to trading fairly and responsibly with suppliers. The company actively seeks out small-scale farmers, traditional craftspeople, rural cooperatives and tribal villages with highly skilled experts at their work, and forges deep, long-lasting relationships, rewarding these suppliers with good trading practices and a reliable, independence-building wage (The Body Shop 2009). The Body Shop had its first community trade agreement with an Indian supplier already in 1986 (Roddick 2000).

The Body Shop Foundation was established in 1990 to fund human rights and environmental protection groups (The Body Shop 2009). It has, for example, launched The Big Issue paper for homeless people. The Body Shop has initiated many international campaigns over the years, including Save the Whale (with Greenpeace) in 1986, Ogoni People in 1993, Against Animal Testing in 1996, Make Your Mark (with Amnesty International) in 1998, Renewable Energy (with Greenpeace) in 2002, Stop Violence in the Homes (with UNICEF) in 2006 and Spray to Change (with MTV) in 2006.

Initially, there was no guarantee for success for the Body Shop in the late 1970s and early 1980s, but *anticipation of achievement* grew exponentially with the rapidly increasing awareness of environmental and socio-cultural issues in societies of the developed world in the late 1980s and in the 1990s. The Body Shop became an icon of environmental and socio-cultural responsibility. This responsible leadership role was very demanding to Anita Roddick who was overwhelmed by work, campaigns, travel, publicity and invitations. The company could hardly take a backseat and become a *follower* after 30 years of being the *leader* of leaders in responsible business and campaigning. In 2006 The Body Shop became part of the L'Oréal Group, but continued to operate individually within the Group in order to retain its unique identity (The Body Shop 2009). Dame Anita Roddick died in 2007. Her legacy and inspiration continues at The Body Shop.

Grameen Bank

The idea of Grameen Bank (Bank of the Villages) came during the Bangladeshi famine of 1974 when economist and university professor Muhammad Yunus (1940-) gave a \$27 loan to a group of 42 women without requiring any collateral, so that they could build bamboo baskets for sale (Yunus 2006). He was surprised to see that with such a small amount of money they employed themselves, provided for their families, earned enough to pay back the loan with interest and even gained some profit. Muhammad Yunus understood that there lay huge entrepreneurial potentials in rural

villages of Bangladesh. He set up a research project at the University of Chittagong to test his credit system (Yunus 2006) before putting it into practice.

The mission of Grameen Bank is to enable the poor, especially the poorest, to create a world without poverty. The core *value* of Grameen Bank is to empower the world's poor, especially the poorest women (Grameen Foundation 2009).

Since 1976 Grameen Bank has loaned \$7.6 million of micro credits to over 8 million poor women in villages so that they can employ themselves (Grameen Foundation 2009). The women have turned out to be hardworking and trustworthy. Women in a village form a peer group, which ensures that each loan and the financial affairs related to it are managed wisely. The repayment rate of these loans is very high, 99 per cent (Grameen Foundation 2009), for which reason the endeavour has been a great financial success. The profits go back to micro credits.

At first there was plenty of suspicion about micro credits, particularly among the extreme political left and right (Yunus 2006), but their positive impacts on the Bangladeshi rural families have been undeniable. However, like with all micro credit companies, the interest of loans is higher than in other banks, about 20 per cent (in exchange of no collateral), which may look like extortion. In addition, critics say that micro credit companies depend on subsidies and are not financially viable without them.

Although Grameen Bank is a private company it is really a community development bank. The borrowers own 94 per cent and the Government of Bangladesh 6 per cent of its equity (Grameen Foundation 2009). In this way the *self-image* and the *external image* of the company continue to match despite the criticism and worldwide fame it has gained. Muhammad Yunus and Grameen Bank (as the only company ever) were awarded the Nobel Peace Prize in 2006 for their efforts to create economic and social development from below.

Grameen Bank's *time perspective* has been twofold: taking long-term responsibility has been the first priority, but business has also been run for profit. Profits have gone back to taking responsibility. Grameen Bank started in a few villages but spread fast all over Bangladesh – hence the business opportunities were taken advantage of – but the simple down-to-earth way of doing it has remained during the more than 30 years of operations. It was clear from the beginning that demand for micro credits would be enormous, but the repayment rate was a risk at first, until Muhammad Yunus realized that women were more reliable than men and that peer groups helped women to take responsibility for the repayments. Hence *anticipation of success* grew very quickly once Grameen Bank focussed on women and created peer groups for them. This was also a part of the company's *role experimentation*. Additionally, many other similar schemes have been established around Grameen Bank during the past years, such as Grameen Trust, Grameen Fund, Grameen Communications, Grameen Shakti (Energy), Grameen Telecom, Grameen Phone, Grameen Shikkha (Education), etc.

Grameen Bank was a pioneer in micro credits, and its success has spread micro credit business to more than 40 countries: for instance an international Microcredit Summit Campaign has currently over 100 million customers. Consequently, Grameen Bank is

not a *leader* any more, as far as business size is concerned, but a *follower*. However, in the development other branches of empowering the world's poor to end poverty, Grameen Family of Enterprises is still a *leader*.

The Responsible Leadership Identities of The Body Shop and Grameen Bank

There are similarities and differences between the responsible leadership identities of The Body Shop and Grameen Bank. The *value basis* of both companies is to empower poor people by giving them a chance to earn their living by becoming entrepreneurs – The Body Shop through communal trading, Grameen Bank through micro credits for entrepreneurial investments. In addition, The Body Shop pays special attention to protecting the environment in all of its operations; Grameen Bank's micro credits may indirectly protect the environment, if they enable the earning of one's living without exploiting nature or investments in renewable energy.

The *self-images* of both companies have been attacked by criticisms that portray irresponsible *external images*, but both companies have survived the attacks. Yet a question remains about a fundamental aspect of each company: The Body Shop's trivial line of business and Grameen Bank's high interest rates.

The *time perspective* of both companies is twofold, but in opposite ways: The Body Shop aims at profits, but not at the expense of environmental or socio-cultural responsibility; Grameen Bank aims at socio-cultural responsibility, eradicating poverty through empowerment, but does not shy away from making profits. These companies have shown how to integrate socio-cultural and profit goals into responsible business. Both companies grew rapidly into large companies and have been successful in their both goals for more than 30 years. They took risks at the beginning of their operations but soon their *anticipation of achievement* turned into success because each of them answered a need in society other companies had not answered.

Both The Body Shop and Grameen Bank have been actively *experimenting roles* by inventing very creatively new responsible initiatives over the years and decades. They have been pioneers in these endeavours, and when others have copied them, they have created yet new ways of responsible behaviour in cooperation with a variety of organizations, both companies and governmental and non-governmental organizations. Hence The Body Shop and Grameen Bank have maintained their *leadership* by turning it always to other opportunities even before they have become *followers* in their established lines of operations.

If individuals and organizations can become responsible leaders, then why not states as well?

States: Building Blocks of Some Responsible Leaders

Bhutan, the USA and other “happy” countries

While most developing countries copy the USA and other developed countries in their aim to maximize their Gross National Product (GNP), an indicator of economic welfare, Bhutan aims to maximize Gross National Happiness (GNH), an indicator of the quality of life. Bhutan's efforts are praiseworthy: the country takes its own path to the future wellbeing of its citizens and natural environment. Most developing countries follow the ecologically and socio-culturally destructive highway that the USA and other Western countries have built after the Second World War to become economically wealthy countries. In current global negotiations concerning the mitigation of climate change, shrinking biodiversity and other burning environmental and socio-cultural problems, most developing countries, with China, Brazil and Mexico in the forefront, insist that they should be allowed to pollute and destroy life just like the Western countries did, in order to achieve the same economic standard of living.

Bhutan is one of the few countries, which has chosen a different, independent path to future. In 1972 King Gyalpo Jigme Singye Wangchuck came to the conclusion that the development of a country cannot be measured only by monetary instruments. He initiated the creation of the happiness of citizens index (Ezechieli 2003). Bhutan is a Buddhist Kingdom on the Himalayan mountains: a small country between two giants, India and China. Buddhism advocates the middle road to happiness. Bhutan's happiness index takes account of equitable and sustainable socio-economic development, conservation of the natural environment, preservation and promotion of traditional culture, development of good governance, and the satisfaction and spiritual growth derived from them. The happiness index stands on four pillars: economic development, ecosystem biodiversity, social conditions and political circumstances. The government of Bhutan has ascertained that an index based on these factors is more human and holistic than GNP.

The operationalization of the happiness index is challenging and still being tuned. International conferences on the Gross National Happiness (GNH) with researchers, NGOs and governmental organizations have been held in 2005, 2006 and 2007. The critics say that since the GNH is based on subjective judgements, governments may interpret its aspects the way they like. In practice Bhutan has excluded ethnic Nepalese living in Bhutan from the calculations – their happiness does not seem to concern the Bhutanese government. Cultural diversity does not seem to count.

In a well-known metric called the Subjective Well-being, Bhutan is ranked 8th out of 178 countries (White 2007). Bhutan is the only country with a very low GNP in the top 20. Denmark is ranked first, then Switzerland, Austria, Iceland, Bahamas, Finland and Sweden. The USA is on the 23rd place in this ranking. Congo, Zimbabwe and Burundi are the last ones.

It is noteworthy that the German-speaking and Nordic countries on the top of this ranking have excelled in social welfare and environmental technology, but have some of the highest incidents of suicides per capita and some of the largest

ecological footprints per capita in the world. The only other exotic country in this ranking, apart from Bhutan, is Bahamas, a sunny, happy-go-lucky country.

The USA has long been the icon of rich capitalism and wasteful consumerism with little regard to socio-cultural justice or ecological concern. Yet cultural, social and environmental awareness have grown during the past decades to such an extent that, with President Barack Obama in lead, the USA may change course. Already ethnic pride is booming among African Americans and Native Americans, national health insurance plans have been revived and the country is committing to reducing greenhouse gas emissions. The trends are nationwide, but some states take the lead, like California in environmental initiatives, which are easier to implement now than during the Bush administration.

The USA has been the leading GNP and large ecological footprint country in the world for over 60 years, but now China is overtaking it with other major developing countries pacing. However, India is split in this respect: there is a growing middle class that yearns for Western living standards, but a huge majority live in very poor conditions. From the ecological and socio-cultural point of view, it would be best for India and the whole world if everyone lived like Gandhi lived, modestly but not poorly.

Building Blocks needed for Responsible Leader States

Any country, large or small, rich or poor, can adopt a responsible leader's identity. All it requires is to provide a reasonable, modest standard of living for all citizens, to enhance social and cultural wellbeing and to take good care of the natural environment. This calls for:

1. Nationally and globally shared *values*.
2. Matching *self-* and *external images* of each country for genuinely responsible identities.
3. National and global *time perspectives* with immediate actions and long-term plans.
4. *Role experimentations* for potential division of roles between countries.
5. *Anticipation of achievement* with visions of hope expressed by leaders of countries.
6. *Leadership* for each country in its areas of strength and followership in other areas, with cooperative and fair national and global sharing of the outcomes.

Conclusions

Matching Individual, Organizational and Societal Responsible Leadership

Responsible leadership achieves best results when high levels of individual, organizational and societal leadership responsibility coincide. Mahatma Gandhi was not just an individual responsible leader, but he made the citizens, politicians and the Indian National Congress act responsibly. His influence is still evident in the individuals, organizations and government of India. He has had a great impact even on the business world of India. Gandhi (1908/1951) suggested an “Ethical Model” in which companies voluntarily committed to public welfare and participated in nation building (Sharma, Agarwal & Ketola 2009). For example the mission of a current major Indian company, Tata Group (2009), is to improve the quality of life of the communities it serves. You can see Gandhi’s handprint in all areas of Indian society.

In the same way contemporary responsible individuals can influence other individuals, organizations and societies to become responsible. Moreover, responsible organizations can develop responsible individuals and work together to build responsible societies. And responsible societies will then grow responsible individuals and organizations. Table 1 summarizes the characteristics of a responsible leadership identity for individuals, organizations and societies.

Table 1. Responsible leadership identity for individuals, organizations and societies.

RESPONSIBLE LEADERSHIP IDENTITY:	Individuals	Organizations	Societies
1. Value basis	Strong foundations in education and active involvement. Thirst to constantly learn more from every available source.	Empowering people by giving them a chance. Environmentally benign initiatives.	Need to create nationally and globally shared values.
2. Self-image = external image	Strong responsible self-image. Challenged by irresponsible external images, but stands strong.	Strong responsible self-image. Challenged many times by irresponsible external images, but always stands strong. A weak point remains.	Need to match self-image and external image for a genuinely responsible identity.
3. Time perspective	Long time perspective with plans but also immediate actions to improve the situation.	Long-term socio-cultural and environmental responsibilities are not compromised by profits, which still accumulate.	Need to take immediate actions and make long-term plans that are coordinated nationally and globally.
4. Role experimentation	Several roles (activist, politician). Integration.	Continuous inventing of creative new responsible initiatives.	Need for role experimentations for division of roles between countries.
5. Anticipation of achievement	Success anticipated in the needy quarters but struggles with rulers and critics.	After initial risks, rapid growth and continued success due to answering an unanswered need in society.	Need for visions of hope expressed by leaders of countries.
6. Leader-follower relation	Strong leaders with cooperation skills, but not willing followers. Burnout prevented by focus and delegation.	Leadership maintained by always re-creating and expanding the mission before becoming a follower.	Need for leadership for each country in its areas of strength and followership in other areas. Cooperative and fair national and global sharing of the outcomes.

The different characteristics of the responsible leadership identity at individual, organizational and societal levels can reinforce each other. If individuals, organizations and societies worked together for the same vision, responsible leaders at every level would make the vision come true.

What makes you a Responsible/Irresponsible Leader?

Under peaceful circumstances it is easier to act ethically than in crises when behaviour may go either way: it may be responsible, even sacrificing, or irresponsible, even exploitative.

When the tsunami had hit South East Asia in 2004, many tourists recalled that local inhabitants had rescued them, risking their lives for the foreigners – and then robbed them of their belongings. What is the psychology behind such incredibly responsible behaviour immediately followed by irresponsible behaviour? Was it a realization that nearly sacrificing one's life for a wealthy stranger calls for a proper reward for the poor rescuer? Or were they two separate behaviour patterns: a Buddhist unselfish caring for all living beings versus a capitalist selfish craving for material possessions? Whatever the answer, no one can ever be certain of one's own reaction in a sudden situation. A small thing, like the smell of alcohol, can make us turn away from a man lying in the street who may need immediate first aid to survive.

Prolonged crises like wars can harden some but transform others to altruists. Who helped Jews in Nazi Germany in 1944? Some Jews did; others did not. Some Germans did; others did not. Who helped Hutus in Tutsi attacks in Rwanda in 1994? Some Hutus did; others did not. Some Tutsis did; others did not. We fear for our own lives, for our families and for our careers and possessions; we are prejudiced against some people; we do not want to interfere. Responsible leaders want to interfere; they want to correct the wrong, whatever the personal consequences may be. Responsible leaders are courageous. They may be women, children, small organizations or tiny countries – but they care and dare!

Responsibility and irresponsibility are contagious. Individuals, organizations and societies can boost or repress responsible behaviour: inspiring leaders can pull others with them to higher ethical levels of behaviour while greedy leaders may push others back to lower levels of behaviour. We need to be vaccinated against irresponsible leaders. The best immunity against them is to become a responsible leader.

References

Erikson, E. H. (1959). *Identity and the Life Cycle*. New York: International Universities Press.

Erikson, E. H. (1969). *Gandhi's Truth: On the Origin of Militant Nonviolence*. New York: W.W. Norton & Co.

Erikson, E. H. (1974). *Identity: Youth & Crisis*. New York: W.W. Norton & Co.
 Ezechieli, E. (2003). *Beyond Sustainable Development: Education for Gross National Happiness in Bhutan*. MA Dissertation. [Web publication]. Stanford, CA: Stanford University. [Cited on 12 July 2009]. Available at: <http://suse-ice.stanford.edu/monographs/Ezechieli.pdf>.

Gandhi, M. K. (1908/1951). *Unto This Last: A Paraphrase*. Written in Gujarati (1908). Translated in English (1951) by V.G. Desai. Ahmedabad: Navajivan Publishing House.

Gandhi, M. K. (1940). *An Autobiography: The Story of My Experiments with Truth*. Ahmedabad: Navajivan Publishing House (also Boston: Beacon Press, 1993).

Gandhi, M. K. (1956). *The Gandhi Reader: A Sourcebook of His Life and Writings*. Edited by Jack Homer. Grove Press: New York.

Gore, A. (1992). *Earth in the Balance: Ecology and the Human Spirit*. Boston, MA: Houghton Mifflin.

Gore, A. (2009). *Al's Bio. The Official Website of Al Gore*. [Online]. [12 July 2009]. Available at: <http://www.algore.com/about.html>.

Grameen Foundation (2009). *Grameen Foundation*. [Online]. [12 July 2009]. Available at: <http://www.grameenfoundation.org>.

Green Belt Movement (2009). *Green Belt Movement*. [Online]. [12 July 2009]. Available at: <http://www.greenbeltmovement.org>.

Ireland, C. (2008). Gore: universities have important role in sustainability. *Harvard University Gazette Online* October 22, 2008. [Online]. [12 July 2009]. Available at: <http://www.news.harvard.edu/gazette/2008/10.23/99-gore.html>.

Maathai, W. (2003). *The Green Belt Movement: Sharing the Approach and the Experience*. New York: Lantern Books.

Maathai, W. (2006). *Unbowed: A Memoir*. New York: Alfred A. Knopf.

Maathai, W. (2009). *The Challenge for Africa*. New York: Pantheon.

Roddick, A. (2000). *Business as Unusual: The Journey of Anita Roddick and the Body Shop*. London: Thorsons.

Sharma, M.K., Agarwal, P. & Ketola, T. (2009). Hindu philosophy: bridging corporate governance and CSR. *Management of Environmental Quality*, Special

Issue: Corporate Responsibility & Diversity 20: 3, 299–310.

Tata Group (2009). *Tata Group*. [Online]. [12 July 2009]. Available at: <http://www.tata.com>.

The Body Shop (2009). *The Body Shop* [Online]. [12 July 2009]. Available at: <http://www.thebodyshop.com>.

White, A. (2007). A global projection of subjective well-being: A challenge to positive psychology? *Psychtalk* 56, 17–20.

Yunus, M. (2006). *Banker to the Poor: Micro-Lending and the Battle Against World Poverty*. New York: Oxford University Press..

RESPONSIBLE LEADERSHIP OR A PROFIT-MAXIMISING STRATEGY? THE REALITY BEHIND CORPORATE ENVIRONMENTAL SELF-REGULATION

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Abstract

The concept of corporate social responsibility (CSR) is being widely analysed and discussed by scholars and managers. However, it remains unclear whether CSR-labelled actions are actually motivated by corporate altruism and responsibility or are simply another embodiment of a profit-maximization strategy. This paper aims at filling this gap by analysing the motivations behind the environmental management systems: the most popular form of corporate environmental self-regulation. The results of a survey conducted among 281 enterprises suggest that what is referred to as CSR is rather corporate social performance (CSP) driven by self-interest. In the majority of cases, corporations' attempts to improve their environmental performance have been motivated by their willingness to improve their image, efforts to build positive relationships with various groups of stakeholders as well as expected economic benefits or a risk-minimizing strategy.

Keywords: Corporate Social Responsibility, Corporate Social Performance, Environmental self-regulation.

Introduction

The role of companies in the economy and society has been regarded and discussed by scholars and managers for several decades. Opinions on social performance of enterprises have changed dramatically over time. A case in point is Milton Friedman's view (1970) that "the social responsibility of business is to increase its profits". This approach is largely criticized now. It is pinpointed that businesses should contribute to the widely defined social welfare by undertaking voluntary activities exceeding the companies' legal responsibilities. These activities have been the focal point of the concept of corporate social responsibility.

There has been no consensus on how CSR should be defined. According to a definition suggested by the Commission of the European Communities (2001), CSR is a "concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis." On the other hand, the World Business Council for Sustainable Development has defined CSR as "(...) the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and

society at large”. Other definitions put a strong emphasis on the stakeholder aspect. For example Hopkins (2003: 16) claims that CSR “is concerned with treating the company’s stakeholders in an ethical or responsible manner”. While the definitional problems have raised many doubts and provoked a lot of discussion, there are some common elements in the majority of the suggested definitions. These include: (a) voluntariness of actions, (b) exceeding legal responsibilities and (c) contribution to enhancing the natural environment as well as economic and social development. However, the question arises why businesses make extra efforts and redistribute their assets to the society? What is the motivation for such actions? Is it responsibility and altruism that motivate them or rather pure self-interest?

Baron (2001) made a very interesting and significant distinction between corporate social responsibility and corporate social performance (CSP). In his opinion, CSP stands for “a distribution from the firm to the public” (Baron 2001: 11). If a business undertakes activities labelled as CSR which are in fact motivated by a threat from an interest group or willingness to boost demand for its products, then it is simply a profit-maximization strategy motivated by self-interest. According to Baron (2001), both motivation and performance are equally important and together they make up for CSR.

Baron’s distinction has also been identified by the World Wide Fund for Nature (WWF) and its statement that “(...) too much of what companies call a proactive approach to sustainable development is not really proactive. Instead, it is nothing more than a part of either a risk strategy or a branding exercise” (copied from Reinhardt 2005: 156). According to WWF, in the majority of cases businesses get involved in CSP referring to it as CSR. If, for example, a business replaces its production technology to much more environmentally friendly solutions, it stems from the company’s willingness to enhance its operating effectiveness, the anticipated tightening of environmental regulations or virtual concern about the natural environment and the local community’s quality of living. Or it results from all the mentioned factors put together. Therefore, in order to find out which type of corporate conduct is looming large: corporate social performance or corporate social responsibility, it is key to capture the motivations underlying this conduct. However, pursuing the real intentions from outside the company is very difficult. The great majority of researchers disregard Baron’s distinction (2001) and in some measure tacitly assume that CSR-labelled conduct is driven by businesses’ altruism and understanding their role in social development.

According to Bansal and Roth (2000), understanding the motives for corporate ecological responsiveness is important for the following reasons: firstly, the authors claim that understanding the motives will be useful for organizational theorists to predict ecologically based behaviours. Secondly, it could help in undertaking “the mechanisms that foster ecologically sustainable organizations, allowing researchers, managers, and policy makers to determine relative efficacy of command and control mechanisms, market measures, and voluntary measures” (Bansal & Roth 2000: 717). Another argument can be put forward as well: for some time scholars have been struggling to find a relationship (positive or negative) between corporate environmental and economic performance. To date, the motivational issues have been missing in those analyses.

One of the pillars of corporate social responsibility is commitment to improving quality of the natural environment. A case in point are environmental management systems, the most common form of corporate environmental self-regulation in the world. They started developing very rapidly after 1996 when the International Organization for Standardization presented ISO 14001: some sort of a meta-standard imposing minimum requirements for EMS. It is estimated that over 130 thousand businesses around the world (data from 2007) have EMSs complying with ISO 14001 in place. In Poland the number amounted in 2007 to approximately 1450. The goal of this article is to identify the motivations behind implementing environmental management systems (complying with ISO 14001) in Polish-based enterprises.

Executives in charge of the environment management systems in 960 companies received by post questionnaires and were requested to indicate 5 reasons and attributing weighting thereof from 5 to 1, where 1 indicated no significance and 5 represented key importance. A relatively large sample of enterprises needs to be examined to ensure diversity of practices and contexts and thus increase the potential robustness of the results. 281 questionnaires were sent back, representing a return rate of 29.27 %. In order to obtain more detailed information, impossible to glean from a questionnaire, in-depth interviews were conducted with 20 managers. Table 1 presents the results of the questionnaires.

Empirical Evidence

The two most frequently indicated reasons behind implementing EMSs included willingness to eliminate the business' adverse impact on the natural environment as well as endeavour to enhance corporate image (Table 1). Undoubtedly, it is a positive phenomenon that nearly 60 % of the respondents perceive environmental management systems as a tool for improving their environmental performance. On the other hand, it is difficult to assess univocally whether this percentage is high or low. However, one can conclude that if they are socially responsible, the vast majority of the respondents should strive to eliminate the adverse impact on the environment. This article's goal is primarily to identify the other, non-altruistic motivations encouraging businesses to undertake activities contributing to improving the quality of the environment. The research suggests that companies involved in operations aimed at improving businesses' environmental performance expect specific benefits. The most coveted benefit is enhancement of corporate image as a result of the world-known ISO 14001 certificate.

Table 1. Reasons for implementing environmental management systems in surveyed companies

Reason	Indications (%)	Weight
Striving to eliminate the company's adverse impact on the natural environment	58.36	3.61
Enhancing the company's image	58.36	2.71
Striving towards compliance with the legal regulations in the realm of environmental protection	54.80	3.45
Adopted strategy of company development	53.02	3.30
Striving to develop the existing quality management system in line with ISO 9001	43.42	2.62
The clients' expectations	28.47	3.09
The company managers' expectations	19.22	2.91
Observing trends followed by other enterprises	18.86	2.30
The owners' decision	18.15	3.37
Efforts to reduce costs	12.81	2.64
Efforts to enhance the company's relations with the central and local authorities	11.39	2.38
Striving to enhance relations with the local community	10.68	2.77
Efforts to boost sales	8.90	2.64
Requirement of the chief customer for our products	8.54	3.13
Efforts to increase market share	8.54	3.04
Opportunity to boost exports of the company's products	4.63	2.62
The suppliers' requirements	4.63	3.15

Source: the author's own development based upon questionnaires.

An analysis of the replies also indicates that corporate environmental self-regulation may result from stakeholder pressure which may be very generally categorized into coercive and normative pressure. The former occurs when accompanied by any kind of regulatory institution which imposes specific conduct on businesses. This regulatory body may be a legislative institution (indirect pressure) as well as another enterprise (direct pressure) placed higher in the production chain and whose bargaining power is sufficient to impose specific conduct on the other businesses placed lower in the production chain.

Information presented in Table 1 suggests that 54.80 % of the surveyed businesses considered efforts towards compliance with the legal regulations in the realm of environmental protection as a reason for implementing EMSs, 11.39 % of the respondents mentioned endeavours to enhance the company's relations with the central and local authorities while 8.54 % suggested that measures were taken to meet the expectations of the chief customer for their products. While EMSs are voluntary, a business can be forced by another business entity to implement them. A case in point are huge corporations in the automotive industry (e.g. General Motors) which arrived at a situation where all the company's trade partners and suppliers have EMSs in place. Similarly, the growing pressure exerted by regulatory (local, regional and state) bodies as reflected in introducing successive environmental regulations, tightening the existing regulations, regular monitoring and control of

corporate environmental performance may be an indication that the importance of environmental issues is growing. Therefore, at least some business entities strove to legitimize their operations in the eyes of the regulatory bodies by making environmental efforts exceeding their legal responsibilities.

The normative pressure occurs also when businesses act in compliance with social norms, values and expectations. Outside some regional differences, environmental awareness in societies is undoubtedly growing with more and more environmental organizations and the increasing significance of environmental consumerism while ecological threats affect people's awareness and conduct. Hence the changing expectations of businesses: they are expected not only to manufacture goods, render services and generate profits but also engage in business activities least harmful to the environment. With reference to the research results, 28.47% of companies implemented EMSs to meet their clients' expectations. Over 10% of the respondents decided that one of the reasons for environmental self-regulation was their willingness to enhance relations with the local communities. One might say that the significance of these motivations is smaller than expected; however, they prove that for some enterprises social expectations are drivers for voluntary actions, often perceived as CSR.

As the questionnaires (and personal interviews) suggest, 18.86% of the respondents implemented EMSs after observing other companies' conduct. This may be the case when a business faces information asymmetry and uncertainty. The entity takes notice of its competitors' conduct and imitates it while remaining unaware of the purpose for such behaviour or the related costs and benefits. However, a business entity acts the same way to relieve this uncertainty (Kudlak 2008: 218). Two patterns of behaviour can be distinguished here (Brown 2005: 6-7):

- competitive imitation when business conduct results from concern about losing the competitive advantage over competitors if the company remains passive,
- institutional imitation when business conduct results from a concern about losing the stakeholders' trust if the company fails to take action.

To sum up, concern about losing the market position or deterioration thereof triggers off businesses to take CSR-labelled actions (in this particular case, implementing EMS) and alter their economic operations. Companies tend to keep competing primarily on price and quality while environmental issues seem to be of growing importance as well.

One more phenomenon seems to concur which may be a factor inducing businesses to attend all kinds of voluntary initiatives for the benefit of environmental protection, namely *free-riding*. If benefits on account of implementing and certifying EMSs can be achieved even if actions improving environmental performance are not undertaken, then a firm can benefit from other enterprises' participation and their environmental commitments and efforts. If participants of EMS certification schemes take actual actions to improve quality of the natural environment and hence create a positive and valuable image of the management scheme for various stakeholders, then other businesses may be encouraged to also benefit from participation without taking actions to improve their environmental performance. They simply implement and certify EMSs with no efforts whatsoever to lessen their impact on the

environment and develop a better image and gain clients' trust. This situation is even more likely to take place when accompanied by information asymmetry. As ISO 14001 (as well as EMAS and other standards) is a process rather than a performance standard, it poses no specific requirements related to environmental performance. The only minimum requirement pertains to the management system. This implies the risk that businesses will take only small, incremental actions, failing to significantly improve their environmental performance but giving way to a successful third-party audit which in fact only confirms EMS's compliance with ISO 14001. It gives little information about improvement of environmental performance. If a business' stakeholders are not familiar with the idea of EMS and the related standardization norms, information asymmetry occurs between them and the businesses. This may lead to businesses enjoying undeserved benefits (e.g. enhanced image, the consumers' growing trust) on account of having a certified system in place which in turn may for example trigger off demand for their products.

The reasons for implementing EMSs mentioned by the respondents included certain motives of economic nature like efforts to reduce costs (12.81 %), efforts to boost sales (8.90 %) or to increase the market share (8.54 %), as well as an opportunity to boost exports of the company's products (4.63 %). While it is true that those motivations were not frequently quoted they suggest that by taking extra voluntary efforts aimed at lessening environmental impact, businesses expect certain benefits of economic nature. This does not imply of course that businesses' care for the natural environment is dubious. However, one should expect that business entities combine environmental and economic goals. Therefore this conduct can hardly be referred to as altruistic.

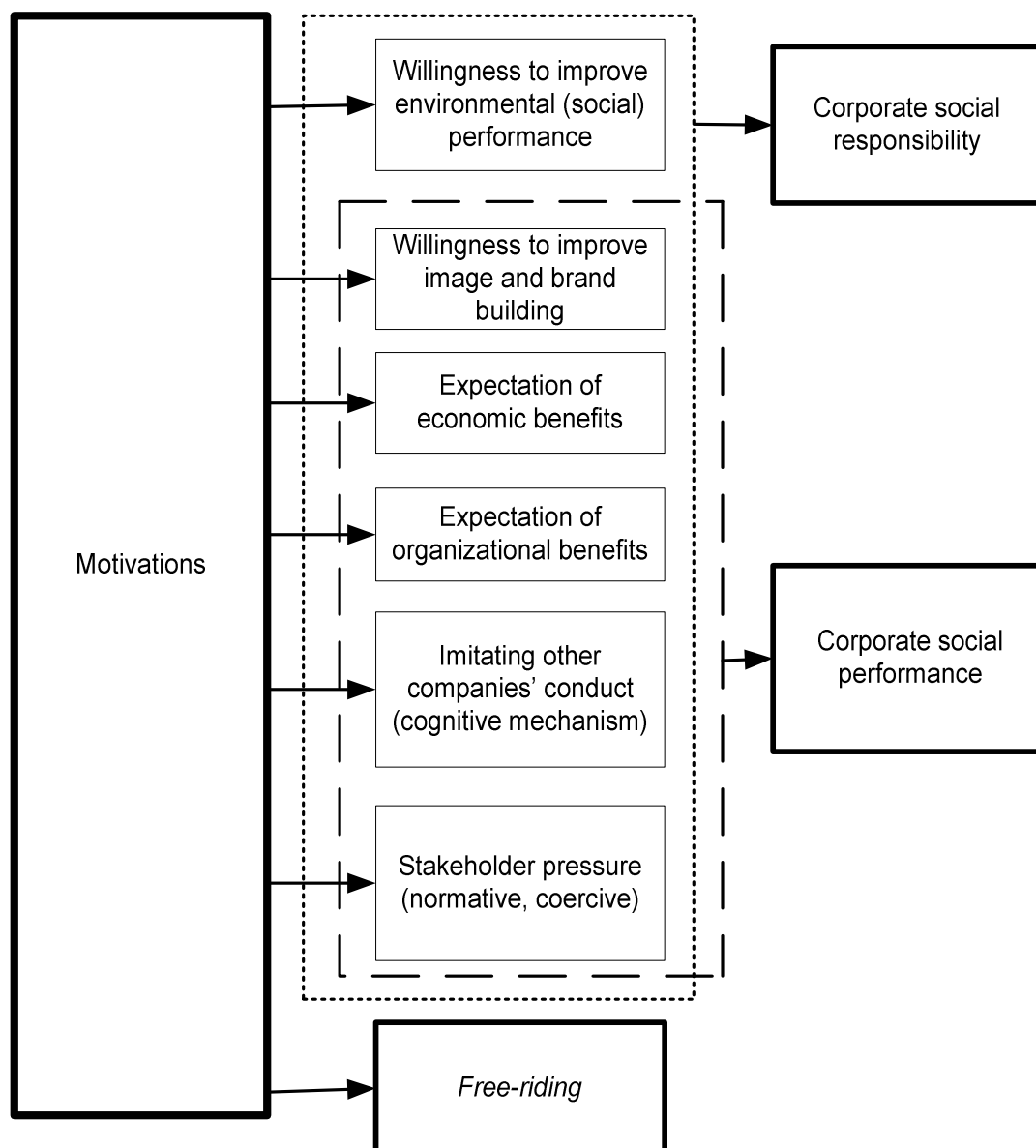


Figure 1. Distinction between corporate social responsibility, corporate social performance and *free-riding*.

Source: Author's own diagram.

The division as suggested by Baron (2001) may be deemed justified and at least partly right. In the light of the presented research results as well as other related works, it seems that in the majority of cases, it is not altruism that motivates enterprises. Figure 1 presents three possible scenarios: (1) when a business takes socially desirable activities – CSP, (2) when corporate social performance is supported by ethical motivation – CSR, and (3) when attendance in voluntary environmental activities is an example of *free-riding*. Undoubtedly, some businesses strive to improve their social and environmental performance but almost always expect some sort of benefits. Both these motivations tend to concur and should be deemed complementary. The benefits coveted by businesses include enhancing image, gaining legitimacy for further operations, minimizing the risk of the other market players' adverse response to non-commitment to CSR etc. Clearly, these may be tangible and intangible benefits; they may also occur shortly or be delayed in time.

Does this imply that corporate efforts to distribute some of their assets to the society should be disregarded if these efforts do not stem from altruism? The answer to this question depends on the fact whether these companies socially outperform or underperform with respect to other companies. For example: is their environmental performance much better than environmental performance of other companies which are not involved in any CSR-labelled activities? The answer to this question remains unknown and the issue is very difficult to solve. Some attempts have been already made yet the outcomes are inconclusive. King and Lenox (2000) surveyed environmental performance of companies attending the “Responsible Care” programme; the authors have concluded that their performance was only slightly better than that of businesses which did not join the programme. Andrews et al. (2002) did not manage to find a positive relationship between EMS and reduced emissions. Khanna and Damon (1999) found that enterprises participating in EPA’s 33/50 Programme were effective in improving environmental quality. On the other hand, Dalhstrom et al. (2003) claim that neither ISO 14001 nor EMAS environmental management standards managed to improve law observance among the surveyed organizations. Potoski and Prakash (2005) as well as Dasgupta et al. (2000) arrived at opposite conclusions when surveying businesses in Mexico and US; they decided that businesses undergoing third-party audits and enjoying compliance certificates (e.g. ISO 14001) better adhered to the natural environment-related law.

If CSR-labelled activities lead to significantly better environmental (social) performance than that put in by companies not involved in such activities, such conduct on the part of businesses should be positively evaluated, irrespective of the fact whether it stemmed from corporate altruism, self-interest or both. However, if businesses’ environmental (social) performance is not better while they take advantage of the CSR label to increase demand for their products and minimize risk of possible pressure exerted by various stakeholders, most certainly this is not altruism or responsibility but another embodiment of profit-maximizing strategy.

Both factors: motivation and performance are indispensable albeit not sufficient; only the concurrence thereof results in corporate social performance.

Conclusions

In the past decades, the views on an organization’s role in the society and economy evolved. The important aspect now is that businesses should be responsible leaders contributing to social and economic development by taking voluntary actions exceeding their legal requirements.

The survey in question confirms the legitimacy of Baron’s distinction (2001) between corporate social responsibility and corporate social performance. The latter occurs when corporate activities result from a threat or pressure exerted by an interest group, the company’s willingness to boost demand or is a form of risk-minimizing strategy. Therefore both motivation and performance are built into CSR.

In the light of the survey one may conclude that a vast majority of actions taken by companies and labelled as CSR are motivated by both willingness to improve environmental performance and expected benefits or a pressure exerted by interest groups. However, sometimes environmental soundness is altogether non-existent. Figure 2 shows identified motifs leading to corporate environmentalism (one may assume they lead also to corporate social performance). The most frequent motifs are located at the base of the pyramid; they tend to be less popular as the pyramid goes up.

By implementing and certifying EMSs, businesses usually expected building up a good image and reinforcing their brands' positions. Organizations are aware of the fact that a good reputation and the trust of the other market players is key in successful business operations. Another important aspect is pressure applied by various groups of stakeholders who impose corporate conduct directly or indirectly. These stakeholders include state and local authorities, other businesses, the company's customers and local communities. Businesses are willing to gain or reinforce legitimacy as failure to take action may undermine their long-term survival or license to operate. Some businesses expected that implementation of EMSs would result in specific financial benefits like cost reduction, increased market share as well as domestic and foreign sales growth.



Figure 2. Pyramid of motives leading to CSR-labelled activities

Source: author's own diagram.

There is also a group of businesses implementing EMSs to imitate other companies' behaviour, without being fully aware of the purpose behind the system or the related profit and loss account. This is how businesses attempt to minimize the risk related to information asymmetry and operating in uncertainty. Companies are afraid that their failure to take such actions may result in losing trade partners and customers. They are unable to assess the risk yet they decide that the costs related to implementing

and certifying environmental management systems are far lower than the losses incurred in the case of losing their clients' trust.

It seems that free-riding may be one of the reasons why businesses are committed to CSR-labelled initiatives. In such cases both the ethical and performance-related motivation is missing. Companies intend to benefit without engaging in activities improving the quality of the natural environment.

Undoubtedly, some businesses undertake CSR-labelled activities spurred by ethical reasons and their willingness to contribute to social development and improvement of the quality of the natural environment. However, there seems to be relatively fewer such companies and the importance of these motifs tends to be overrated. It remains quite clear that the survey results and opinions presented in this paper do not ultimately solve the issue in question; it necessitates further inquiry and discussion. On top of the motivations, researchers should focus on evaluating companies' social (environmental) performance.

References

- Adrews, R.N.L., Amaral D., Darnall D., Gallagher D.R., Edwards Jr D., Houston A., et al. (2003). *Environmental management systems: do they improve performance? Final report*. [Online]. [Referred to 12.10.2007]. Available: www.ndems.cas.unc.edu.
- Bansal, P. & Roth, K. (2000). Why companies go green: a model of ecological responsiveness. *Academy of Management Journal* 43: 4, 717-736.
- Baron, D.P. (2001). Private politics, corporate social responsibility, and integrated strategy. *Journal of Economics and Management Strategy* 10: 1, 7-45.
- Brown, B. (2005). Building global institutions: the diffusion of management standards in the world economy – an institutional perspective. In C.G. Alvstam, E.W. Schamp (eds) *Linking industries across the world*. London: Ashgate, 3-27
- Promoting a European Framework for Corporate Social Responsibility, COM (2001). Brussels: Commission of the European Communities, final version.
- Dalstrom, K., Howes, C., Leinster & O., Shea, J. (2003). Environmental management and company performance. *European Environment* 13, 187-203.
- Dasgupta, S., Hettige & H., Wheeler, D. (2000). What improve environmental compliance. Evidence from Mexican industry? *Journal of Environmental Economics and Management* 39: 1, 39-66.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine*, 13 September, 32-33, 122-126.
- Hopkins, M.(2003). *The Planetary Bargain – CSR Matters*. London: Earthscan.
- Khanna, M. & Damon, L.A. (1999). EPA's voluntary 33/50 program: impact on toxic releases and economic performance of firms'. *Journal of Environmental Economics and Management* 37: 1, 1-25.
- King, A.A. & Lenox, M.J. (2000). Industry self-regulation without sanctions: the chemical industry's Responsible Care program. *Academy of Management Journal* 43: August, 698-716.
- Kudlak, R. (2008). Adaptation of enterprises to the requirements of sustainable development in the light of new institutional economics. *Management of Environmental Quality* 19: 2, 213-221.
- Potoski, M. & Prakash, A. 2005. Covenants with weak swords: ISO 14001 and facilities' environmental performance. *Journal of Policy Analysis and management* 24, 745-769.
- Reinhardt, L.F. (2005). Environmental protection and the social responsibility of firms: perspectives from the business literature. In B.L. Hay, R.N. Stavins, H.K. Vietor (eds). *Environmental protection and the social responsibility of firms*.

Perspective from law, economics, and business. Washington D.C.: Resources for the Future, 151-183.

Corporate Social Responsibility: Making Good Business Sense (2000). Geneva: World Business Council for Sustainable Development.

WHAT BARRIERS ARE THERE TO BECOMING A CSR LEADER? CSR COMPARISON BETWEEN GERMANY AND JAPAN

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Abstract

This paper compares Japanese and German CSR to explore drivers and barriers for CSR development. I looked at CSR development in both countries from 1990s to 2000s. CSR has received attention not only from companies but also governments and NGOs because it decreases information costs. This paper focuses on the path of CSR development and change of a disclosure process. The difference of institutions makes the path different, or the similar path of development converge the institution in Japan and Germany. This paper explores under which condition and in which relationship companies develop disclosure which promotes CSR.

Keyword: Government, Information, NGO

Introduction

This paper compares the institutions around ‘corporate social responsibility’ (CSR) in Japan and Germany, focusing on the the environmental CSR. To say exactly, I ask importance of an information exchange process for CSR and the role of the government and Non-Governmental Organisation (NGO) in the development of CSR in both countries.

Japan recently loses its leading position in international environmental policy but was a giant in 1960s and 70s (Foljanty-Jost 2000) and Germany, without doubt, now leads international environmental policy. Economically their current role in environmental protection is also very big. For example, in 2006 Japan and Germany are account for about 9 percent and 16 percent of the world’s trade in environmental goods (BMU and UBA 2009). Another example is a large number of certified organisations by ISO 14001 which is an international standard on environmental management system, or of registered bodies by the EU Eco-Management and Audit Scheme (EMAS) which is an alternative standard valid in the EU¹. Thus they are very important actors in global environmental policy.

¹ In 2007 total 27,955 sites and organizations are certified by ISO 14001 in Japan and 4,877 in Germany respectively. Japan is ranked 2nd, following China, and Germany is ranked 8th (International Organisation for Standardization 2008). In addition, 1,838 sites and 1,394 organisations registered by EMAS in Germany (EMAS 2009).

However neither Japan nor Germany is evaluated as a good contributor to CSR for which environmental protection plays a significant role. For instance, ‘National Corporate Responsibility Index (NCRI)’ issued by the cooperation program of the think tank ‘Copenhagen Centre’ and the British government ranked Japan and Germany 18th and 9th of OECD countries². In addition to that, their self-image about CSR is also surprisingly low. Habisch and Wegner (2004) said that Germany is likely to be a ‘white spot’ on the European CSR landscape, or more, CSR “has been ignored for a long time not only by business but also by other sectors including NGOs as well as the government”(Backhaus-Maul 2008). In Japan also many scholars think Japan is still a country which imports CSR (Fujii 2005). A consensus about CSR in Japan and Germany is that both have seriously observed CSR since the beginning of the 21st century.

As long as I know there are many empirical literatures focusing on the current development of acknowledge about CSR and the historical picture of CSR in both countries, but just few try to explore what and how blocked CSR development in Japan and Germany or how the linkage of CSR and environmental protection has changed there. Especially there are very little comparative analyses of CSR development of these two countries.

This paper thus tries to offer the idea how we can compare the path of CSR development cross nationally from the perspective of barriers. I know that this suggestion sounds tricky. However this should make an interesting comparative view for CSR researches which mostly pick up best practices.

Framework of the Research

Research Agenda

Japan and Germany are for me very interesting cases because they are likely to have started to discuss about CSR at the same period, namely in the beginning of the 21st century. However they did not start their discussion from scratch. In fact Japanese and German companies have the tradition of contributions to the society. Besides high engagement in corporate environmental management including ISO 14001, “Sampo-Yoshi” in Japan and “organisierte Bürgerschaft“in Germany are the argument often seized as the traditional examples of Japan and Germany’s CSR. They are likely not to have sufficiently used their potential of CSR although they have a tradition of social contribution. Questions are therefore why they did not relatively low engage in CSR and what drove or hampered the development of CSR in both countries. As above argued, it is often said that Japan and Germany started to seriously observe CSR in the beginning of 21st century. This paper looks at the situation changed at that time, exactly to say the period from the end of the 20th century to 2003 is targeted in this paper. Through looking at what diminished or was weakened at that time, this paper would explore the barriers blocked the development of CSR, and differences or similarities of changes in two countries.

² For more details see: (EABIS and AccountAbility 2005)

What is CSR?

This paper starts the discussion with some arguments as to what CSR is. CSR is originally based on the Anglo-Saxon corporate culture which centred philanthropy and donation in CSR, but it has gathered a political attention globally since the beginning of the 21st century. Reasons are that government cannot well regulate companies across border as long as the policy is anchored on a national level, and that companies are strongly motivated to maximise their profit as often neo-classic economists presume. Environmental NGOs always criticise company's behaviour unsustainable. In sum, the current CSR means the go-beyond-compliance concept "whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (COM(2001)366 2001). One more to add, Maxwell and Lyon's definition of CSR for the environment explains the extent of this that "environmental friendly actions not required by law, also referred to as going beyond compliance, the private provision of public goods, or voluntary internalising externalities" (Lyon and Maxwell 2007).

Also important is that interpretation of the concept of CSR is not identical in all countries, because national institutions which construct actor's allocation and social expectation are different (Matten and Moon 2004). We have to be careful in distinction between CSR and nearly CSR activities. For example, there are different opinions as to whether Corporate Citizenship should be discussed as the complete fulfilment of CSR³.

Who are Important CSR drivers?

On a practical level, CSR is not a completely unilateral approach of a company. In fact, CSR started in 1950s as a social responsibility of managers (Carroll 1999) however through the extent that companies more actively take care of the society in which they are located (Pleon GmbH and IFOK GmbH 2008). Morimoto (2004) argued that the essence of CSR is dependent on the expectations of stakeholders which depend on cultural and institutional contexts. In sum CSR is a tool to respond to the expectations of stakeholders which cannot be handled in markets. Therefore a core is how to involve such invisible requirements of stakeholders in company's management. In this case, the core of CSR is communication. An important question was what constructs a society a company takes care of, namely who stakeholders are⁴. It is true that as many actors as possible should be involved in a comparative study. There are many important stakeholders who actually should not be ignored in Japan and Germany. Local communities, citizen initiatives, public organisations, economical organisations, competitors, consumers, labour unions are examples of this. But the mention of all actors makes a discussion complicating. Alberini and Segerson (2002) extracted drivers promoting environmental voluntary programs which is a part of the the environmental CSR. They result a regulator (government),

³ See also Debate about social responsibility in both countries

⁴ The stakeholder theory defines stakeholders as "any group or individual who is affected by or can affect the achievement of an organisation's objectives" (Freeman and McVea 2001).

community pressure, and environmental organisations are significantly important for companies to pollute less. Thus this paper focuses on government and NGOs as the most relevant stakeholders and keeps argument about others at a minimum.

Core of the Relationship Between Companies and Stakeholders

Most important but most difficult is to evaluate the level of CSR development. When can we say CSR has developed? One way is to look at the environmental performance of voluntary programs. But this cannot explain the tendency of CSR development because the performance strongly depends on the characteristics of a program. International CSR ranking and rating are a good way to know who are good and who are bad, as this paper described about the NCRI at the beginning. But this does not explain reasons why CSR has developed. These examples focus on outcome of CSR activities, but a phenomenon I want to explain is input of CSR development. This paper describes the relationship between companies and government or companies and NGOs, focusing on information exchange within these relationships.

Lyon and Maxwell (2008) presumed that business has become savvier about the workings of the political system, taking proactive steps to avert political conflict (e.g., regulatory threats, enforcement pressures, boycott threats from NGOs) rather than reacting to public pressure after the fact. This motivation of CSR promotion can be explained through information costs. Information cost is an important idea of transaction costs. The transaction cost gives us some important assumptions. The bounded rationality and the opportunistic actions are examples of this. The bounded rationality explores that human beings' rationale action is restricted due to his limited ability of information acquisition, processing and distribution. This is called information costs. The opportunistic actions emphasise "self-interest seeking with guile" which is ineffective choice based on the bounded rationality (Williamson 1979).

Government usually takes monitoring costs and legislative costs as information costs in order to influence corporate decision making. On the other hand NGOs take information collection and distribution costs and negotiation cost in an influence game on a legislative stage⁵. Since actors have an incentive to realise their requirements with minimum costs, they try to minimise these information costs. If the transaction costs is enough high for government or NGOs, they give up to take an action to guide companies in the direction which they want. This should be diminished through construction of formal and/or informal institutions which regulates actors' behaviour. The increasing number of CSR report⁶ is an evidence of this. The German ministry for the environment, Nature Conservation and Nuclear Safety (BMU) issued 'Umweltwirtschaftsbericht 2009', which took one subsection for reporting on CSR. The World Bank also issued that government use an information policy in order to promote CSR (Fox, Ward, and Howard 2002). ISO

⁵ However strategies NGOs use has been drastically changed in the last years. This is explained later.

⁶ There are various names of report which discloses information of a company. Environmental report, sustainability report are example of this.

14001 and the GRI guideline⁷ are completely voluntary self-regulation for information disclosure. Therefore my assumption in this paper is that CSR is a voluntary based action to build institutions which reduce the information costs of stakeholders.

In sum, this paper discusses about

1. whether a company reduces the information costs on a voluntary basis (it must not start as a voluntary action),
2. whether this transition made the relationship change (it does not mean friendly),
3. and whether this change is permanent.

Case study

Debate about Social Responsibility in both Countries

How did social responsibility in both countries look like before CSR started to develop? Japan and Germany's social responsibility was oriented by compliance and corporate citizenship. Especially strong influence of compliance was a significant deference in Anglo-Saxon CSR and that of Japan and Germany. This was affected by the political institution of these countries. Jeffrey Broadent and Yoshito Ishio described Japan's policy system as an 'embedded broker'. The government exercises much weaker formal regulatory control over companies, but it engages and "guides" companies in more subtle ways. Through such networks and mutual trust the Japanese government has provided business with guidance that allowed coordinating collective efforts. Companies in trusted the government to absorb their concerns and give good collective guidance based on it. The Shingikai (Advisory Council) Method is a typical Japanese way of group decision making. To avoid open confrontation ministries organise their Shingikai to which they invite key interest groups and opinion leaders with the purpose of according to special provisions of relevant laws. However, there has been criticism of this 'closed' method, because, according to Suda and Nakamura, the selection and nominations of committee members are up to the discretion of government (Imura 2005). In Japan, thus, the state has actively engaged in the market. There has been considerable deregulation in Japan following the American example. Yet, government continues to play (or try to play) an important role in many economic areas negotiating with industry over how to address various policy concerns. This is true in the environmental realm as well (Schreurs 2003).

The European countries including Germany traditionally try to regulate companies through legislation. Typically it enacted direct regulations. Social Market Economies influences unemployment, health, and environmental policy choices in Germany. Germany has not embraced deregulation in the way the USA has. Instead, taxes remain high and government regulations to tame market forces to promote social equality and environmental protection are generally accepted even through the cost of doing this is straining the government's budget and raising some concerns about

⁷ The GRI guideline is a de facto standard on responsible reporting produced by the Global Reporting Initiative.

international competitiveness (Schreurs 2003). Matten and Moon (2004) argued in their comparison of USA and European CSR that the fewer number on voluntary environmental reporting from European companies related to American ones lies not on that European companies care less about their environmental responsibility, but on that they are left with a far lower degree of discretion in issues of social risk allocation. They resulted that differences in CSR lie on the level of codified rules and norms which are part of the mandatory legal framework of corporate activities.

In both Japan and Germany the environmental protection has been considered to be “in the public interest” and external to private life. The governments have assumed principal responsibility for assuring environmental management, and have focused on creating and preserving a safe environment. They have directed the private sector to adopt environmentally sound behaviour through regulations, sanctions and occasionally, incentives.

According to the number of questionnaires, adding to compliance, philanthropy and the environmental CSR centre in Japan’s CSR. This is mostly as same as the case of 1970s and 1980s. The discussion about CSR has developed in Japan as the unification of domestic environmental criticism and import of the American philanthropic CSR. There were series of serious environmental destruction in Japan from 1950s. However protest movements were entirely focused on a local level, and they did not set up to a national level. The protest movements were viewed as the enemies of modernisation, and disclosure to stakeholders except the government was limited. Schreurs (2003) pointed that “many pollution victims did not understand that they were suffering from pollution-related problems”. At last ‘Pollution Victims’ Compensation Law’ was enacted in 1970. This law aimed to make the institution in which companies were put in charge and the victims of air and water pollutions were compensated by using money of polluters. This law was crucial for alleviation of environmental-related injury. However this shifted the environmental responsibility from polluting companies to the government who produced the compensation system.

Through strong criticism against environmental degradation produced by companies and environmental diseases caused by the environmental contamination Japanese companies have tried to develop environmental technologies. Along with the Oil-shock in 1970s the development of environmental technologies in Japan was directed in two directions, namely the end-of-pipe technology and eco-efficient technology. The end-of-pipe technology is a measure in order to respond to air quality standards with minimum costs and the eco-efficiency technology was one for surviving economically severe period. In comparison to the strong relationship between the government and companies, the relationship between companies and NGOs was significantly weak, or did not exist at that time. NGOs, in Japan often called non-profit organisation (NPO), have a weak legal status within an institutional framework. Thus NPOs have been weak in Japan in terms of their social recognition, number of members and their financial base (Imura 2005). In Japan there is much use of administrative guidance linking the bureaucracy to industry, but there has been little involvement of environmental NGOs in this informal decision making process (Schreurs 2003). It was easy for companies to ignore them. In the result the environmental technologies of Japanese companies were high developed, however this was not connected with CSR.

In Germany the “green” issues have dominated political debates since 1970s. Companies were always targeted by a NGO’s environmental campaign. However the environmental movements in Germany were interestingly not connected with CSR. Not only German companies but also NGOs ignored CSR debates (Habisch and Wegner 2004). Honestly I do not know why NGOs did not take notice of CSR in Germany, but imagine the German political institution hampered the development of information disclosure, thus NGOs did not sufficiently trust companies as a cooperative partners. Unlike the Japanese situation, the German government is relative independent from industries. The Federation of German Industry (BDI) is a strong player who is actively lobbying in the German politics, but the opportunity of lobbying is relatively open for all actors. Thus NGOs are very active in Germany. Their participation to German environmental policy has been already since 1980s institutionalised. In fact, NGOs are in many questionnaires ranked as the second important player with about 5 million participants. According to that, ‘Greenpeace’ got the third place of important institutions, following the German government and the EU commission (Jänicke, Kunig, and Stitzel 2002). An important notion is that the relationship between companies and NGOs was hostile due to a stiff competition in lobbying. The BDI responded hostilely to every environmental movement and tried to water down environmental laws. German companies did not disclose information. I think they tried to avoid interference in their management strategies from NGOs through closing information. The cost of politicisation of a target issue was sometimes expensive for NGOs due to the small availability to information of a company which they wanted to target.

At last both Japan and Germany argue that they have a long tradition of “Corporate Citizenship”. Corporate Citizenship is connected with philanthropy and social donation in Germany respectively. Since Japan imported CSR from USA, it is sure that philanthropy has a strong influence on Japan’s CSR. In 1970s it was a boom with in Japanese companies to establish a foundation in order to donate local communities. A peak of this was establishment of 1% Club by the Federation of Economic Organizations (Nippon Keindaren: Keidanren)⁸. Related to environmental activities companies promoted protection of local environment, using their employees. Waste-pick-up is a typical example of this. However the EU estimates philanthropy as “not bad but not enough” activities (Fujii 2005). Typical examples of German corporate citizenship include donation to a local sport club or environmental organisations. In fact corporate citizenship is a subset of CSR however this must be differentiated from CSR. Corporate Citizenship is persistently voluntary restoration of their benefits, which does not need use of corporate competitiveness.

Interim Conclusion

Until 1990s the relationship between companies and government was in Japan very close and in Germany relatively neutral respectively and that of companies and NGOs was in Japan as weak as being likely not to exist and hostile in Germany. How can this be understood? An important influential resource of a regulator is the regulatory threat (Alberini and Segerson 2002; Lyon and Maxwell 2008; Segerson

⁸ Keidanren required the participants of 1% club to make a donation of 1% of their sales to local communities.

and Alberini 2002). The function of regulatory threat depends on the credibility of legislative method, i.e. implementation of new regulations in the case of defeat of voluntary actions. In Japanese case the close relationship between them weakened the regulatory threat because companies knew the government would consider the status of companies. The costs of information acquisition for the government might not be high at that time however it is doubtful if the monitoring costs, i.e. transparency and liability of information provided by companies was enough low for the government. Companies led legislation in a direction they wanted through controlling information disclosure. As already argued, NGOs were in Japan as weak as they were simply externalised from political institution. It was also rare that NGOs were called for participation in Shingikai. Companies did not disclose information but a serious problem was that NGOs did not have a sufficient literacy to exactly understand technical or managerial information of companies due to the lack of financial and human resources.

In Germany the relationship between the government and companies was neutral. Thus the regulatory threat worked better than in Japan however this directed companies to avoid new legislation through closing information. In addition the hostile relationship between companies and NGOs calcified companies' attitude. The responsibility of proof of corporate unacceptable environmental degradation lied on NGOs. Companies did not disclose information in order to avoid being targeted in an anti-marketing campaign promoted by NGOs (Lyon and Maxwell 2008). The costs of information collection and distribution were significantly high for NGOs.

Change for CSR; Start of CSR Development

This section discusses about the dynamic transition which affect the institutions in Japan and Germany, because the institutions control the information costs. Peter Hall defined institutions as “formal rules, compliance procedures, and standard operating practices that structure the relationship between individuals in various units of the polity and economy” (Schreurs 2003). There are many literatures to explore when an institution fundamentally changed. For example, an unusual event has a big impact to change political institution. The Chernobyl disaster fundamentally changed German nuclear policy. The discovery of Ozone hole accelerated conclusion of Vienna convention for the protection of the Ozone layer. Can we find such an impact on CSR in these countries? Change of availability to political alternative is also important. Transition of policy measure sometimes makes actors' relationship change drastically.

Internationalisation of Environmental Policy

Environmental policy has been internationalised since 1990s. Although movements toward internationalisation of environmental policy could be found in early time (for instance the Club of Rome) however the UNCED in Rio de Janeiro in 1992 was the most important event for the environmental CSR in both countries. Since the role of

business and NGOs was cleared, companies started to seriously recognise the environmental responsibility. This caused in Japan a rush of establishment of NGOs.

Another big impact for CSR was a competition toward ISO 14001 and EMAS. ISO 14001 was issued in 1994. Along with establishment of ISO 14001, many international or regional standards on environmental management system and reporting system were also started. Most of environmental management system standards require disclosure of environmental information of companies. To be certified or registered by these standards a company has to make and improve an information disclosure system especially that about environmental impacts. NGOs could get information about a target company with much less costs than before. Japanese and German companies were at first motivated to disclose information through improvement of their environmental management system, however this was crucial for CSR development.

Development of Information Technology (IT) drastically abated the transaction costs for the NGOs, especially cost of information acquisition and distribution. This enabled stakeholder to collect and distribute information about companies with significantly less costs. For example, what you need to get information about a company is to buy a computer and set up an internet connection. This was not imaginable in 1970s.

Voluntary Agreement

In 1996 the Commission of the European Communities issued the Communication to the Council and the European Parliament on Environmental Agreements (COM(96)561 final, para.4 1996). The Commission argued that a voluntary agreement (VA) will be an important measure for the European environmental policy thanks to its cost efficiency. After that Germany became one of the countries who use VA in a favour. Germany has the second largest number of VA implementation with 93 VAs, following the Netherland. The declaration for Climate Protection started in 1994 with unilateral promotion by the BDI was revised and re-started in 2000 as a negotiated agreement. In Japan Keidanren started an initiative called “Global Environmental Charter” and “Voluntary Action Plan”. In the framework of this initiative Keidanren suggested participants to collect and disclose information about environmental impacts. Keidanren evaluates and publishes the evaluation every year (Jisyu Kyotei Kentokai 2001).

What is the role of a VA? The problem which the German government had was that the regulatory threat misled companies to hide information. A VA provides the room in which the regulatory threat can function and make information costs lower. It is true that a VA must be well designed in order to decrease the information costs for governments. But many scholars often emphasise the information distribution of a VA (Alberini and Segerson 2002). If the relationship of companies and government is independent, this role of VAs should not be ignored.

Public Politics and Private Politics

Baron (2003) explained the change of NGOs' strategy using the "Public Politics" and "Private Politics". The 'Public Politics' is a measure through which NGOs require government to introduce new regulations, and the 'Private Politics' is one through which NGOs try to directly affect decision making of companies. NGOs' movements can also be separated in the advocacy movement through which NGOs try to collect and diffuse information of companies and the market-based movement through which NGOs try to affect the marketing strategies of companies, typically boycotting and anti-movements. Or the private politics can be understood as an adversarial approach and a cooperative approach.

NGOs internationally shifted in 1990s from the public politics to the private politics, from protest movements to cooperative movements. An NGO at first introduced boycotting but it was costly. However, some activities aimed cooperation between the company and the NGO were successful in reducing the information costs and improving the relationship. Invention of the non-CFC refrigerator "green freeze" is a successful example of such kind of cooperation. This kind of cooperation must promote information exchange between the company and the NGO. The NGO can learn the technology which the company has, and the company can use the liability of the NGO. German consumers want the information about the environmental effects of the company, but they want the credibility of such information to be ensured by an independent organisation at the same time. Companies learned that disclosure brings them market supremacy by using the trust of NGOs. An attitude toward the environmental problems of Japanese companies shifted consciously from reaction to regulations to strategic correspondence as managerial task.

Change of Relationship

Sometimes the relationship itself can change. In the case of Japan, an environmental policy produced a new tension of government, companies and NGOs. As explained above, a Japanese institution was very rigid in which the government, bureaucracy and companies had a strong connection. The information which all stakeholders needed was exchanged only within this circle. This relationship was based on Japanese sectionalism, but an environmental policy did not belong to any sector. A power game of government and companies occurred in this situation. After researching about the environmental impact assessment law, Murai (2000) suggested the change of the opportunity structure of a Japanese environmental policy was drastic at that time. The Japanese environmental agency tried in 1997 to enact the environmental impact assessment law again⁹. At that time the Ministry of International Trade and Industry (MITI) and the Federation of Electric Power Companies of Japan confronted for the intensity of the law. The environmental Agency which has for a long time dealt with enactment of the law got favourable reaction from other ministries. The MITI which wanted to keep its influence on the

⁹ the environmental agency has tried six times since 1975 to 1982 to enact the environmental impact assessment law (Murai 2000)

national policy proposed separation of an electric sector from the target of this law and introduce the more stringent standard on the environmental impact assessment of the electric sector under the name of the MITI. The electric sector strongly opposed against the MITI. In this case, the narrow relationship between companies and the government was worsened. In addition, the global environmental charter issued by Keidanren in 1991, which was a voluntary declaration for corporate environmental behaviour, caused the confrontation between the MITI and Keidanren, because the MITI thought this might cause independence of Keidanren from the MITI. Since the strong relationship was slowly broken, NGOs have got a chance to implement the private politics in a better relationship with companies. At that time, NGOs were firstly observed by companies as a stakeholder, and companies started to disclose information. Another good example of the slowly changing dynamics between companies and NGOs was a meeting sponsored by Greenpeace in November 1996. Greenpeace, long viewed in Japan as an extremely radical environmental group, held a seminar attended by representatives of sixty Japanese companies (Schreurs 2003).

Conclusion

This paper described some transitions in both Japan and Germany. The foreign pressure of the internationalisation of environmental policy made companies recognise the importance of the environmental CSR and standards on environmental management system made information costs for NGOs lower along with the development of the IT technology.

As the governments became able to use a VA as a policy alternative to public regulation, the regulatory threat started to function. It is still unclear how strong this affected Japanese environmental CSR, but this explains well about the development of CSR in Germany. Although VAs introduced in Germany have problems to be solved, for instance the credibility of information transparency or the clearance of the set-up process of a target must be improved the role of VAs to broadly distribute information with little costs became recognised.

The transition from the public politics to the private politics drastically reduces the information costs of NGOs. This change potentially brings more benefit to the participating companies and reduces marketing costs through use of the credibility of NGOs and their marketing campaigns. This can be more observed in Germany, However Japanese NGOs can also use the private politics from the beginning. WWF or Greenpeace Japan are likely to use this strategies in Japan.

The change of the relationship between companies and the government is the most gradual way in the transitions described in this paper. However the impact of this change in Japan might be going very huge, because this is the most fundamental change. The neutralisation of the relationship makes the regulatory threat influential in Japan. The long rule of the Liberal Democratic Party in Japan at last ended in 2009. The new Government party, Japanese Democratic Party, emphasises its will of change the relationship between the government and bureaucracy. I am interested in what will happen in the relationship between companies and the government because

these three actors have been strongly connected in Japanese unique policy system called Shingikai.

Now I would answer the questions I listed above. Some of the cut down on information costs are promoted by companies themselves. Participation to an international standard is completely voluntary but Japan and Germany are one of the most enthusiastic countries to join this. VAs enable the regulatory threat functional. To alleviate future risks, companies are motivated to join VAs. Usually companies set up, evaluate and issue environmental targets to achieve in the framework of VAs. Thus these must fulfil the condition (1). The condition (2) is still unclear because the criticism that a VA is a too weak instrument to settle climate change recently occurred in Germany. VAs have improved the relationship of actors however it is sceptical if VAs can continually improve the relationship and reduce the information costs. On the other hand, it is credible that the voluntary disclosure of corporate information will improve. The fact that the number of companies publishing Eco-Report or CSR report increases must confirm this trend. Thus the condition (3) is also fulfilled.

In the private politics companies disclose information in order to respond to the requirements of companies. The companies have noticed the advantage of use of NGOs' trust which consumers have. The private politics can improve the relationship between companies and NGOs because it realises the "win-win" situation. As long as the private politics brings the "win-win" situation both companies and NGOs have no reason to give up this measure. Thus this can strongly promote CSR.

The last aspect must be handled carefully. On one hand this potentially decreases the information costs of NGOs; on the other hand this would increase the information costs of the government. Whether or not this change is advantage for CSR depends on a balance of increase and decrease of information costs. Thus the government should use formal or informal measures to minimise the increase of information costs. A VA can be helpful but the regulator has to be careful of the limitation of VAs.

In sum, the institutions in Japan and Germany differed until the 1980s; especially existence of NGOs and the relationship between companies and the government were significantly different. However the driver decreasing information costs in both countries looks not as different as the former institution did. The lack of political alternatives to public regulations, and the implementation of international standards requiring reporting on environmental information play a crucial role in both countries. A politician who wants to promote CSR should carefully use these factors in the future.

Reference

Alberini, A and Segerson, K. (2002). Assessing Voluntary Programs to Improve Environmental Quality. *Environmental and Resource Economics* 22: 1, 157-184.

Backhaus-Maul, H. (2008). Corporate Citizenship in Deutschland. Die überraschende Konjunktur einer verspateten Debatte. In H Backhaus-Maul (Ed). *Corporate Citizenship in Deutschland: Bilanz und Perspektiven*, Verlag für Sozialwiss.,13-42.

Baron, D-P. (2003). Private Politics. *Journal of Economics and Management Strategy* 12: 1, 31-66.

BMU and UBA. (2009). Umweltwirtschaftsbericht 2009. neues handeln GmbH.

Carroll, A-B. (1999). Corporate Social Responsibility: Evolution of a Definitional Construct. *Business Society* 38: 3, 268-295

COM(2001)366. (2001). GREEN PAPER, Promoting a European framework for Corporate Social Responsibility. Commission of the European Communities.

COM(96)561 final, para.4. (1996). Communication to the Council and the European Parliament on Environmental Agreements. Commission of the European Communities.

EABIS, and AccountAbility. (2005). Responsible Competitiveness: Reshaping Global Markets Through Responsible Business Practices.

EMAS. (2009). EU register of EMAS organisations [Online]. [Reffered to 14.09.2009]. Available:
http://ec.europa.eu/environment/emas/about/participate/sites_en.htm.

Foljanty-Jost, G. (2000). Kankyo Seisaku no Seiko Joken. *Leviathan* 27: 35-48.

Fox, T, Ward, H, and Howard, B. (2002). Public Sector Roles in Strengthening Corporate Social Responsibility: A Baseline Study. World Bank.

Freeman, R. E, and McVea, J. (2001). A Stakeholder Approach to Strategic Management. *Darden Business School Working Paper* 01-02.

Fujii, T. (2005). *European CSR and Japanese CAR - Difference and Similarity* - Nikka Giren Shuppansha.

Habisch, A, and Wegner, M. (2004). Overcoming the Heritage ofline Corporation. In A. Habisch (Ed). *Corporate Social Responsibility Across Europe*, 111-123. Berlin ; Heidelberg ; New York ; Hongkong ; London ; Mailand ; Paris ; Tokio: Springer.

Imura, H. (2005). Japan's Environmental Policy: Instruments and the Interplay of Actors. In H, Imura and M, Schreurs (Ed). *Environmental Policy In Japan*, 49-87. Edward Elgar Pub.

International Organisation for Standardisation. (2008). The ISO Survey 2007.

Janicke, M, Kunig, P and Stitzel, M. (2002). *Lern- und Arbeitsbuch Umweltpolitik: Politik, Recht und Management des Umweltschutzes in Staat und Unternehmen*.

Jisyu Kyotei Kentokai. (2001). Jisyu Kyotei Kentokai Hokokusho (Report on Investigation about Voluntary Agreement). Shoji Homu Kenkyukai.

Lyon, T-P., and Maxwell, J-M. (2007). *Corporate Social Responsibility and the Environment: A Theoretical Perspective*. Indiana University, Kelley School of Business, Department of Business Economics and Public Policy.

----- (2008). Corporate Social Responsibility and the Environment: A Theoretical Perspective. *Rev Environ Econ Policy* 2: 2, 242-260.

Matten, D, and Moon, J. (2004). 'Implicit' and 'explicit' CSR: a conceptual framework for understanding CSR in Europe. *ICCSR Research Paper Series* 29-2004.

Morimoto, T. (2004). Basis of Corporate Social Responsibility and Stakeholder Approach (Corporate Social Responsibility). *Soka-Keiei-Ronsyu* 28: 1, 1-14.

Murai, M. (2000). Japanese Political Opportunity Structure for the Environmental Agency in 1990s-Process of Legislation of Environmental Impact Assessment Law-. *Kokyo-Seisaku*.

Pleon GmbH, and IFOK GmbH. (2008). Die gesellschaftliche Verantwortung von Unternehmen (CSR) zwischen Markt und Politik.

Schreurs, M-A. (2003). *Environmental Politics in Japan, Germany, and the United States*. Cambridge University Press.

Segerson, K, and Alberini, A. (2002). Assessing Voluntary Programs to Improve Environmental Quality. *Environmental and Resource Economics* 22: 1, 157 - 184

Williamson, O-E. (1979). Transaction-Cost Economics: The Governance of Contractual Relations. *The Journal of Law and Economics* 22: 2

USE OF ENVIRONMENTAL VALUE SCALES FROM ENVIRONMENTAL PSYCHOLOGY AND SOCIOLOGY IN ENVIRONMENTAL MANAGEMENT STUDIES

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Abstract

Within environmental psychology and environmental sociology there is a lot of conceptual and empirical research assessing the environmental values and attitudes. In the existing empirical studies, the population has in most cases been an average citizen, with some studies taking a closer look at specific populations. However, empirical studies applying environmental value and attitude scales from above mentioned fields in management studies, studying company employees, managers or customers, are with a few exceptions non-existent.

This paper reviews the existing psychological and sociological scales to measure environmental values and attitudes and outlines guidelines for how these scales might be used in an interdisciplinary manner in environmental management studies, focusing on organizational reality and sampling employees and managers. The importance of individual value patterns of employees in shaping the environmental performance of the organization is also discussed. An analysis of environmental value patterns among employees and managers can offer explanations to overall environmental performance of the firm, as well as tools to analyze the impact of values and value differences between organizational levels and units on the success of environmentally related activities.

Keywords: Natural environment, organizations, environmental psychology, environmental sociology, environmental management

Introduction

Nowadays, companies and other organizations are increasingly facing the challenge of climate change and other serious environmental problems. At the same time, it is quite clear that the very same organizations are using natural resources and producing waste and pollution, thus significantly adding to the environmental degradation (DesJardins 1998; Purser, Park & Montuori 1995). Within business ethics, corporate social responsibility, and environmental management research, the environmental issues in the organizational context have drawn lots of attention during the past years. However, there seems to be relatively little discussion about the environmental values and attitudes of employees of business organizations. Instead, the research within the fields mentioned above has often concentrated on the

technical aspects of environmental management. For example, recent research on environmental management is conducted about issues such as environmental quality standards (ex. Nawrocka & Parker 2009; Bernardo 2009) or management of supply chains (ex. Pagell & Wu 2009).

Within the field of organizational studies, Bansal and Gao (2006) provide a review of environmentally related articles published in major business journals between 1995 and 2005. They point out that the main focus has been on environmental outcomes, and to a lesser extent, even organizational outcomes have been studied. Bansal and Gao also recognize that there has been quite extensive debate on the philosophical foundations of the relationship between organizations and environment, demonstrated by conceptual articles by Shrivastava (1995a, 1995b, 1995c), Gladwin, Kennelly and Krause (1995), Purser et al. (1995) and others. However, the value discussion in these papers, typically described as a distinction between anthropocentric and ecocentric ethics¹⁰, has not been empirically tested in an organizational context. In a review of the development of the field, Kallio and Nordberg (2006) point out the limited empirical testing of theory related to environmental organization studies. The ultimate goal of environmental organization studies is, according to Kallio and Nordberg (2006) to find out what is happening and why. Based on existing research on the field, it might be fair to claim that studies on the role of individual value orientations of employees as an underlying cause to environmentally related activities are practically non-existing. A notable exception is a study comparing public and private sector organizations by Nilsson, von Borgstede and Biel (2004), but also in this study, only decision-makers (managers), not employees are sampled. Consequently, one might argue, that “the human side of the enterprise” is largely neglected in environmental management and environmental organization research due to its focus on systems and technologies.

Therefore, this paper discusses the linkages between values and attitudes held by individuals and environmental behavior and outcomes in business organizations. Consequently, the paper builds on a widely recognized assumption that values and attitudes influence behavior (Fishbein & Ajzen 1975; Hofstede 2001; Rokeach 1968; Schwartz 1992) of individual employees. Recognizing these, sometimes hidden, value patterns of the employees can help the organization to re-direct the behavior towards organizational goals, and particularly towards environmental goals.

In general organization and management research, the importance of the value orientations of the employees with regard to outcomes of organizational activities is recognized. For example, individual work values are expected to determine the individual's work-related behavior, which in turn have an impact on organizational outcomes (Gahan & Abeysekera 2009). In environmentally oriented research within other disciplines, such as psychology and sociology, the values of individuals towards the natural environment have been studied extensively, as will be shown in the next section of this paper. Therefore, this paper aims at filling the existing gap in environmental management and organization literature by discussing the importance

¹⁰Anthropocentrism, also called human-centered view, builds on the idea that the nature is valued based on its usefulness for human purposes (Gladwin et al. 1995; Iyer 1999) and that humans are separated from and superior to nature (Gladwin et al. 1995; Hoffman & Sandelands 2005). Ecocentrism assumes that nature has intrinsic moral value regardless of its usefulness to humans (Kortenkamp & Moore 2001). This means that the value of nonhuman nature is independent of its value or utility to humans (Iyer 1999).

of individual value patterns of employees in shaping the environmental performance of the organization. Also, the paper discusses how scales on environmental values used in psychology and sociology can be applied within the field of management.

Scales on Environmental Values in Psychology and Sociology

Within environmental psychology and environmental sociology, there is a vast amount of research addressing the individuals' and society's values and attitudes towards the environment. In some of these studies (Dunlap & McCright 2008, Dunlap & York 2008, Hansla et al. 2008; Ryan & Spash 2008; Grob 1995) the studied population has been general public while other studies have sampled more specific populations, such as farmers, wildlife managers and biologists (Bjerke & Kaltenborn 1999), car owners (Gärling et al. 2003; Nordlund & Garvill 2003), members of transportation associations (Kaiser, Wölfling & Fuhrer 1999), and public and private decision makers (Nilsson, von Borgstede & Biel 2004). It can be also mentioned that several studies (Karp 1996; Kortenkamp & Moore 2001; Milfont & Gouveia 2006; Schultz & Zelezny 1999; Snelgar 2006; Stern, Dietz & Kalof 1993) have used student samples, obviously for convenient and easy access, even if this procedure is not easy to motivate from an adequate sampling perspective. In the context of this paper, it is worth noting that none of these studies has been conducted in a business environment and with participants being representatives or employees of business organizations. Therefore, some level of carefulness is needed before findings of and scales from these studies can be applied in a business context. The possibilities for applying psychological and sociological scales in the management context will be discussed later in this paper.

Based on a database search in EBSCO, ProQuest and other social science databases, it seems that the main body of empirical research addressing environmental values of individuals and societies is conducted either within psychology or within sociology. There has also been a more or less philosophically oriented but at the same time cross-disciplinary debate on environmental ethics (for example Gladwin et al. 1995, Purser et al. 1995, Shrivastava 1995a, 1995b, 1995c, 1996) even within the context of management and organization studies, but this discussion, regardless of its importance, has not led to empirical studies of the concepts presented in those articles. The outcome of this is a clear lack of empirical research on environmental values and attitudes in business organizations. However, the methods and scales used in psychological and sociological studies of environmental values can, with some modifications, be used as a base for development of environmental value scales for use in business context as well.

It is not easy to draw strict lines between environmental psychology and environmental sociology, because psychologists are using also sociological concepts and vice versa. Scientists from different disciplines also treat the concepts of values and attitudes in different ways, and the difference between those two is somewhat unclear and depending on the theoretical framework used.

However, a more in-depth discussion on the concepts of values and attitudes is beyond the scope of this paper and therefore these concepts are treated in this paper in somewhat overlapping manner.

In Table 1, the central scales related to environmental values and orientations, used within sociology and psychology are collected. In the following, these scales, their application in previous research, as well as their strengths and limitations are shortly reviewed and their importance for development of the field is discussed.

Authors	Article	Publication	Year	Scale	Examples on applications
Dunlap & Van Liere	The “new environmental paradigm”: A proposed measuring instrument and preliminary results	Journal of Environmental Education	1978	NEP	Albrecht et al. 1982; Edgell & Novell 1989; Gooch 1995; Stern et al. 1995; Schultz & Zelezny 1998; Widegren 1998
Dunlap et al.	Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale	Journal of Social Issues	2000	Revised NEP	Willis & DeKay 2007
Thompson & Barton	Ecocentric and anthropocentric attitudes toward the environment	Journal of Environmental Psychology	1994	Ecocentrism/ anthropocentrism	Bjerke & Kaltenborn 1999; Schultz & Zelezny 1999
Stern, Dietz & Kalof	Value orientations, gender, and environmental concern	Environment and Behavior	1993	Consequences for self/others / biosphere	Gärling et al. 2003; Snelgar 2006
Kaiser et al.	Environmental attitude and ecological behaviour	Journal of Environmental Psychology	1999	General Ecological Behavior	Kaiser et al. 1999

Table 1: Scales for measuring environmental values and orientation

NEP Scale

One of the most widely used scales to measure pro-environmental attitudes is New Environmental Paradigm (NEP) scale, developed by sociologists Dunlap and Van Liere (1978). More recently, Dunlap et al. (2000) revised the scale, now called New Ecological Paradigm Scale. These scales have been the most widely used measure of environmental concern within sociological studies, leading to over 100 published studies (Freudenburg 2008). As the authors (Dunlap et al. 2000: 427-428) point out, the original NEP scale of 1978 is problematic from the construct definition point of view. Accordingly, it has been used to measure as well the fundamental worldview of individuals towards environment as environmental attitudes, beliefs and even values, even though the developers themselves (Dunlap et al. 2000: 427) argue, based on Rokeach' (1968) theory on beliefs, that NEP mainly captures "primitive beliefs", e.g. those beliefs that are the norm in the society and deeply and unconsciously rooted in the mindset of an individual (Rokeach 1968: 6). Hence the NEP scale is very close to measuring values, which are typically seen as the basic, enduring principles guiding an individual (Schwartz 1994) and often unconscious (Hofstede 2001).

The sociological roots and perspective of NEP are clearly seen in its two disadvantages with regard to direct applicability in an organizational or managerial study. First, the NEP scale is rather general and targeted for general public. At least it is not developed for managerial or organizational purposes. Second, due to its lack of a strong psychological foundation, the scale suffers from a lack of clear definitions on values, attitudes, beliefs, and behaviors. Despite these disadvantages, the NEP scale has showed good internal consistency and previous studies have successfully applied the instrument to very different samples, such as farmers (Albrecht et al. 1982) and college students (Schultz & Zelezny 1998) and also in different countries, such as Canada (Edgell & Nowell 1989), Sweden (Widegren 1998) and Baltic States (Gooch 1995). This may suggest that the scale, with some modifications, is useful even within the organizational context. Additionally, the new NEP scale developed by Dunlap et al. (2000) addresses some of the limitations of the original scale, especially with regard to the clarity of constructs. Applications, such as Willis and DeKay (2007), have shown a good internal consistency of the revised scale. In the Willis and DeKay (2007) study, NEP scale items were used among others, but loaded on a single factor in factor analysis, indicating that it is a coherent structure.

Ecocentric/Anthropocentric Scale

NEP scale measures, besides other factors, also ecocentric vs. anthropocentric orientation. This distinction has been widely discussed in environmental ethics literature (Desjardins 1998; Naess 1981) and also in conceptual articles arguing for paradigm change in management (Gladwin et al. 1995; Iyer 1999; Purser et al. 1995; Shrivastava 1995a, 1995b, 1995c). The results from studies using NEP scale indicate that ecocentric attitudes are related to environmental behavior.

However, Thompson and Barton (1994) developed a scale that is entirely intended to measure ecocentric and anthropocentric orientation. Their scale has also been

empirically tested in a number of psychological studies (Schultz & Zelezny 1999; Bjerke & Kaltenborn 1999; Thompson & Barton 1994). Bjerke and Kaltenborn (1999) found that ecocentric/anthropocentric distinction is linked to more specific environmental attitudes. Also, Schultz and Zelezny (1999) found that general values, measured by Schwartz (1992) value types, were related to ecocentrism and anthropocentrism, supporting the assumption that general values influence environmental orientation. Consequently, the existing empirical results combined support the idea of a relationship between general values and specific environmental attitudes, where the environmental orientation (ecocentric/anthropocentric) may take a role as a mediator. However, Schultz and Zelezny (1999) point out that the scale does not differ between different anthropocentric motives (concern for self or for others) and that the empirical testing has been so far limited. Despite these limitations, Thompson and Barton (1994) scale represents an effort to operationalize the concept of ecocentrism and anthropocentrism and further testing and elaborating of the scale is needed.

With regard to applicability into organizational and management studies, the ecocentrism/anthropocentrism scale by Thompson and Barton (1994) can be criticized with the same arguments than NEP scale: the scale has not been tested in an organizational environment and its items are fairly general. In its current form the scale can be used to measure general environmental orientation, but for managerial use, more concrete items addressing organizational reality should be added.

Consequences for self, others and biosphere scale

Stern, Dietz and Kalof (1993) study on general value orientations, gender and environmental concern has been influential within the field and their scale has been used in several subsequent studies (e.g. Gärling et al. 2003; Snelgar 2006). Stern et al. (1993) scale builds on the idea of three different value orientations towards the environment, namely egoistic, humanistic, and biospheric. Conceptually, biospheric orientation is close to ecocentrism, while egoistic and humanistic orientations are two different aspects of anthropocentrism. Stern et al. (1993) found in their study that all three orientations have some influence on willingness to take political action, expressed as specific pro-environmental activities an individual may take.

The scale developed by Stern et al. (1993) was used also in a study by Gärling et al. (2003), examining car drivers' environmental intentions and awareness. It builds on a model where knowledge (awareness) is seen to affect personal norms (values), which in turn affect the behavior intentions. The results indicate that it is hard to distinguish between the three different types of environmental awareness (consequences for self, others, biosphere). This is in line with findings by Stern, Dietz and Guagnano (1995), where a factor analysis put both altruistic (consequences for others) and biospheric values into same factor, showing that it is not quite clear whether the scale by Stern et al. (1993) really can distinguish between different motives for environmental action. Snelgar (2006) used a somewhat modified version of Stern et al. (1993) scale, and in a factor analysis, a factor structure with egoistic, altruistic and biospheric emerged. However, a SEM model consisting of human and non-human structure fit the data better than self/others structure. This finding indicates that ecocentric (non-human) and anthropocentric (human) distinction is an adequate way to distinguish

between environmental value orientations, while only partial support has been found for Stern et al. (1993) idea of three value orientations.

Non-existing testing in organizational or business context and lack of items related to environmental issues within organizations are once more the main limitations for use of this scale in organizational studies. This calls for modifications before the scale is used in an organizational or business context. However, the distinction between egoistic and altruistic anthropocentric motives may be relevant within organizations, where the employees' decisions are affected both by personal (egoistic) and organizational (loosely, altruistic) goals.

Other Scales with Psychological Foundation

Kaiser, Wölfing and Fuhrer (1999) build on Fishbein and Ajzen (1975) theory of planned behavior, a psychological model of the relationship between beliefs, attitudes, and behavior. Scales and measurement instruments rooted in Fishbein and Ajzen's theory of planned behavior are often designed to differentiate between concepts of values, attitudes and behavior. In this theory, values and attitudes are seen as predictors of behavior. According to an interpretation by Kaiser and colleagues (1999), behavior is partially a result of values (through norms) and partially a result of knowledge-based attitudes. Factual knowledge is thus a prerequisite of attitudes.

Kaiser et al. (1999) studied members of a proenvironmental and an antienvironmental transportation association. Their General Ecological Behavior scale contains 38 items measuring mainly general behavior towards environment. Despite this, in a following factor analysis the researchers could separate three factors, of which one was related to knowledge, one to values and one to behavior intentions. This suggests that underlying value and attitude structures can be at least to some extent derived from a measure of reported behavior towards environment.

Other psychological studies on environmental values are based on value-belief-norm-theory. In an interesting study by Nilsson et al. (2004), the organizational aspect is taken into consideration while developing a value-based measurement model for willingness to accept climate change strategies. The main core of the theoretical model is the assumption that values impact on behavior is mediated via beliefs through pro-environmental personal norms. Empirically, managers of public sector organizations and private (business) organizations are compared and the findings indicate that environmental values were more important to public sector managers. The authors also put in organizational goals in to the model, as well as a measurement of general values drawn from Schwartz (1992) value model. Unfortunately, the scales applied do not contain any clear section measuring environmental orientation or concern; consequently the relationship between general values, environmental orientation and environmental decisions taken remain unclear.

Recently, Hansla et al. (2008) used value-belief-norm (VBN) theory in their conceptualization of the relationship between general value orientations, awareness and environmental concern. In the questionnaire used by Hansla and colleagues (2008) items measuring as well general value orientation than questions addressing

the level of awareness and environmental concern were included, using modified versions of Stern et al. (1993) scale. The procedure used by Hansla et al. (2008) provides a possibility to find new relationships between general values and more specific orientations towards the environment. For example, the results indicate that environmental beliefs and concerns are related to three value types of Schwartz (1992), namely power, benevolence and universalism.

However, VBN-based measurement models, that generally employ scales measuring environmental concern and awareness, have been criticized for not measuring what they are intended to measure (Ryan & Spash 2008). Ryan and Spash (2008) suggest that the scales can be used more properly to measure concern over consequences of environmental action and inaction instead of measuring environmental value orientations. This recent critique strengthens the suspicions of ambiguity and conceptual problems of scales used to measure environmental values and indicate that careful research design is needed in order to ensure the validity of scales in the sense that they measure what they are intended to measure.

Usability of Borrowed Scales in Environmental Management Studies

As Kallio and Nordberg (2006) point out, there has been very limited amount of “own” theory-building within environmentally related organizational research and instead, it has borrowed theories from mainly environmental sociology and philosophy. When it comes to environmental values and attitudes of employees in business organizations, and their impact on behavior and, more indirectly, on organizational outcomes, even psychological theories are important to consider. Environmental values and attitudes have been studied in sociology and psychology during several decades, starting from the original NEP scale by Dunlap and Van Liere (1978). Against this background, it is quite surprising, that studies of environmental values and attitudes have been almost completely ignored in organizational research. Reasons to this ignorance are of course not straight-cut, but the dominance of mainstream environmental management, with its focus on technical solutions and organization-level benefits of environmental friendliness (see Kallio & Nordberg 2006), together with traditional top-down –leadership thinking, might have led to a situation where the organizations and researchers have forgotten to ask about the employees’ values and attitudes towards the environment and to link it with the outcomes of environmental activities within the firm.

In order to fill this gap in organizational environmental research, sociological and psychological studies measuring environmental values and attitudes have been presented in this article. Now the crucial question is whether concepts, theories, methods and scales used in sociological and psychological studies for general public, or for specific samples outside of the organizational context are transferable and usable in a study of environmental values and attitudes within business organizations. Further, can these concepts and measurement scales be used as such or should they be modified to enhance the validity of the measures within organizational research?

Before a discussion of transferability of studies from sociology and psychology is possible, we need to highlight the different interpretations of the concept of values in psychology and in organizational research. In psychology, and within the context of this paper, the values are usually considered to be an individual's enduring way of guiding his/herself life (Schwartz 1992). In contrast, within organizational theory, and in management research particularly, the concept of organizational values is often used in the manner defined by Ott (1989) as conscious, affective desires and wants, defining the appropriate ways of conduct in organizational life. According to Rintanen (1999) organizational values are seen as a part of organizational culture, and they can be a result of societal development or efforts of company management. To make the distinction clear, in this paper, values are held by individuals and often unconscious, while organizational values are seen as enforced practices, in accordance with a view of Hofstede (2001). Thus, the question about linkages between individual values and organizational outcomes becomes a question of how and to what extent the individual values of employees affect organizational practices related to environmental issues.

A study of environmental values of employees in business organizations should intuitively have better validity, at least face validity, if the concepts and measures used are connected in to the organizational and business reality. At the same time, when individual values and attitudes are studied, the measures should reflect theoretical concepts of environmental orientations. Based on 30 years of theoretical work and extensive sociological and psychological research, the most often used theories of environmental orientation builds on ecocentric/anthropocentric distinction (e.g. DesJardins 1997; Eckersley 1992; Dunlap & van Liere 1978; Dunlap et al. 2000; Thompson & Barton 1994). The widely used NEP scale is based on this underlying theory and it has been proved to have both internal consistency and validity in varied research settings (see Dunlap et al. 2000 for overview). Also the more purely ecocentric/anthropocentric scale of Thompson and Barton (1994) shows decent internal reliability and supports the idea that ecocentric/anthropocentric orientation is important when linkages between environmental attitude and behavior are studied.

Somewhat paradoxically, the ecocentric/anthropocentric distinction have not been incorporated in mainstream research in environmental management because it is seen as too challenging against mainstream management theory assumptions such as growth emphasis (Kallio & Nordberg 2006). Ecocentric ideas have been presented into area of management in theoretical papers (e.g. Iyer 1999; Shrivastava 1995a, 1995b, 1995c, 1996; Purser et al. 1995; Gladwin et al. 1995) but only conceptually and usually at the organizational level (for example Branzei, Vertinsky, Takahashi & Zhang 2001). As Kallio and Nordberg (2006) point out, an *organization* can hardly be ecocentric today, and this might be the reason to why ecocentric/anthropocentric distinction has been left without much consideration. However, moving the focus from *organizations* to *individuals within organizations* might help in operationalizing the underlying concept: now we are able to study the individual variation within a given organization and investigate, whether organizations having more ecocentrically oriented employees are also showing more environmentally sound practices. As Rintanen (1999) has pointed out, there is a possibility of conflicts between organizational goals and the values held by individuals, which might prevent even an environmentally positive management to enforce sound environmental practices. In short, the mainstream environmental management theory with its focus on technical

solutions might even exaggerate the power of managerial solutions: if the employees' own values and attitudes towards environment differ from the managers' ones or the company's explicit "values" or policy, they might, unconsciously or deliberately, not act in accordance with those values or policies.

The move of the focus from the organizational to individual level in the environmental management discourse does not mean ignoring the organizational outcomes. Values of individuals can be aggregated into organizational level to allow for example comparisons between organizations. Different multilevel methods (see for example Klein & Kozlowski 2000) can also be useful in order to establish relationship between individual level variables and organizational level outcomes. The proposed approach suggests that instead for looking at the managerial solutions to environmental issues, the values of employees and values of society members at large need also to be taken seriously into account when discussing the business organizations' strategies and policies towards more environmental practices.

To conclude, a proper measure of employees' environmental values should contain a scale that measures the environmental orientation, for example the revised NEP scale (Dunlap et al. 2000) or Thompson and Barton (1994) scale. At the same time, for increased face and construct validity, and for increased usability of the results, the scale should be adapted to organizational and business reality. Experiences from environmental psychology studies (e.g. Bjerke & Kaltenborn 1999) show that NEP scale can be combined with other scales and applied to different samples. Thus, for organizational and business purposes, items capturing the essence of environmental issues faced by business organizations, such as conflicts with win-win-situations and growth orientation, should be added.

Conclusions

Research on environmental values and attitudes both at individual, organizational and societal level is by its nature cross-disciplinary. One might argue that the academic boundaries between different disciplines have been an obstacle in generating a more comprehensive understanding of the origins and impacts of environmental values. These boundaries seem to have been highest in the field of management, where very little ideas from other disciplines have been extensively used and empirically tested. For example, Kallio and Nordberg (2006) mention that ideas borrowed from environmental sociology and philosophy have not been well incorporated in mainstream organization and environment research. Therefore, it might be appropriate to suggest a new stream of research, managerial environmental value studies, which would draw from management and organization theory, environmental psychology, sociology and philosophy, economics, and other disciplines relevant to the topic studied, in order to find linkages between individual values, organizational values and organizational outcomes with regard to environmental performance of organizations.

Much of the management and organization research is about the organizational outcomes. Practical application of scientific models in business requires that the model can be used to predict the behavior of the members of organizations. In this

respect, the NEP scale seem to have predictive validity (Dunlap et al. 2000), because studies combining environmental orientation measurement using NEP and either self-reported or observed behavior (e.g. Blake, Guppy & Urmetzer 1997; Ebreo, Hershey & Vining 1999; Roberts & Bacon 1997) have found linkages between environmental orientation and actual behavior. These linkages have not yet been studied in organizational or management research, but hypothetically one might expect to find linkages between environmental orientation of employees and their motivation and participation in environmentally related activities within the organization. Also the ecocentric/anthropocentric scale developed by Thompson and Barton (1994) seems to have predictive validity. In order to create a linkage between environmental orientation (such as ecocentrism/anthropocentrism) and organizational outcomes, the scales need to be empirically connected to a measure of organizational environmental outcomes or activities. The results can be analyzed both at individual level and at organizational level. For the managerial purposes, the organizational level analysis is probably of primary interest, because it can explain problems and shortcomings in environmentally related activities initiated by management. Therefore, studies combining environmental orientation of employees and behavior with environmental outcomes in the organization, are welcomed in order to increase our understanding of individual values' and attitudes' impact on organizational performance in environmental issues.

References

- Albrecht, D., Bultena, G., Hoiberg, E. & Nowak, P. (1982). The new environmental paradigm scale. *The Journal of Environmental Education* 13, 39-43.
- Bansal, P. & Gao, J. (2006). Building the future by looking to the past. Examining Research published on Organizations and Environment. *Organization & Environment* 19:4, 458-478.
- Bernardo, M. (2009). How integrated are environmental, quality and other standardized management systems? An empirical study. *Journal of Cleaner Production* 17:8,742-750.
- Bjerke, T. & Kaltenborn, B. (1999). The relationship of ecocentric and anthropocentric motives to attitudes toward large carnivores. *Journal of Environmental Psychology* 19, 415-421.
- Branzei, O., Vertinsky, I., Takahashi, T. & Zhang, W. (2001). Corporate Environmentalism Across Cultures. A Comparative Field Study of Chinese and Japanese Executives. *International Journal of Cross Cultural Management* 1:3, 287-312.
- Des Jardins J. (1998). "Corporate environmental responsibility". *Journal of Business Ethics* 17:8, 825-838.
- Des Jardins J. (1997). *Environmental Ethics - an introduction to environmental philosophy*. Belmont: Wadsworth.
- Dunlap, R. E. & McCright, A. M. (2008). Social Movement Identity: Validating a Measure of Identification with the Environmental Movement. *Social Science Quarterly* 89:5, 1045-1065.
- Dunlap, R. E. & York, R. (2008). The globalization of environmental concern and the limits of the postmaterialist values explanation: Evidence from Four Multinational Surveys. *The Sociological Quarterly* 49, 529-563.
- Dunlap, R. E. & Van Liere, K. D. (1978). The "new environmental paradigm": A proposed measuring instrument and preliminary results. *Journal of Environmental education* 9, 10-19.
- Dunlap, R. E., Van Liere, K. D., Mertig, A. G. & Jones, R. E. (2000). Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale. *Journal of Social Issues* 56:3, 425-442.
- Eckersley R. (1992). *Environmentalism and political theory. Toward an Ecocentric Approach*. Albany: State University of New York Press.

- Edgell, M. & Nowell, D. E. (1989). The new environmental paradigm scale: Wildlife and environmental beliefs in British Columbia. *Society and Natural Resources* 2, 285-296.
- Freudenburg, W. R. (2008). Thirty Years of Scholarship and Science on Environment-Society Relationships. *Organization & Environment* 21:4, 449-459.
- Gahan, P. & Abeysekera, L. (2009). What shapes an individual's work values? An integrated model of the relationship between work values, national culture and self-construal. *The International Journal of Human Resource Management* 20:1, 126-147.
- Gladwin, T., Kennelly J. & Krause T. (1995). "Shifting paradigms for sustainable development: Implications for management theory and research". *The Academy of Management Review* 20:4, 874-907.
- Gooch, G. D. (1995). Environmental beliefs and attitudes in Sweden and Baltic States. *Environment and Behavior* 27, 513-539.
- Grob, A. (1995). A structural model of environmental attitudes and behaviour. *Journal of Environmental Psychology* 15, 209-220.
- Gärling, T., Fujii, S., Gärling, A. & Jakobsson, C. (2003). Moderating effects of social value orientation on determinants of proenvironmental behavior intention. *Journal of Environmental Psychology*, 23, 1-9.
- Hansla, A., Gamble, A., Juliusson, A. & Gärling, T. (2008). The relationship between awareness of consequences, environmental concern, and value orientation. *Journal of Environmental Psychology* 28, 1-9
- Hoffman, A. J. & Sandelands, L. E. (2005). Getting Right with the Nature. Anthropocentrism, Ecocentrism, and Theocentrism. *Organization & Environment* 18:2, 141-162.
- Hofstede, G. (2001). *Cultures's consequences. Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Thousand Oaks: Sage.
- Iyer G. (1999). "Business, consumers and sustainable living in an interconnected world: A multilateral ecocentric approach". *Journal of Business Ethics* 20:4, 273-288
- Kaiser, F. G., Wölfing, S. & Fuhrer, U. (1999). Environmental attitude and ecological behaviour. *Journal of Environmental Psychology* 19, 1-19.
- Kallio, T. & Nordberg, P. (2006). The Evolution of Organizations and Natural Environment Discourse. Some Critical Remarks. *Organization & Environment*, 19:4, 439-457.
- Karp, D. G. (1996). Values and their effect on pro-environmental behavior. *Environment and behavior* 28:1, 111-133

Klein, K. J. & Kozlowski, S. W.J. (2000). From Micro to Meso: Critical Steps in Conceptualizing and Conducting Multilevel Research. *Organizational Research Methods* 3:3, 211-236.

Kortenkamp, K. V. & Moore, C. F. (2001). Ecocentrism and anthropocentrism: Moral reasoning about ecological common dilemmas. *Journal of Environmental Psychology* 21, 261-272.

Nawrocka, D. & Parker, T. (2009). Finding the connection: environmental management systems and environmental performance. *Journal of Cleaner Production* 17:6, 601-607.

Milfont, T. L. & Gouveia, V. V. (2006). Time perspective and values: An exploratory study of their relations to environmental attitudes. *Journal of environmental psychology* 26, 72-82.

Naess A. (1981). *Ekologi, samhälle och livsstil*. Stockholm: LTs förlag

Nilsson, A., von Borgstede, C. & Biel, A. (2004). Willingness to accept climate change strategies: The effect of values and norms. *Journal of Environmental Psychology* 24, 267-277.

Nordlund, A. M. & Garvill, J. (2003). Effects of values, problem awareness, and personal norm on willingness to reduce personal car use. *Journal of Environmental Psychology* 23, 339-347.

Ott, J. S. (1989). *The organizational culture perspective*. Pacific Grove:Brooks/Cole Publishing Company.

Pagell, M. & Wu, Z. (2009). Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars. *The journal of supply chain management* 45:2, 37 -56.

Purser R., Park C. & Montuori A. (1995). Limits to anthropocentrism: Toward an ecocentric organization paradigm?. *The Academy of Management Review* 20:4, 1053-1080.

Rintanen,S.(1999).Luonnonmukainen elintarviketuotanto: Arvolähtöinen vai kilpailustrateginen valinta. Turku: Turku School of Economics.

Rokeach, M. (1968). *Beliefs, attitudes and values*. London: Jossey-Bass.

Ryan, A. & Spash, C. L. (2008). Measuring “awareness of environmental consequences”: two scales and two interpretations. In *CSIRO Working Paper Series 2008-10*. Canberra: CSIRO.

Schultz, P. W. & Zelezny, L. C. (1999). Values and proenvironmental behavior: A five-country survey. *Journal of Cross-Cultural Psychology* 19, 255-265.

Schwartz, S. (1992). Universals in the content and structure of values: theoretical, advances, and empirical tests in 20 countries. In M. Zanna (Ed.): *Advances in experimental social psychology* 25. New York: Academic Press, 1-65.

Schwartz, S. H. (1994). Beyond individualism and collectivism: New cultural dimensions of values. In U. Kim, H. C. Triandis, Ç. Kağıtçıbaşı, S.C. Choi & G. Yoon. (Eds.): *Individualism and collectivism: Theory, method and applications*. Thousand Oaks: Sage, 85-119.

Shrivastava P. (1995a). "Ecocentric management for a risk society". *The Academy of Management Review* 20:1, 118-133.

Shrivastava P. (1995b). "Industrial/environmental crises and corporate social responsibility". *Journal of Socio-Economics* 24:1, 211-227.

Shrivastava P. (1995c). "The role of corporations in achieving ecological sustainability". *The Academy of Management Review* 20:4, 936-960.

Shrivastava P. (1996). "Ecocentric versus traditional management: Some hints to Hanna". *The Academy of Management Review* 21, 9-11.

Snelgar, R. (2006). Egoistic, altruistic, and biospheric environmental concerns: Measurement and structure. *Journal of Environmental Psychology* 26, 87-99.

Stern, P. C., Dietz, T. & Guagnano, G. A. (1995). The new ecological paradigm in social-psychological context. *Environment & Behavior* 27:6, 723-743.

Stern, P. C., Dietz, T. & Kalof, L. (1993). Value orientations, gender, and environmental concern. *Environment and behavior* 25:3, 322-348.

Thompson, S. C. G. & Barton, M. A. (1994). Ecocentric and anthropocentric attitudes toward the environment. *Journal of Environmental Psychology*, 149-157.

Widegren, O. (1998). The new environmental paradigm and personal norms. *Environment and Behavior* 30, 75-100.

Willis, H. H., & DeKay, M. L. (2007). The Roles of Group Membership, Beliefs, and Norms in Ecological Risk Perception. *Risk Analysis* 27:5, 1365-1380.

**PART TWELVE: SMEs & CORPORATE
RESPONSIBILITY**

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK FOR THE DRIVERS AND BARRIERS TO IMPARTING FREE ENVIRONMENTAL KNOWLEDGE AND TRAINING TO SMEs

Allen Alastair

Abstract

The author uses an extensive review of the SMEs, training and sustainable development literatures to develop a Conceptual Framework showing the *Driving and Restraining Forces* for imparting free environmental knowledge to SMEs.

The work confirms that SMEs are an important and vibrant sector of the economy and a very diverse and heterogeneous group differing in structure, style, processes and resources from the larger organisations at which environmental training is generally aimed. Although there are many bodies wishing to give free environmental assistance to the SME sector, the assistance is not taken up for a variety of reasons such as lack of awareness of the assistance, a perception that the assistance is inappropriate to them or that the costs will outweigh the benefits.

This new Conceptual Framework reinforces the view that the owner/manager is the most important factor in decision-making within. However the Conceptual Framework also discovers that many Drivers – such as legislation, financial concerns and the attitude to training – can also be Barriers dependent upon the view of the SME owner/manager, thus presenting providers of environmental assistance with the dichotomy that a ‘selling point’ for training can also be an obstacle.

Keywords: SMEs; Sustainability; Training & Development.; the Environment

Introduction and Context

The context of this article lies within the DBA that the Author is undertaking. The Author had worked previously for the Institute for Sustainable Development in Business (ISDB) based at Nottingham Trent University which was a supplier of sustainable development education – usually on a free basis. In the Author’s experience, through anecdotal evidence and from reading trade journals, the Author noticed how difficult it was to ‘give’ this information away. This led to the decision to examine this phenomenon in a more structured basis through the academic rigour of a DBA. Initially, this investigated the Barriers to imparting free environmental knowledge. However it quickly became apparent that an investigation into the barriers would be worthless without an investigation into how to overcome them and so the research would look at both barriers and drivers. The ISDB was an organisation funded by European money (mainly ERDF and ESF) to assist Small and Medium Sized Enterprises (SMEs) in the East Midlands to improve their *business* performance through improving their *environmental* performance. Thus the topics of

SMEs, Training and Sustainability formed the main areas of investigation and this Research sits at the confluence of these topics. This paper will present the results of the literature review of SMEs and Training and Management Development (TMD) and SMEs and Sustainability, but set against the context of an earlier Conceptual framework by Tilley (1999b)

The Importance of SMES to UK Industry

For the purposes of this research, the European definition of an SME has been used: the organisation must employ less than 250 employees; have an annual turnover of less than €40million (approximately £35million); must have a balance sheet of less than €27million (approximately £23million); and be independent (i.e. not owned as to 25% or more of the capital or the voting rights by one other enterprise, or jointly by several enterprises) (CEC, 1992). The main reason why this definition – and not any of the other myriad definitions – is used is the context of this paper. This concerns funded operations, such as the ISDB. In this case the funding body for the ISDB is the East Midlands Development Agency (*emda*) and it too uses the European definition.

The importance of SMEs to the UK economy is frequently mentioned in the literature (*inter alia* Chaston and Baker, 1998; Tilley, 1999a; Tilley, 1999b; Netregs, 2003; Spence, 2004) and represent 99.9% of all UK enterprises (BERR, 2008). The UK Government sees the small business sector as playing a very important part in the economy (Keasey and Watson, 1993; Hilary, 2000; Johnston and Loader, 2003). The SME sector diversifies a nation's economic base, assists in employment creation, promotes a healthy local control and accountability, provides a counterbalance to big business, assists in the development and dissemination of new forms of technology and caters for niche markets which larger enterprises ignore (Barrow, 1998; Culkin and Smith, 2000; Beaver, 2002).

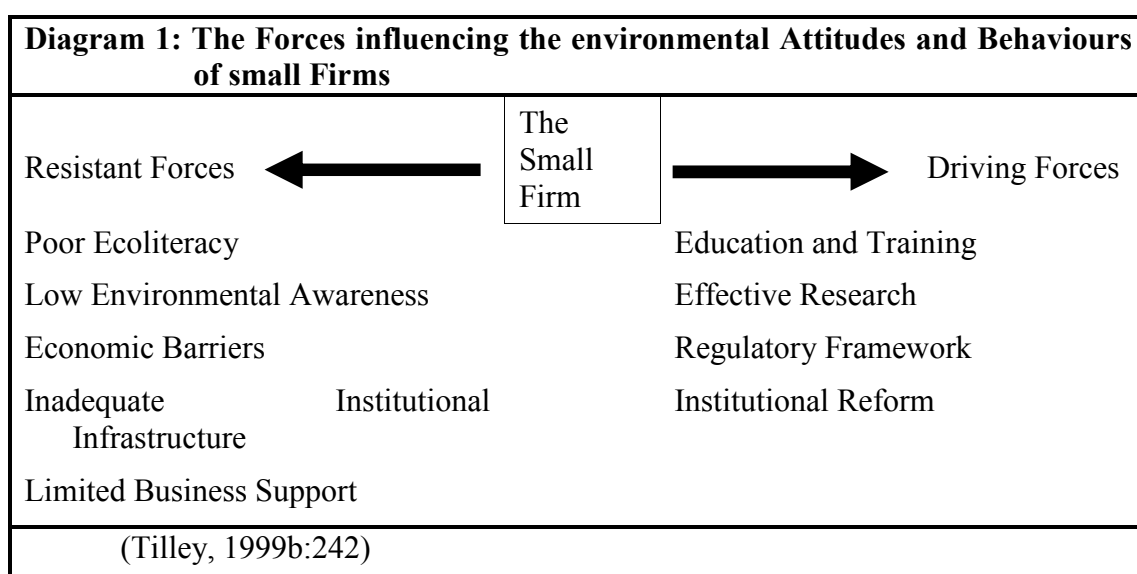
As far as their importance to the environment is concerned some estimates put the contribution to 'pollution' as high as 70% (Hillary, 1999) due to a variety of reasons such as using older machinery and technologies, lack of awareness of legislation and of their own environmental impacts" (Hillary, 2000:11) and the nature of the industries in which they operate: "leather-tanning, metal finishing, dry cleaning, printing and dyeing, brewing, food processing, fish farming, textile manufacture etc" (Hobbs, 2000:148).

They are an exceptionally wide and diverse sector of business and notoriously difficult to reach. A consistent theme in the literature is that the sector is difficult to engage with *en masse* due to its heterogeneous nature (Barber *et al*, 1989; Barrow, 1998; Fay, 2000; Devins and Johnson, 2003; Ammenberg and Hjelm, 2003). Organisations such as the Government (on a national level) or Business Links (on a local level) trying to reach the sector find it problematic as the sector is comprised of organisations operating under fundamentally different conditions. Beaver emphasises that "small firms are not an homogenous entity and to think otherwise is both dangerous and naïve" (Beaver, 2002:6). Another key issue is that the SME sector has such heterogeneity and disparate needs that it is futile to try to satisfy them with programmes intended for larger organisations, yet this occurs frequently (Wilson and Homan, 2004).

However in spite of their importance, little is done to interact with them on *their* own terms within *their* own context (Dalley and Hamilton, 2000).

Tilley's Framework

In the course of the Literature Review, the author came across a much-quoted piece of work to demonstrate the gap between the environmental attitudes and the behaviour of small firms (see Diagram 1). This diagram showed in a simple way the gap between the two elements and allowed a direct comparison between the two. The Author thought that it would be interesting to compare Tilley's 1999b work with his own – and develop it.



SMEs and Training and Management Development

The author's review of the literature suggested five major areas that were relevant to his study regarding SMEs and Training and Management Development (TMD).

The High Influence of the OM within the SME

An SME is inextricably linked with the life and identity of the OM (Kerr and McDougall 1999; Culkin and Smith, 2000; Beaver, 2002). Within SMEs of up to even a reasonable size, there are no specialists – the OM does everything. This poses a problem of focus for them as a typical working day may consist of strategic decisions about the direction of the organisation, mixed with functional discussions about the sales, finance or human relations issues, training a new employee, meeting with the bank, or packing a lorry for despatch (Wilson and Homan, 2004; Haugh and McKee, 2004).

The values of an SME are predominantly those of the OM, who is the hub of control and is the manifest concentration of leadership and authority. In the smaller SME the OM plays a critical role and their personality is crucial in inspiring loyalty and aligning employees to the organisation's values (Haugh and McKee, 2004). Feltham *et al* (2005) agree with this view and say that SMEs – particularly family-run businesses – are highly dependant (perhaps dangerously so) on the OM.

SMEs of OMs share five common values of independence, survival, control, pragmatism and financial prudence. Whilst it is acknowledged that larger organisations may well have similar values too, these five values are what make up “the cultural paradigm of the smaller firm” Haugh and McKee (2004:378). The issue of independence is important as it often makes an OM unwilling to accept advice. The high influence of the OM means that OMs have to be convinced that TMD is beneficial to them before undertaking it (e.g. Quinn, 1997). The issue of financial prudence is important as the OM has to be convinced of the (sometimes) unquantifiable benefits of TMD.

The Characteristics of SME OMs

With such a diverse range of companies, the OMs of SMEs are similarly diverse, Barrow (1998:15) quotes Peter Drucker (but without reference) as saying that:

“Some [OMs] are eccentric, other painfully correct conformist; some are fat and some are lean; some are worriers and some are relaxed; some drink quite heavily, others are total abstainers; some are men of great charm and worth, some have no more personality than a frozen mackerel”.

The characteristics of a successful small-business person are that they have total commitment and hard work, have a higher acceptance of uncertainty, demonstrate self-discipline, are self-confident all-rounders and demonstrate innovative skills (Barrow and Brown, 1997). This adds to the view of a SME OM as being a generalist (Beaver, 2002) and thus not needing TMD.

A Cooper & Lybrand survey of 800 small companies cited in Barrow and Brown (1997) shows the main motivators for SME OMs as being *Personal Satisfaction*. At 98%, this was cited by the OMs as being more important than *Personal Wealth* (85%) or *Capital Growth* (93%) showing that an OM is motivated by the satisfaction of developing his business more than his own wealth. This has an impact on the relevance of the content of messages aimed at the OM.

The Perception that TMD brings few Benefits to an SME

For SMEs the key managerial issues are those to do with effective time management and the ability to acquire the necessary financial and marketing skills (Hall, 1989;

Freel, 2000; Hillary, 2000; Hill, 2001a; Hill, 2001b). One way to increase the specific resource levels is to implement TMD (Stewart and Beaver, 2004). SME employees tend to be less well-trained and skilled than employees in larger organisations (Westhead and Storey, 1996; Patten *et al*, 2000; Devins and Johnson, 2003). Furthermore, there is a problem in the area of training as SME OMs often do not see the link between management development and profitability (Westhead and Storey 1996) – a link that is often taken for granted in large organisations (Wilson and Homan, 2004) or the OMs simply say that they do not have the resources to undertake training (Patton *et al*, 2000).

There is a moderate positive impact – in the short term – of training upon a range of performance measures. For example, Barrow and Brown (1997) found some positive reactions from SME OMs regarding TMD and its effect on cost-reduction. According to Hill (2004), the drivers for training for SMEs are that training can be shown to reap business improvements whose benefits outweigh the costs. There are two further drivers: if the training is made relevant to the company by on-site training or bespoke material or if the organisation is pursuing certification. The relevance of the training will be addressed later as it relates directly to one of the barriers to SMEs taking up assistance and the matter of certification is important as it will be seen as a major driver in a subsequent section when the issue of SMEs and Sustainability is addressed. Other research has highlighted the view that ‘softer’ benefits are more important (Devins and Johnson, 2003) and is backed up by Beaver and Hutchings (2004).

Hill (2004) found that insofar as SMEs view training positively, they implement training that they see as necessary for survival, growth and the accomplishment of business objectives. This supports the view that TMD is not planned, but a reactive feature of SMEs.

In spite of the large amount of support available (e.g. Johnston and Loader, 2003) SMEs are more likely to ignore TMD opportunities, because of the perceived lack of benefits.

TMD tends to offer ‘big Company’ solutions to ‘small Company’ problems.

The TMD offered to SMEs is not perceived to be relevant to them (e.g. Westhead and Storey, 1996). The *context* of training is important to SMEs. The context “defines the system through which all information is processed, interpreted and given meaning i.e. becomes knowledge” (Dalley and Hamilton, 2000:51). Context is central to what will and will not be learnt within an organisation – particularly an SME. The information provider has its own context and there has to be a high level of context compatibility for the knowledge transfer to occur. When new knowledge is absorbed into the context ‘learning’ is said to have occurred. TMD must be delivered within the context that the SME finds itself (Culkin and Smith, 2000). Too much TMD directed at SMEs has been developed for larger organisations and *their* context. It is easier to deliver a bespoke course to the larger organisations as they can generally provide enough employees to make it cost-effective (Freel, 2000; Hill, 2004). This is particularly true of schemes from Government-sponsored agencies as their advice is often seen as too generic and too oriented towards NVQs which SMEs do not want (Friedman and Miles 2002; Wilson and Homan, 2004). There have been attempts over the years to develop TMD programmes and courses specifically for

SMEs, but these have rarely lived up to expectations (Friedman and Miles 2002; Wilson and Homan, 2004).

SMEs have limited Resources

The key resources for SMEs are time and money (e.g. Hill, 2001b) and this leads to OM's being very wary about allocating them to TMD. Westhead and Storey (1996) note that the effective and relative price paid for TMD is greater for SMEs when adding in all relevant costs; and that the SME has, anyway, a much reduced income across which to spread the cost of training. This is supported by Beaver and Hutchings (2004) who similarly found that management in SMEs is typically endowed with less time and financial resources to implement training programmes.

Wilson and Homan (2004) say that SMEs cite time and cost of development as the most common reason for non-participation in training. They note that these two are inextricably linked: not only does an SME have to justify the development costs, but also the time lost to the organisation and the resultant opportunity costs. These most common barriers are also cited by, amongst others, Marlow (1998), Kerr and McDougall (1999), Freel (2000), Patton *et al* (2000) and Hill (2004).

Closely linked to the issue of resources is that of the staff who undertake TMD and their retention post-training. Hill (2004) talks about the anxiety felt by OM's that trained staff may be 'poached' by competitors. There is a feeling that the benefits of training accrue to the *individual* not to the *organisation* and so the staff who benefit from training may leave for another organisation (Marlow, 1998; Lange *et al.*, 2000; Wilson and Homan, 2004). Johnston and Loader (2003) cite 'employee poaching' as one of the major barriers to uptake of training amongst SMEs.

SMES and Sustainability

Within the context of Sustainability, the author identified the following issues. Some of them are similar to the previous section, but there are some which are unique.

The Influence and Commitment of the OM towards Sustainability

The high influence of the OM within the SME and their (often negative) attitude to environmental action (e.g. O'Laiore and Welford, 1996) mean that OM's have to be convinced that it is beneficial (Simpson *et al.*, 2004). The personal values of an SME OM are critical when looking at how an SME OM will address the issues of Sustainability, however that it cannot be *assumed* that an OM's ethical attitude will be the same at work as when they are at home (Quinn, 1997). Nevertheless, personal values *do* influence the first stage of forming judgements on an ethical issue. This has implications for SMEs as OM's often inform the culture of their firm (Beaver, 2002; Haugh and McKee, 2004). This approach to ethical issues can work both ways though, as an OM who is apathetic – or worse, antagonistic – to an ethical issue such

as Climate Change can discourage ethical behaviour in others (Sims, 1992 quoted in Vyakarnam *et al.*, 1997)).

There is certainly evidence to support the view that OMs are supportive of environmental issues (*inter alia*, O'Laoire and Welford, 1996; Petts *et al.*, 1999; Tilley, 1999b; Revell and Rutherford, 2003), but they take little action as they prefer economic interests over environmental or social ones (Revell and Rutherford, 2003); they see the necessary investment as risky (Hill, 2001a); they lack the skills to tackle it (Dewhurst and Burns, 1993), as well as the resources – particularly time and money (Gelber, 2001; Wilson and Homan, 2004) or they lack the awareness of the legislation (Petts *et al.*, 1999; Hillary, 2000; Clement and Hansen, 2003).

Tilley (1999b) says that typical OMs of small firms struggle to bridge the gap between their environmental attitudes (aspirations) and their environmental behaviour (practices).

The SME Sector's Awareness of and Attitude to environmental Legislation

One of the major debates in the 'Sustainability' literature is whether or not legislation should be used to force SMEs to be 'more sustainable' or whether voluntary regulation will be enough (Merritt, 1998; Bayliss *et al.*, 1998; Petts *et al.*, 1999; Sheridan, 2001; Revell and Rutherford, 2003;) and this debate is still relevant (Revell and Blackburn, 2004; Simpson *et al.*, 2004; McCarthy, 2006). In the early days of environmental legislation, SMEs were ignorant of, or confused over, Environmental legislation. Merritt (1998) suggested that attempts to promote environmental management in SMEs were only likely to succeed if the legislation was grounded in a thorough understanding of the nature of SMEs and the many contexts within which they operate. This did not happen however as UK policy-makers encouraged voluntary sectoral initiatives from industry to address environmental issues. The *voluntary* approach has thus meant that the environment has not been forced upon the agenda of SMEs, whilst the *sectoral* approach has meant that SMEs have not been targeted specifically (Revell and Rutherford, 2003).

SMEs themselves are supportive of legislation (O'Laoire and Welford, 1996; Tilley, 1999b), even though regulatory controls are thought to pose the greatest costs to SMEs (ECOTEC, 1998). Self-regulation was not supported by SMEs as SMEs are not best placed to identify what actions are needed in order to comply (Tilley, 1999b), a view supported by Revell and Rutherford (2003).

In spite of this attitude to legislation from SMEs (which as noted earlier make up 99.9% of all UK employment) UK Government policy has been influenced by such bodies as the CBI and is aimed at voluntary action whilst emphasising the benefits of environmental improvements (Rutherford *et al.*, 2000) and SMEs have often been omitted from the policy dialogue between Government and industry (Revell and Rutherford, 2003).

SMEs know little about their own industry's legislation (Tilley, 1999b; Clement and Hansen, 2003, Revell and Rutherford, 2003), they think that their level of activity is not worthy of regulatory control (Gelber, 2001; Revell and Rutherford, 2003) and they perceive enforcement is low, as are potential fines (Tilley, 1999b; Sheridan, 2001; EIB, 2005). All of this encourages deliberate non-compliance as SMEs

believe that this course of action will be less costly (in the event that they *are* caught) than compliance. This attitude is supported by low standards of eco-literacy and awareness levels (Tilley, 1999b) which promote ‘accidental’ non-compliance (Tilley, 1999b; Revell and Rutherford, 2003). However, Gelber (2001) and Simpson *et al.* (2004) claim that legislation actually works *indirectly* on SMEs as they face increasing pressure to improve environmental performance from customers and suppliers (see next section).

Sustainable Development cannot be *imposed* upon a company, but SMEs do face a number of pressures and drivers to engage in Sustainable Development. Two of the major pressures are *legislation* and pressures in the *supply chain* (Simpson *et al.*, 2004). Having dealt with legislation, the second pressure will now be examined.

The Pressures put on SMEs by the Supply Chain

Merritt (1998) found that supply chain pressure had little or no significant impact on SME behaviour and suggested that this driver was limited in the extent to which it was likely to influence future practice in SMEs. However all the reviewed literature written since then has put supply chain pressure as a major driver for SMEs becoming more aware of their environmental obligations.

Revell and Rutherford (2003) say that since the onus for developing SME environmental awareness has been put largely on larger organisations to ‘green their supply chain’, they exert pressure on smaller suppliers to improve their environmental performance. The CBI (2004:32) maintains that “big companies are scrutinising their supply chains more and more carefully and do not want to be associated with companies that show little or no respect for the environment.” It must be noted however that this reinforces the ‘big business’ view that environmental legislation is not necessary as it does not mention compliance as a pressure.

O’Laoire and Welford (1996), Friedman and Miles (2002), Simpson *et al.* (2004) and Preuss (2005) all put forward the view that it will be supply chain pressures that force SMEs to adopt environmental policies, but each writer has a slightly different emphasis. Friedman and Miles (2002) say that this pressure will be from larger businesses and regulation equally. Simpson *et al.* (2004) say that SMEs will be driven to adopt environmental policies in order to foster better relationships with their customers. O’Laoire and Welford (1996) argue that larger firms will force Environmental Management Systems (EMS) through their supply chain; and Preuss (2005) contends that it is only the larger non-SME customers who will insist on SME compliance as these tend to be the organisations whose activities come under close scrutiny by shareholders and pressure groups.

Even if these larger firms require their SME suppliers to be accredited to the various Quality Standards (ISO9000, ISO14001 and ISO19001), their achievement often involves overcoming significant inertia and significant investment of time and money (Gelber, 2001). Imposed, externally-dictated standards and procedures often run contrary to the needs of an SME where informal methods are preferred (Spence, 2004).

Handfield *et al.* (2005) noted that as larger businesses focus more tightly on their core competencies, they rely more heavily on their suppliers for their non-core activities. With these responsibilities being passed further down the supply chain, businesses can also pass down such risks as environmental risk to suppliers. This can bring about an opportunity for some environmentally-conscious supply chain managers to impact on both environmental and financial performance of their supplier SMEs (Powell, 2000).

Environmental advisors tend to offer ‘big Company’ solutions to ‘small Company’ problems

This was a view first mooted by Westhead and Storey (1996) and echoed by many since, particularly Tilley (1999b). The environmental advice that SMEs have been given over the years has come from many sources – many from the Government (Barrow, 1998; Bennett and Robson, 1999; Culkin and Smith, 2000). The importance of SMEs within the national economy and their impact on the environment has led Government to develop its current approach of encouraging SMEs to take environmental action through finance initiatives to help with investments that secure a better environmental performance (Clement and Hansen, 2002). There is a need for local and national Government to support innovative developments and provide a forum where information can be exchanged (O’Laoire and Welford, 2005), but this has been criticised as not being joined up. In a survey on Government environmental support, one SME OM is quoted as saying that: “as a company we can offset National Insurance contributions against buying a home computer for our staff, but not against a micro-wind turbine. Let’s join up” (anon, 2005:6).

Barrow (1998), Bennett and Robson (1999 and Culkin and Smith (2000) listed over 25 sources of support and information for SMEs – all of them capable of providing environmental support – from both the public and private sector, so there is no shortage of environmental advice providers. Smith *et al.* (2000) note that much of the advice available for improving SMEs’ environmental performance came from business-support agencies such as Business Links, Training and Enterprise Councils (TECs), Groundwork, business environmental associations and academic institutions. However, SMEs made little use of this advice – even when free or subsidised and even though SMEs agree that they require external assistance. An issue has been that, once again, much advice has been developed for non-SMEs and then ‘cut down’ to suit the smaller organisation (Netregs, 2003). In spite of all the assistance available, noted that many attempts to engage SMEs in environmental matters had had little or no success (O’Laoire and Welford, 1996; Hitchens *et al.*, 2003). Starkey (2000:105) says that “Service providers need to be fully conversant with the full spectrum of possible environmental management options in order to help SMEs come to the correct conclusion about which form of action is the most (competitively) advantageous” and concludes that usually the provider was unable to do this to the level required by the SME.

The Government approach to ‘high level’ support for SMEs has been inconsistent and illogical (edie.net, 2005a). They have focused upon the *central* provision of information and advice and the *local* provision of environment-business clubs

(Revell and Rutherford, 2003). They have, again though, demonstrated a lack of 'joined-up' thinking (ECOTEC, 1998) which results in problems for SMEs.

A success factor for SME programmes is the *channel* used (Friedman and Miles 2002). Information channels that SME OMs know and trust are the most effective (Clark, 2000) and SMEs are more likely to contact known intermediaries such as Business Links and Chambers of Commerce for information and training on environmental matters (Smith *et al.*, 2000). However establishing a level of interest through these intermediaries is one thing: prompting SMEs to action is another, so the degree of support from these intermediaries is critical (Friedman and Miles, 2002).

The Netregs (2002:12) survey found that 40% of SMEs would welcome more assistance and guidance from Government and its agencies. Interestingly they cited the 'internet' and 'printed materials' as the most favoured ways to receive information, with 'face-to-face visits' and 'training' only being the preferred option of 15%. This last method however is the preferred option for the service providers – particularly funded organisations who, from the Author's experience, are judged on this form of intervention. A subsequent survey (Netregs, 2003) asked respondents *where* they would go for environmental information: the results were that 60% had contacted their local authority, 35% the regulator (e.g. the Environment Agency), 35% a waste company, 14% a trade/professional organisation and 10% a Consultant.

UK trade associations appear to have the potential to address environmental issues and engage with SMEs (Hunt, 2000), as they are able to offer sector specific solutions and advice. However, some writers (Revell and Rutherford, 2003; Clarke, 2004) point out that though they have the potential, their low levels of membership make them a weak intermediary. Most SMEs are very limited in their time and this makes the OMs particularly discerning regarding which ones they join – environmental networks have to be more appealing to the OM than other networks that might be joined if they are to be of any use (Martinuzzi *et al.*, 2000).

The importance of networking amongst SMEs cannot be underestimated (Martinuzzi *et al.*, 2000; Hill, 2001a; Hill, 2001b), so it is important to consider not only the 'official' support available from the Government, but also the SME's more 'unofficial' ones. SME OMs use networks so freely that all manner of decision-making is characterised by the use of networks (Hill, 2001b). This will be just as true for decisions made regarding the Environment as in any other business area. Friedman and Miles (2002:336) identified networking as a key aspect of helping SME OMs implement environmental change in their organisation. In their research, they quote one SME respondent as saying:

“SMEs need to have contact with other people who are doing the same...There are myriad hiccups and practical difficulties in implementing good intentions, which are...much easier to fix if you can speak to someone who is doing exactly the same thing”

Revised Conceptual Framework

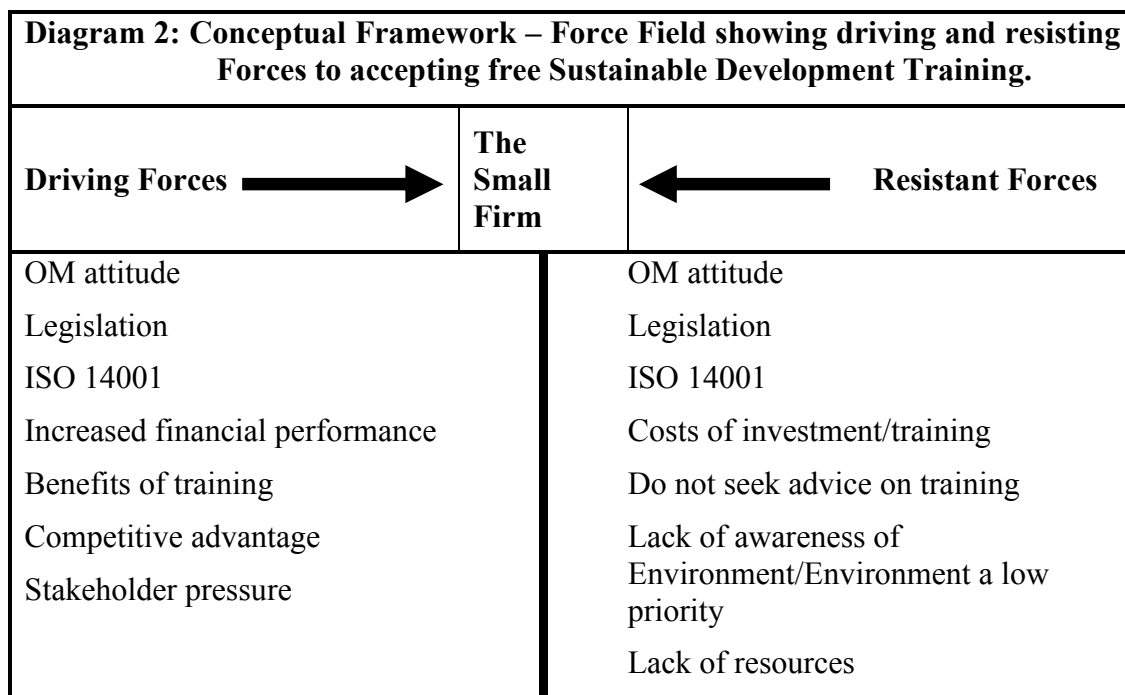
During the course of the Literature Review, the author came across 25 elements which could be described as *drivers* to accepting free environmental advice and 41 elements which could be described as *barriers* to accepting free environmental advice. These were then grouped together into areas that had similar attributes (or ‘bins’ according to Miles and Huberman (1996)). The bins were developed into the ‘Forces’ shown in the Diagram below. So for example ‘desire to comply with legislation’ (Meritt, 1998), ‘lower risk of prosecution’ (Palmer, 2000) and ‘fewer violations of regulations’ (Stanwick and Stanwick, 2005) were all seen as *Legislation drivers* and ‘independence of the OM – unwilling to accept help’ (Goffee and Scase, 1995) and ‘OM does not believe in training’ (Simpson *et al*, 2004) were seen as *OM Attitude barriers*.

This activity resulted in seven Drivers and seven Barriers (Diagram 2). The author noted that three of the Drivers and Barriers were directly and oppositely paired – the *attitude of the OM*, *the legislation* and *the environmental Quality Standard ISO14001*. Also two others – *increased financial performance* and *costs of investment/training* and *benefits of training* and *do not seek advice on training* can be viewed as opposite of the same coin. Finally there were four other areas – two Drivers and two Barriers – which did not match up although a Force like *Lack of resources* containing, as it does money, has links to *Costs of training and investment*.

Finally a Conceptual framework was developed and, in *homage* to Tilley (1999b), a *Forcefield Analysis* was used (Fisher, 2007).

Conceptual Framework Development and Issues

As well as the content of the Model, there was one further development of Tilley’s work. This the reversal of the positioning of the *driving* and *resistant Forces* and direction of the arrows versus Tilley (1999b). It seems more realistic and more logical to show the SME being squeezed between the two opposing Forces – the *Scylla* of the environmental quality and the *Charybdis* of economic growth – rather than being pulled apart by them as in Tilley’s (1999b) model.



It is important to note that the Forces do not show the *weighting* or *importance* of each Force. Nor does the fact that there are numerically more Barriers than Drivers mean that the latter can never overcome the former. Although the literature may lead one to believe that Legislation may be the most important driver, it may not be the most important barrier. One of the aims of the later Research within the DBA will be to attempt to rank each Force in order to assess its importance to the SME.

In developing the Conceptual Framework, the Author has tried to be aware of the three major pitfalls (Fisher, 2007). The first is over-complexity. This is avoided through the simplicity of the Force Field used. The second is the failure to specify what the relationships between the concepts are. Again the directional forces of the *Drivers* and *Barriers* and the logical juxtaposition of the various pairs of Forces avoids this pitfall. The third is that the Conceptual Framework is too general. This, at first sight, could be levelled at the Conceptual Framework, however using the information *behind* the Forces (the sixty-six individual themes) avoids this pitfall.

Further Research

This will be to consider the effectiveness of the author's Conceptual Framework in encapsulating the current situation regarding SMEs and their uptake of free environmental training.

In line with the requirements of the DBA, the author is required to undertake further pieces of research in order to understand fully the barriers to imparting free environmental knowledge to SMEs in the UK's East midlands region. This will be done by testing the Conceptual Framework through research. The first piece will be interpretive, non-survey-based research. The Author's intention is to interview a number of SME OMs in the East Midlands on the database of the ISDB. The intention is to interview OMs from organisations which *are* currently receiving free

environmental assistance OMs from organisations which have declined it. The objectives of this research will be to build up an accurate and up-to-date, in-depth picture of how SMEs in the East Midlands view environmental training and how it may benefit them; how they view Sustainability and whether they feel environmental issues impact upon them, and *vice versa*; and what if anything, they are doing about bringing training and Sustainability together.

The second piece will be a survey-based research whose objectives would be to refine the issues learnt from the interpretative research and to investigate them using survey-based research methods.

Reference

Ammenberg, J. and Hjelm, O., (2003). Tracing Business and environmental Management Systems – A study of Networking small and medium sized Enterprises using a Joint Management System, *Business Strategy and the Environment*, 12:3, May-June 2003, 163–174.

Anon., (2005). Government urged to ‘join up’, *Environment Business*, September, and ecological Modernization: further Analysis at the Level of the Firm, volume 7, page 6.

Barber, J., Metcalfe, J.S. and Porteous M., (1989). Barriers to Growth: the ACARD Study, in Barber, J., Metcalfe, J.S. and Porteous, M., (1989). *Barriers to Growth in Small Firms*, Routledge, London.

Barrow, C., (1998). *The Essence of Small Business*, Prentice Hall, Harlow.

Barrow, C. and Brown, R., (1997). *The Principles of Small Business*, International Thomson Business Press, London.

Bayliss, R., Connell, L. and Flynn, A., (1998). *Company Size, environmental Regulation and ecological Modernization: further Analysis at the Level of the Firm*, *Business Strategy and the Environment*, 7:5, 285–296.

Beaver, G, (2002). *Small Business, Entrepreneurship and Enterprise Development*, Prentice Hall, Harlow.

Beaver G. and Hutchings K., (2004). the big Business of Strategic Human Resource Management in small Business, in Stewart J. and Beaver G. (2004) (eds.), *HRD in Small Organisations—Research and Practice*, Routledge, London.

Bennett, R.J. and Robson, P.J.A., (1999). The Use of external Business Services by SMEs in Britain, *Entrepreneurship & Regional development*, [online] April-June, 11:2, 155-180, available via EBSCOHost [accessed 18/06/2009].

BERR, (2008). *Statistical Press Release*, 28th July (2008). [online], available at <http://stats.berr.gov.uk/ed/sme/smestats2007-ukspr.pdf>, [accessed 14/07/09]

CBI (the Confederation of British Industry), (2004). *Business Sustainability Business Guide*, Caspian, London.

CEC (Commission of the European Community), (1992). *Towards Sustainability: A European Community Programme and Policy and Action in relation to the Environment and Sustainable Development*, Com [92] 23 final, II, 27 March 1992, CEC, Brussels.

Chaston, I. and Baker, S., (1998).; Relationship Influencers: Determination of Affect in the Provision of advisory Services to SME sector firms, *Barriers to Growth in Small Firms*, [online], 22:6, 249–256, available via Business Source Premier [accessed 18/06/2009].

Clark, G, (2000). Developing better Systems for Communication – environmental best Practice in small business, in Hillary, R., (ed.) 2000; *Small and Medium-Sized Enterprises and the Environment – Business Imperatives*, Greenleaf, Sheffield.

- Clarke, J., (2004). Trade Associations: an appropriate Channel for developing sustainable practice in SMEs?, *Journal of Sustainable Tourism*, 12:3, 194-208.
- Clement, K. and Hansen, M., (2003). Financial Incentives to improve environmental Performance: A review of Nordic Public Sector Support for SMEs, *European Environment*, 13:1, 34-47.
- Culkin, N. and Smith, D., (2000). An emotional Business: a Guide to understanding the Motivations of small Business Decision Takers, *Qualitative Market Research: An international Journal*, [online], 3:3, 145-157, available via Emerald [accessed 18/06/2009].
- Dalley, J. and Hamilton, B., (2000). Knowledge, Context and Learning in the Small Business, *International Small Business Journal*, [online], 18:3:71, 51-59, available via European ASAP [accessed 17/03/2009].
- Devins, D. and Johnson, S., (2003). Training and Development Activities in SMEs: some Findings from an Evaluation of the ESD Objective 4 Programme in Britain, *International Small Business Journal*, [online], 21:2, 213-228, available via European ASAP [accessed 18/06/2009].
- Dewhurst, J. and Burns, P., (1993). *Small Business Management*, Macmillan, Basingstoke.
- ECOTEC, (1998). *Professional Education and Training for sustainable Development: a Report for the European Foundation for the Improvement of living and working Conditions*, ECOTEC, Birmingham.
- Edie.net, (2005). *Free sustainable Support for SMEs*, [online] downloaded from http://www.edie.net/news/news_story.asp?id=9379&channel=1 on 12/04/2009.
- EIB, (2005). EA goes after 'big, bad nasty Waste Criminals', *Environmental Information Bulletin*, July 2005:150, 5, IRS, London.
- Feltham, T., Feltham, G. and Barnett, J.J., (2005). The Dependence of Family Businesses on a single Decision-maker, *Journal of Small Business Management*, 3:1, 1-15.
- Fay, C., (2000). Foreword, in Hillary, R., (ed.) (2000). *Small and Medium-Sized Enterprises and the Environment – Business Imperatives*, Greenleaf, Sheffield.
- Fisher, C., (2007). *Researching and Writing a Dissertation: a Guidebook for Business Students*, second edition, Pearson Education, Harlow.
- Freel, M.S., (2000). Barriers to Product Innovation in Small Manufacturing Firms, *International Small Business Journal*, [online], 18:2:70, 60-80, available via European ASAP [accessed 18/06/2009].
- Friedman, A.L. and Miles, S., (2002). SMEs and the Environment: evaluating dissemination Routes and handholding Levels, *Business Strategy and the Environment*, 11:5, September-October, 324-340.
- Gelber, M., (2001). Bite-sized Chunks of EMS for smaller Firms, in Hilary, R, (ed.) (2001). *The CBI Environmental Management Handbook: Challenges for Business*, Earthscan Publications, London.
- Goffee, R. and Scase, R., (1995). *Corporate Realities: the Dynamics of large and small Organisations*, Routledge, London.

Hall, G, 1989). Lack of Finance as a Constraint on the Expansion of Innovative Small Firms, in Barber, J., Metcalfe, J.S. and Porteous, M., 1989; *Barriers to Growth in Small Firms*, Routledge, London.

Handfield, R., Sroufe, R. and Walton S., (2005). Integrating environmental Management and Supply Chain Strategies, *Business Strategy and the Environment*, 14:1, 1 -19.

Haugh, H. and McKee, L., (2004). The cultural Paradigm of the small Firm, *Journal of Small Business Management*, 42:4, 377-394.

Hill, J., (2001a). A multidimensional Study of the key Determinants of effective SME Marketing Activity: Part 1, *International Journal of Entrepreneurial Behaviour and Research*, [online], 7:5, 171-204, via Emerald [accessed 14/01/2009].

Hill, J., (2001b). A multidimensional Study of the key Determinants of effective SME Marketing Activity: Part 2, *International Journal of Entrepreneurial Behaviour and Research*, [online], 7:6, 211-235, via Emerald [accessed 14/01/2009].

Hill, R, (2004). Why HRD in Small Organisations may have become a neglected field of Study, in Stewart J. and Beaver G. (2004) (eds.), *HRD in Small Organisations – Research and Practice*, Routledge, London.

Hillary, R., 1999). The Eco-Management and Audit Scheme: ISO14001 and the smaller Firm, in Hillary, R., (ed.) (2000). *Small and Medium-Sized Enterprises and the Environment – Business Imperatives*, Greenleaf, Sheffield.

Hillary, R., (ed.) (2000). *Small and Medium-Sized Enterprises and the Environment – Business Imperatives*, Greenleaf, Sheffield.

Hitchens, J., Clausen, J., Trainor M., Keil. M and Thankappen, S, (2003). Competitiveness, Environmental Performance and Management of SMEs, *Greener Management International*, Winter issue 44, 45–57.

Hobbs, J, (2000). Promoting cleaner Production in small and medium-sized Enterprises, in Hillary, R., (ed.) (2000). *Small and Medium-Sized Enterprises and the Environment – Business Imperatives*, Greenleaf, Sheffield.

Hunt, J., (2000). Environment, Information and Networks – how does Information reach small and medium-sized Enterprises, in Hillary, R., (ed.) (2000). *Small and Medium-Sized Enterprises and the Environment – Business Imperatives*, Greenleaf, Sheffield.

Johnston, K. and Loader K., (2003). Encouraging SME Participation in Training: identifying practical Approaches, *Barriers to Growth in Small Firms*, 27:6, 273-280.

Keasey, K. and Watson, R., (1993). *Small Firm Management: Ownership, Finance and Performance*, Blackwell, London

Kerr, A. and McDougall, M., (1999). The Small Business of developing People, *International Small Business Journal*, [online], 17:2:66, 65-74, available via European ASAP [accessed 17/05/2009].

Lange, T., Ottens, M. and Taylor, A., (2000). SMEs and Barriers to Skills Development: a Scottish Perspective, *Barriers to Growth in Small Firms*, 24:1, 5-11.

Marlow, S. (1998). So much Opportunity – so little Take-up: the Case of Training in small Firms, *Journal of Small Business and Enterprise Development*, 5:1, 38-47.

- Martinuzzi, A. and Huchler, E. and Obermayr, B, (2000). Ecoprofit, *Greener Management International*, [online], Summer:30, available via Business Source Premier [accessed 12/01/2009].
- McCarthy, M, (2006). Global Warming: Your Chance to change the Climate, *The Independent*, 28/03/06, 1-3.
- Merritt, J.Q., (1998). EM into SME won't go? Attitudes, Awareness and Practices in the London Borough of Croydon, *Business Strategy and the Environment*, 7:2, May (1998)., 90–100.
- Miles, M.B. and Huberman, A.M., (1994). *An expanded Sourcebook: qualitative Data Analysis*, 2nd edition, Sage, London.
- NetRegs, (2002). 2002 *Netregs Benchmarking Survey: How green are small Businesses?*, NetRegs, Bristol.
- NetRegs, (2003). *SME-nvironment 2003: a Survey to assess environmental Behaviours amongst SMEs*, NetRegs, Bristol.
- O'Laiore, D and Welford, R., (1996). The EMS in SME, in Welford, R, (ed) (1998).; *Corporate Environmental Management 1: Systems and Strategies*, 2nd edition, Earthscan, London.
- Palmer, J., (2000). Helping small and medium-sized Enterprises improve environmental Management, in Hillary, R., (ed.) (2000). *Small and Medium-Sized Enterprises and the Environment – Business Imperatives*, Greenleaf, Sheffield.
- Patton, D., Marlow, S. and Hannon, P., (2000). The Relationship between Training and small Firm Performance: Research Frameworks and lost Quests, *International Small Business Journal*, [online], 19:1:73, 11-27, available via European ASAP [accessed 17/06/2009].
- Petts, J., Herd, A., Gerrard, S. and Horne, C., (1999). The Climate and Culture of environmental Compliance within SMEs, *Business Strategy and the Environment*, 8:1, January-February 1999, 14–30.
- Porter, M. and van der Linde, C., (1995). *Green and Competitive – ending the Stalemate*, *Harvard Business Review*, September–October, 120–134.
- Powell, A, (2000). Greening the Supply Chain: are formal Environmental Management Systems appropriate to the Needs of small and medium-sized Enterprises?, in Hillary, R., (ed.) (2000). *Small and Medium-Sized Enterprises and the Environment – Business Imperatives*, Greenleaf, Sheffield.
- Preuss, L., (2005). Rhetoric and Reality of corporate Greening: a View from the Supply Chain Management Function, *Business Strategy and the Environment*, 14:2, 123–139.
- Quinn, J.J., (1997). Personal Ethics and Business Ethics: the ethical Attitudes of Owner Managers of small Businesses, *Journal of Business Ethics*, 16:2, 119-127.
- Revell, A. and Blackburn, A., (2004). *UK SMEs and their Response to Environmental Issues*, Kingston University, Kingston.
- Revell, A. and Rutherford, R., (2003). UK environmental Policy and the small Firm: broadening the Focus, *Business Strategy and the Environment*, 12:1, January-February 2003, 26–35.

Sheridan, P., (2001). Directors' and Officers' Personal Liability under Environmental Law, in Hillary, R., (ed.) (2001). *The CBI Environmental Management Handbook: Challenges for Business*, Earthscan, London.

Simpson, M., Taylor, N. and Barker K., (2004). Environmental Responsibility in SMEs: does it deliver Competitive Advantage?, *Business Strategy and the Environment*, 13:3, 156–171.

Smith, A., Kemp, R. and Duff, C., (2000). Small Firms and the Environment: Factors that influence small and medium-sized Enterprises in environmental Behaviour, in Hillary, R., (ed.) (2000). *Small and Medium-Sized Enterprises and the Environment – Business Imperatives*, Greenleaf, Sheffield.

Spence, L.J., (2004). Does Size Matter? The State of the Art in Small business Ethics, *Business Ethics: European Review*, 13:1, January 2004, 163-174

Stanwick P.A. and Stanwick, S.D., (2005). Sustainability, Violations and Financial Performance, in Starik, M. et al (2005); *New Horizons in Research on Sustainable Organisations*, Greenleaf, Sheffield.

Starkey, R., (2000). Environmental Management Tools: some Options for small and medium-sized Enterprises, in Hillary, R., (ed.) (2000). *Small and Medium-Sized Enterprises and the Environment – Business Imperatives*, Greenleaf, Sheffield.

Stewart J., and Beaver G., (eds.), (2004). *HRD in Small Organisations – Research and Practice*, Routledge, London.

Tilley, F., (1999a). Small-Firm Environmental Strategy, *Greener Management International*, Spring issue 25, 67- 80.

Tilley, F., (1999b). The Gap between the environmental Attitudes and environmental Behaviour of small Firms, *Business Strategy and the Environment*, 8:4, 238-248.

Vyakarnam A., Bailey, A., Myers, A. and Burnett, D., (1997). Towards an Understanding of ethical Behaviour in small Firms, *Journal of Business Ethics*, 16:15, 1625-1636

Westhead, P. and Storey, D., (1996). Management Training and small Firm Performance: why is the link so weak?, *International Small Business Journal*, [online], 14:4, 13–24, available via European ASAP [accessed 11/06/2009].

Wilson A. and Homan G, (2004). The Management Development needs of Owner-Managers in manufacturing SMEs – Mapping the Skills and Techniques, in Stewart J. and Beaver G. (2004) (eds.), *HRD in Small Organisations – Research and Practice*, Routledge, London

WHEN AN AREA BECOMES AN ENEMY: THE ROLE OF CSR IN SMEs' DEVELOPMENT STRATEGIES

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Abstract

The roots of this research lie in the awareness that there is a relationship of mutual interdependence between small and medium enterprises (SMEs) and the local system. These firms are strongly rooted in the territory from which they draw resources often not available inside the firms.

The competitiveness of the territory positively influences the competitiveness of those enterprises able to establish relationships with the local actors. But what happens when the territory that was a fertile basis becomes an enemy?

This research poses the hypothesis that corporate social responsibility (CSR) is introduced as an enterprise-level strategy to overcome the negative effects produced by the territory and to restore the level of competitiveness of the firm. In fact if the CSR efforts are organised in a synergistic way, they can create a virtuous path in which the enterprise efforts stimulate improvements in the local network, which then regenerates resources and competencies usable by the enterprises located within it.

Keywords: CSR, SMEs, Competitiveness, Resources and Competences, Territory

The Importance of the Territory for the Enterprise's Performance

The influence of the territory on the competitiveness of the enterprise has broadly been discussed in theoretical debate and it is first of all contained in the concept of comparative advantage. Since its first introduction, the comparative advantage doctrine has explained the factors regulating international commercial exchanges – from the early macroeconomic concept of advantage attributed to low cost of the labour to the concept of advantage attributed to productivity of the job, to the classical concept of advantage attributed to the availability of goods on the domestic market and to the diversified endowment of resources, technological knowledge and managerial ability. Theory has evolved from approaches focused on the joint evaluation of the country, business sections, firm factors (Vernon 1966; Richardson 1977; Horst 1972; Hirsch 1976; Buckeley & Casson 1976: 116; Dunning 1977), to more recent interpretations that overcome the traditional tie of the unmodifiability of the factorial endowment (Porter 1991: 978; Hunt & Morgan 1995). These newer

theories focus on the transferability of advantages and on the replicability of the general international advantage of the enterprise, which is a function of the mobility of the factors that have produced it (geographical specificity) and of their effectiveness in a given country (tacit knowledge) (Hu 1995).

Also, the studies on industrial districts have underlined the variety of places and the relationships between places as an essential element in the generation of competitive advantages (or disadvantages) of a country, and of the enterprises located in the industrial zone.

In an industrial district, interconnections among economic-productive and social-cultural conditions play a non-secondary role in business profitability. In 1919, Marshall coined the term *industrial atmosphere*, reflecting the joint result of a local community's system of values, institutions and rules on development. He promoted a holistic vision of the local system in which the improvement of productive knowledge and the formation of incremental innovative processes are realised through the net of informal relationships that established in the district (Marshall 1919: 875).

Subsequently in that contributions in which the unity of investigation moves from the district system, dear to Marshall, to the enterprise inserted in a district, it is underlined as the district firm should have a different behaviour from an isolated enterprise or from an enterprise belonging to another productive system. The district acts on the enterprise, moulding and conditioning its fundamental character and creating an industrial atmosphere within social, cultural, historical and productive components that influences the character and the behaviour of the enterprise (Ferrucci & Varaldo 1993).

The influence of the social-cultural and institutional context on the economy of enterprise is revealed, above all, through human capital, which is moulded from the values and from the traditions of a specific country and of a specific environmental context. Therefore the "quality" of social-cultural context becomes a decisive factor of the competitiveness of the district enterprise. It is a primary factor in a territory's competitiveness that is attributable to irreducible or hardly reducible factors, determining how much is not exportable from one country to another and representing an expression of the cultural identity of a system-country.

Finally, the studies of international marketing of the concepts of *impact of the country of origin* (IPO) and *made in* have underlined the influence of the industrial origin of products on consumer purchase. These studies have appraised the predisposition of the consumer toward products for which the technological and operational superiority of the country of production is generally recognised. Consumers use the image of the country of production as an indicator of quality when there are not able to appraise the real qualitative attributes of the product and when they don't have previous consumption experience. In these cases, their purchase process is guided by the image that they have formed of the country from a range of elements including not only information about the country (politics, level of economic and social development, traditions, etc.), but also the affective components and the stereotypes or rather the diffused preconceptions to international level (Usunier & Lee 2005: 573).

The Variable "Territory" of SMEs

In the case of SMEs, the territory of affiliation weighs strongly on their competitiveness. The theory of industrial districts explains that the fruit of an agglomeration of small specialised enterprises is a territory in which SMEs enjoy economies of scale that otherwise would be the exclusive prerogative of big enterprises. As shown in studies of the international development of SMEs, the importance of the territory depends on the resources and competencies that are unavailable or difficult to produce inside the firm (Cavusgil 1980; Czinkota & Tesar 1982: 295). The inside production of knowledge and the ability to operate on the international markets is seriously compromised by the scale diseconomies that emerge as soon as the degree of specialisation of the competencies to be developed crosses a certain threshold. Thus, the principal obstacles to the development of international activity in SMEs are very often inside the enterprise, tied to limited resources and abilities, and not to the market opportunities.

The territory can represent, then, a fertile basis from which to draw resources and skills. However, it is the responsibility of the enterprise to evaluate the presence and characteristics of the area's advantages and to evaluate the effectiveness of these advantages in the target market-country. The lack of homogeneity in the distribution of domestic assets (resources, ability, relationships), of the demand structure and of the technology in different foreign markets determines the differing effectiveness of the comparative advantages that the enterprise can enjoy (De Chiara & Minguzzi 1996).

So, the relationships and the abilities to create consent and trust around the enterprise and its entrepreneurial project become essential to the continuation of the activities of these enterprises.

Corporate Social Responsibility

The joint outcome of a series of factors has brought to the foreground the theme of the social responsibility of enterprise: the awareness of the conditions of uneasiness between the state of nature and the social state resulting from economic growth; the awareness of the competitiveness of countries and the enterprises leaving these countries out of consideration for the responsible nature of these successes; the certainty of the impossibility of boundless economic growth, neglecting any impact on the environment; and the importance of the social function developed by the enterprise that emerges from the relationships that it must activate inside and outside. The growing maturity of civil society is reflected in its requests and expectations of public and private institutions, these institutions must consequently unite to find a new equilibrium between economic criteria and social outcomes in the governance of economic development activity. Such motivations have inspired the ideation of models of development compatible with an eco-centric vision (also noted by the term deep ecology¹¹) that will answer to a wider common or social interest, because the

¹¹This concept has been proposed by the philosopher Arne Naess in Capra F. (1997). *La rete della vita*, Milano Rizzoli.

traditional models of management and goal of enterprise appear inadequate¹². Today social responsibility is a requirement for managing a company (Caselli 1998). We can no longer consider enterprise as merely “a social process within which an economic process develops” (Bartels 1967): it needs to uphold the binomial “society and economy” (Sciarelli 2007: 310). For the definition of social responsibility of enterprise, we refer to the Commission Green Paper (2001), (European Commission 2001:35) which defines social responsibility as “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis”. A brief review of some important definitions is shown in Table 1.

Table 1 Some concepts of CSR

Author	Definition
Bowen (1953)	The duty of entrepreneur to pursue those policies, to make those decisions or to follow those action plans which are consistent with values and objectives of all our society.
Caroll (1979, 1991, 2004)	Responsibility pyramid of the firm: -economic, linked to the production of good and services aimed to both satisfying community's needs and to remunerate production factors; -legal, related to the behave obeying law bonds; -ethical, related to an ethical behaviour which goes over the norm; -voluntary of philanthropic, related to initiatives for the improvement of quality of lyfe.
Sacconi (2004)	A wide “governance” model planning that who manages the firms hold large responsibilities from fiduciary duties toward shareholders to fiduciary duties toward all types of stakeholders.
Molteni (2004)	Increasing satisfying the rightful environmental and social - as well as economic - expectations of internal and external stakeholders.
Freeman (2005)	Managing in the best way the relationships with its own stakeholders (corporate stakeholder responsibility).
Sciarelli (2007)	A three-dimensional model based on principles (solidarity and trust - corporate social responsibility), processes (corporate social responsiveness) and policies (issues management).
Perrini (2007)	Responsible firm is that which pin down, measures, monitors and evaluates social, environmental and economics impacts of its own activities.

¹² In the theoretical debate about the purpose and aims of the firm, there is an evolution from the neoclassical view of benefit maximisation, to the satisfactory view of the Carnegie School, to the recent theories that favour the shareholders in the wealth creation process.

Nowadays firms have to go beyond the shareholder orientation and consider all their stakeholders (stakeholder theory). Purpose and aims of firms depend on interests and relationships with stakeholders and firms have to frame their activities in a win-win network. The guiding criterion for firms' decisions is value maximisation (value theory). Value creation is the main aim of the firm and the created value must be divvied out to all stakeholders (value diffusion).

CSR and SMEs

While the emphasis of CSR has been on the social profile of large enterprises, awareness is rising of the necessity for SMEs to promote a culture of the social responsibility toward all the stakeholders. Some studies have underlined the necessity for SMEs to adopt responsible behaviour in light of the strong bond that these enterprises have with the local system (Harvey et al.1991: 229; Perrini 2008: 312).

The ability to create consent and to develop trust around the entrepreneurial project is an essential element for such enterprises, as is the ability to develop relationships, by virtue of the presence of a lot of SMEs in the Italian industrial zone. These considerations impose the need to reinterpret CSR for such realities (Perrini 2007) and seem to be motivating action in a lot of Italian public institutions¹³ as European political leaders look at CSR as an essential strategy to strengthen and re-launch the European economic system¹⁴. This system is perceived as an alternative to the American model of liberal capitalism, and is based on an elevated standard of quality of life, equal opportunity, protection of the environment and attention to society.

Even if the CSR idea has been developed by and for big firms first, the European Commission follows the “think small first” approach, so firms’ social responsibility concept, practices and tools have to be shaped on the basis of SME features, as they represent the most important part of European entrepreneurship.

In the European Multi-stakeholder Forum final report on CSR (2002-2004), (European Commission 2005: 27) there are the following recommendations by the European Commission in order to support the spread of CSR in SMEs:

- Raise SMEs’ sensitivity level and good practice knowledge
- Develop skills and competencies in order to integrate CSR in firms’ processes
- Ensure a CSR-favourable environment

The common denominator of all these interventions is the proposal to consider CSR not as an additional aspect but instead as an integral part of enterprise management, particularly of SMEs, which represents the most important part of the European entrepreneurial world.

It is emphasized in literature that the attentiveness of SMEs to CSR is strongly influenced by the individual values of the owner or manager. The ethical and social values emerge as important factors that explain the involvement of small enterprises in the practices of social responsibility (Observatory of European SMEs 2004: 282). The adoption of CSR tools also seems to depend on the age of the enterprise, and the

¹³ The project of the Ministry of Labour and Social Policies (2005) has the purpose to promote the culture of CSR inside the industrial system. The project is addressed above all to SMEs, to firms belonging to the industrial district and to cooperatives, because these are the main actors of the Italian economy. It rests on the belief that CSR is a valid tool for improving firm’ competitiveness over a long period. Confindustria, the Italian association of firms, has realized a vademecum to spread the culture of CSR among SMEs (Confindustria 2007: 31).

¹⁴ The last report on the state of social responsibility underlines the importance of the adoption of socially responsible strategies and tools for the competitiveness of SMEs (The State of Responsible Competitiveness 2007: 141). For a summary of such initiatives, we refer to Tencati et al. 2004.

end of the fifth year of life marks the point at which the probability of involvement of small enterprises in CSR emerges (Observatory of European SMEs 2004: 282).

In addition, the adoption of social responsible behaviour seems to be directly tied to the daily question of improving the effectiveness and efficiency of the business activities and the creation of value, therefore the interventions are directed above all to the inside dimension of the enterprise.

The Responsible Competitiveness of the Enterprise: Winning Strategy in “Hostile” Territories

The adoption of responsible and ethical behaviour produces an improvement in the image of the enterprise (Freeman 1984: 276; Sciarelli 2007: 310), and therefore improves the competitiveness of the enterprise in international markets. Such an effect happens, first of all, for those enterprises located in a social context that shares the value system of the enterprise, attentive to the theme of “environmental sustainability” and characterised by “growth of wealth” and, therefore, eventually prepared to spend more for products coming from the enterprises characterised by social engagement¹⁵.

For those enterprises, instead, that operate in a context in which the society is not ready to receive certain phenomena, or in which they are not able to make their “voice” heard (for instance in the poor and underdeveloped countries of the world), the acquisition of responsible behaviour seems, instead, to be an essential factor of competitiveness for the development of their activities out of the national borders.

CSR is a strategy that can be pursued by the enterprise to redeem itself from the possibly negative image of the country of origin and to operate in foreign markets that are, by contrast, attentive to the environmental and social theme.

In the case of a negative image projected by the country of origin of the firm, the impact produced on the competitiveness of enterprise (IPO) could negatively predispose consumers toward products coming from that country and could jeopardise the enterprise’s international development process there.

In the presence of small enterprises, if the territory transforms from a fertile basis from which to draw resources and competencies to a hostile area, the actors can no longer enjoy the advantage of the differential endowment of resources and possible comparative advantage on international level, and will further suffer from the increased costs that they must sustain for overcoming the inefficiencies produced by the local system.

In the cases in which the association between product / enterprise and country is unfavourable, we believe that the enterprise could remedy the situation by choosing

¹⁵ These factors, together with the change in “expectations towards the firms” after the lost of trust in the institutions and the “globalisation and the wide diffusions of information” that allow consumers to know what of good or bad has done by firms, are considered the main factors driving the increasing importance of CSR in firms (Werther & Chandler, 2006: 384).

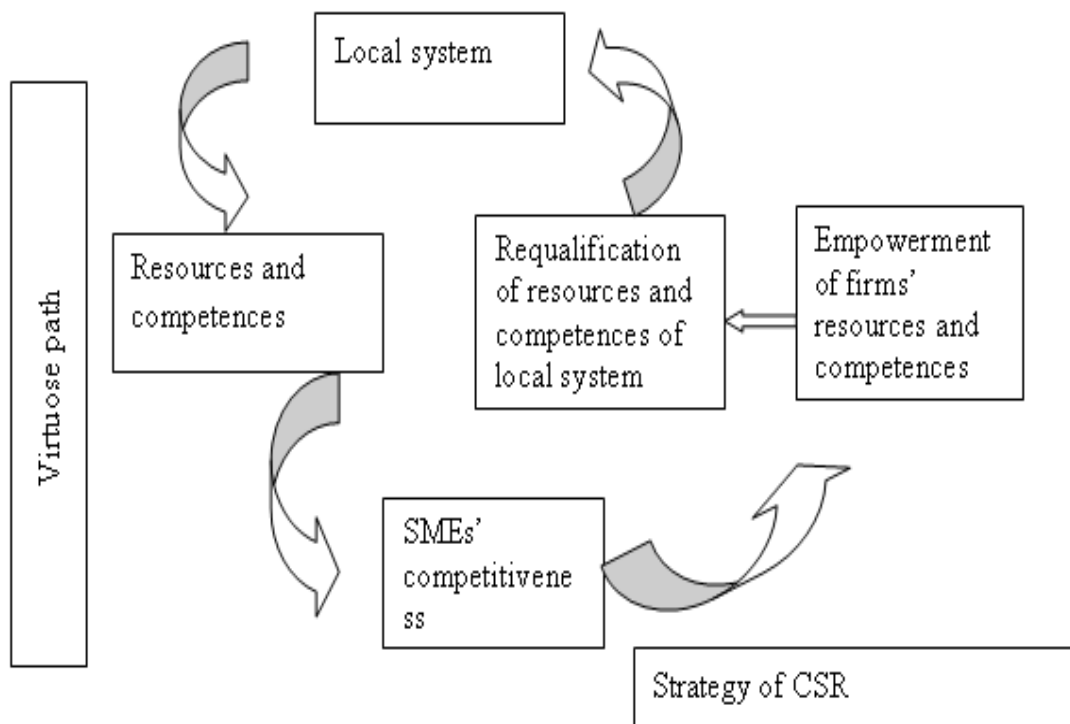
to emphasize the performance of the product or by resorting to the loan of a different image-country, for instance going to operate in other countries or, more simply, collaborating with enterprises of different origin. Alternatively, the enterprise can minimise the bond of the product with the country, emphasizing other aspects of the business image (Roth & Romeo 1992). The adoption of socially responsible behaviour and the implementation in the enterprise of the tools of CSR (ethical code, social budget, certification SA8000, certifications Emas, etc) can be considered strategies that allow the enterprise to overcome the negative influence produced by the local system and to recover competitiveness in the domestic and foreign market, through a revaluation of the resources and the business competencies.

To restore the level of business competitiveness in situations where the territory weighs more on the competitiveness of the enterprise, for instance because the local system is an industrial zone or because as a non-secondary consideration, is a productive factor (as in the case of agricultural and zootechnical businesses), the enterprise must define a synergic strategic behaviour with the local system. In fact, still more in these cases, the enterprise results are part of a *multistable system* composed of more interactive systems, and therefore it becomes fundamental to establish cooperative relationships among the fundamental operators (local institutions, suppliers and sub-suppliers) with the purpose of managing the processes of adaptation and change in an easier, more rapid way.

The strategy of CSR, even if adopted by a small enterprise, must bring about, through the retraining of its resources / competencies, the requalification of the resources of the local network so as to restore that virtuous path that is an important vector of competitiveness in the small enterprise. Otherwise, it seems difficult for the small enterprise, even in adopting socially responsible behaviour, to alone overcome the negative image of the country of origin and somehow to restore the level of business competitiveness on international markets.

In synthesis the model proposed in this article (see. figure 1) introduces CSR as a necessary strategy when the territory becomes "hostile", with the purpose to re-value the resources / competencies of the enterprise and to stimulate the retraining of the resources / competencies of the local network with the last objective to restore that virtuous circle in which the local system is an active factor in the creation of the competitive advantage of SMEs.

Figure 1 The model



The Research

The Methodology

In light of the advanced model, the empirical investigation determines the relationship between CSR behaviour and the characteristics of the territory, of the ownership (age and value system) and of the enterprise and investigates the external dimension of CSR in the enterprise, with respect to the following categories of stakeholders: consumers, local community and environment.

The research includes first the harvesting of information on the territory, through the consultation of different public documents, and then the use of a questionnaire administered to the owners of some SMEs to study the behaviour of the enterprises. The indicators used for appraising the external dimension of CSR in the enterprises, in relationship to the categories of selected stakeholder (clients, local community, environment) are drawn from Project CSR-SC (Corporate Social Responsibility-Social Commitment) of the Ministry of Labour and the Social Politics (2005), and chosen selectively according to the necessities of the experiment (see table 2).

The area under study is the territory of the Agro Caleno, of the plain of the Volturno and of the south plain of Garigliano, in the province of Caserta (Italy). The enterprises under study in the territory are those of the cow buffalo business section that are promoting a series of initiatives for the retraining of the territory (Auriemma s.r.l., Agricola casearia Lupara, B.U.F.F.A.L.O. Soc. Cop. a r.l., ditta Giuseppe

Liccardo, ditta Antonio Cimmino). This territory was chosen based on the recent events of deterioration in the territory image and the consequent crises of enterprises.

Table 2 The indicators of CSR used in the research

Characteristics of the enterprise and the ownership	Consumers	Local community	Environment
Age and values of owners	3.3.1. Indicators of customer satisfaction (searches, initiatives of measure and use, call centre and management of claims)	7.2 Contributions direct in different area of intervention 7.2.1 Education and formation 7.2.2 Culture 7.2.3 Sport 7.2.5 Social (also international) solidarity 7.2.6 Other (for instance voluntary work, kindergarten for the community)	8.1. Energy consumption, materials and issues 8.1.1. Energy 8.1.2. Water 8.1.3. Row materials auxiliary materials and packaging 8.1.4. Issues in atmosphere 8.1.5. Water unloadings 8.1.6. Refuse
Age of firm	3.4. Information and labelling of product / service (safety, LCA, voluntary initiatives)	7.3 Communication and involvement of the community (stakeholder engagement)	8.2. Environmental strategy and relationship with the community
CSR tools	3.5. Products / services with ethical-environmental connotation	7.4 Relationship with the means of communication	
	3.6. Promotional policies (for example, respect codes of self-discipline)	7.5 Virtual community	
		7.6 Prevention of corruption	

The Area Selected and the Ccow Buffalo” Business Section

The area selected has been qualified as “Area B”, or an “area with an intensive agriculture and with integrated productive line”¹⁶, in the recent Rural development Program (Psr) 2007-2013 of the Region Campania (approved by European Commission, with choice n. C(2007)5712 of 20 November 2007)¹⁷.

Such territory has lately been subjected to contradictory choices by local administrations that have allowed the installation of activities incompatible with the safeguard of the exercise of agricultural productive activities and more generally, of activities incompatible with the development of the landscape potential of the territory. Such choices, besides the serious attacks from various forms of abuse, have brought pollution, environmental disqualification, and annulment of a consolidated productive and housing history.

In the Agro Caleno, the Delegated Commissioner for emergency refuse has manifested the intention to install activity related to the disposal of refuse, including dumps of refuse solid urban, plants for treatment of special refuse, polluting industries and incinerators.

This area is designated for quality alimentary production of “mozzarella of bufala” (controlled origin denomination), the apple “annurca”, other fruit and vegetable, and olives, whose production is always endowed with marks of quality, and therefore the area is not fit to sustain polluting plants.

In 2007 and 2008, the zootechnic business section and milk-cheese of buffalo of the region and, in general, of the area within the denomination of protected origin “mozzarella of bufala doc”, have experienced a series of emergencies with economic-environmental and sanitary aspects that have threatened the structural stability of the sector and impacted the operations of the productive line. The first signs of difficulty for the zootechnic business section of buffalo, and particularly for that of the province of Caserta, were in November 2006, following the emanation of an ordinance of the Minister of Health on November 14th 2006, bringing “extraordinary Measures by veterinary police in areas of tuberculosis, bovine and buffalo brucellosis, sheep and goat brucellosis, leucosis in Calabria, Campania, Puglia and Sicily”, resulted in obligations to demolish a conspicuous number of head.

¹⁶This area and others such as area C (“Area with agricultural and food specialisations and processes of qualification of the offer”) are areas with agricultural specialisation, identified in consideration of the agricultural model (more intensive) of the agro-food vocation (with high index of specialisation) and of the presence of critic labels and in a development phase.

¹⁷The Rural Regional Program (PSR) established for these areas:

- 1) investments directed to improving the quality and alimentary safety standards;
- 2) to support positive initiatives on environment performance;
- 3) investments directed to hygiene conditions;
- 4) the introduction of innovative technologies for the improvement of quality and alimentary safety standards;
- 5) the exploitation of quality production;
- 6) to support the development of cooperative relationships of line;
- 7) the stimulation of technical-commercial support for increasing the presence of products on national and international markets;
- 8) to support the introduction of control systems and certification on quality of line.

The true criticality for the buffalo production line was foreshadowed in 2008 in correspondence regarding the emergency refuse in Campania and in the story on diossina. The business section of the buffalo breeding has been deeply stunned by such events, and has experienced a notable decrease in the sales of “mozzarella of bufala campana”, with consequent repercussions felt by all the zootechnic firms.

In the first four months of 2008, the contraction was reflected in the sales versus 2007 of the dairies (-19 million Euro) and the breedings (-3,3 million Euro), as well as excesses of milk (over 27.000 tons). In addition, over 26.000 heads were eliminated due to brucellosis and 5.000 heads were sequestered (sources XII Agricultural Commission Agriculture the Deputies' Chamber).

The situation, amplified in an unjustified way in newspapers and on televisions at the national and international level, has put seriously in difficulty a compartment of the Italian productive system that for a long time has represented the best of “made in Italy”.

The Behaviour of the Enterprises: The Strategy of CSR

In the face of the crisis within the business and the degradation of interest in this area, the response from the group of enterprises interviewed has been to first adopt socially responsible behaviour toward the local community, making themselves promoters of the proposal to compile a "plain of safeguard and of territorial and landscape development of the area of the south Agro Caleno Volturno and of the south Garigliano" to submit for the examination and approval of the local area government.

The plan, departing from the study of the territory, will trace the shared lines of the development as historically stratified. The plan must motivate not only the local administrations, but also the non public institutions to promote the environmental qualification that is an essential presupposition for overcoming the territory's crisis. These players have been at the origin of the serious threats that threaten the economic and social survival of the territory.

The proponents of the local agricultural entrepreneurs have already gained the support of many institutions in the area for reverting practices to adhere to area B of the "Program of rural development 2007-2013 of the Region Campania". They have gotten appointments from the local governments for the new PUC to be compiled coherently, with much established in the Regional Territorial Plan; they have gained the promise of local governments to limit the industrial development of the area to activities compatible with agriculture and in respect of the anticipated indications in the Plans of Territorial Development of the Region Campania (PTR and PSR). See the Law of the Region Campania n.16/2004, in “The Finality and Principles of the Planning”, Art. 1. the Plan will have to ensure "the guardianship, the orders, the transformations and the uses of the territory with the purpose to guarantee the development, in the respect of the principle of sustainability, through an efficient system of territorial planning and urbanism".

The Plan must guarantee the attainment of the following objectives (Art. 2, law n. 16/2004): a) the promotion of the rational use and orderly development of the urban territory and extra-urban through the least consumption of the ground; b) protecting human safety from hydrogeological, seismic and volcanic risk factors; c) guardianship of the physical integrity and the cultural identity of the territory through the exploitation of the landscape-environmental and historical-cultural resources, the maintenance of the ecosystems, the retraining of the existing installed activities and the recovery of compromised sites; d) improvement of the salubrity and the liveability of the inhabited centres; e) expansion of local economic development; f) guardianship and development of the agricultural landscape and the connected productive activities; and g) guardianship and development of the landscape sea-earth and of the connected productive and tourist activities.

Contextually, the enterprises of the Consortium of the Mozzarella of Bufala, have effected an action of involvement, insisting on the necessity of more efficient controls to guarantee the raising of the product and possibly to stimulate new investments in the compartment from the agriculturists. These enterprises, so harshly stricken in these months, must rely heavily on base controls that guarantee the origin of the milk and the techniques of production respecting the product with controlled origin denomination. This need for qualified production reflects a need to be attentive to both domestic and foreign markets.

The enterprises maintain that the predisposition and management of the Plan of the Controls of the Consortium have been deficient until now, approximate and surely injurious to the affairs of the regional breeders. Therefore, they have required that the Consortium implement all the useful initiatives to avoid an irreversible crisis in the buffalo business section that could mine the provincial economy.

In agreement with the Confagricoltura of the Region Campania, the enterprises are working to improve and develop the buffalo business section through the definition of new and specific rules for the production and marketing of the business section's products, holding essential the following points: 1. rebalance of the market of the Mozzarella of bufala of the region; 2. improvement of the quality of the production; 3. definition of the price of the milk of buffalo; 4. support of interventions of the compartment; 5. plan of promotion of the production.

In conclusion, the interventions effected by the enterprises have followed two lines of action:

1. Strongly safeguard the territory and the image of quality and excellence, through the involvement of the local administrations
2. Reorganise the Consortium of guardianship

The activities brought about by these enterprises are reflected in the indicators proposed for the evaluation of CSR, 7.3 "Communication and involvement of the community (stakeholder engagement)" and 7.4 "Relationship with the means of communication", including the sensitising of the local Administrations the associations of category (the provincial union of the agriculturists of Caserta - Confagricoltura).

Also, a series of initiatives singly conducted by the enterprises is reflected in the indicator 8.2 "Environmental strategy report with the community". These initiatives aim to improve the productive structures with the purpose of assuring a smaller environmental impact and avoiding important relapses in terms of occupation and promotion of the territory. Some firms, in alignment with the agricultural vocation of the area in which they are located, have long pursued a program of functional business modernisation to adopt high standards of quality and safety of the product and the process of production, consistent with the objectives of the Program of regional rural development.

Such interventions have included entire surface irrigation, completion of mechanisation, technological innovation and the restructuring and construction of the productive structures. Such interventions are essential to guarantee the competitiveness of firms and great quality and food safety of products. The investments by firms have guaranteed that important relapses in terms of occupation and promotion of the territory are avoided. In some cases, the aforementioned investments have been valued at a regional level, judged as consistent with the objectives of the Program of regional rural development.

The sensibility of the enterprise to the theme of the social responsibility can be also assessed through indicator 3.5, "produced / services with ethical-environmental connotation", in the extent to which modernisations produce products with high standards of quality and safety. This one orientation is followed by all of the investigated enterprises. The research has shown that the promoting enterprises are almost all characterised by a young ownership age (under 45 years for 80% of the enterprises) and, as the enterprises consist mainly of family farms, a long business history (to exclusion of only case, above the 20 years for 80% of the enterprises). Of the firms investigated, none has introduced the classical tools of CSR: social budget, environmental budget, ethical codes, or SA8000.

Table 3 Indicators of CSR in the interviewed firms

Characteristics of the enterprise and the ownership	Consumers	Local community	Environment
Age of owners under 45 years (80% of firms)	3.5.Products / services with ethical-environmental connotation (100% of firms)	7.3 Communication and involvement of the community (stakeholder engagement) (100% of firms)	8.2.Environmental strategy and relationship with the community (100% of firms)
Age of firm: more than 20 years (80% of firms)		7.4 Relationship with the means of communication (100% of firms)	

Managerial Implications, Limits of the Research and Future Developments

The attentiveness manifested by the enterprises towards the guardianship and exploitation of the territory in which they are located, is born not only from the conscience and values of the individual subjects interviewed, but above all from their awareness that the territory is a determinant factor for the competitiveness of the small enterprise and that it obviously becomes essential if firms use the territory as productive resource, as in the case of the agricultural and zootechnical firms. Overcoming the crisis of the buffalo business section passes therefore necessarily through a retraining of the territory, and on the base of such conviction, the enterprises have generally sensitised the actors of the local community and the economic and productive environment with the purpose of organising synergic action among all the interested actors that can influence the retraining of the territory. Consequently, from the restoration of the virtuous path, in which the territory becomes a "distributor" of resources and of competencies for the SMEs, firms can profit in their own competitiveness, in the international as well as domestic markets.

By virtue of the strong bond that these enterprises have with the local system, corporate social responsibility becomes a necessary strategy to overcome the negative effects produced by the territory and to restore somehow the level of competitiveness of the firms. From the research emerges the finding that the strategy of social responsibility of the enterprises interviewed has been pursued primarily at the level of the community and the environment, even though firms are aware that they need to mostly invest towards the final market. Thus, they must bring forth a series of actions that guarantee the quality of the product and its safety as it is necessary to promote products with ethical / environmental connotation. These actions can also be realised in joint way through the Consortium for the Guardianship of the Mozzarella of Bufala.

The realisation of the CSR strategy concerns the editing of the Plan of Territorial Development, once the enterprises have gained the support of the administrations that are located in the interested area. So far, comparisons have not been made on the effects of such strategy on the competitiveness for these enterprises. This fact could be the principal limit of such research and can be resolved with an investigation into the results of the plan of territorial development. This would allow research into the behaviour of the enterprises interviewed in two different temporal moments, before the realisation of the plan and the retraining of the area and after the realisation of the plan and the possible retraining of the area, with the purpose to appraise its impacts in terms of business competitiveness.

References

- Aa. Vv. (2007). *The State of Responsible Competitiveness* AccountAbility, July.
- Aa.Vv. (2004). *Observatory of European SMEs*. European Commission.
- Bartels R.(1967). A model for ethics in marketing. *Journal of marketing* 31 (January), 20-26.
- Bowen H.R. (1953). *Social responsibility of the businessman*. New York: Harper & Brothers.
- Buckeley P. J.& Casson M. (1976). *The future of the multinational enterprise*. London: MacMillan.
- Capra F. (1997). *La rete della vita*. Milano: Rizzoli.
- Caroll A.B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review* 4: 4, 497-505.
- Caroll A.B. (1991).The pyramid of corporate social responsibility. *Business Horizon* 34:4 (June-august), 39-48.
- Caroll A.B. (2004). Managing ethically with global stakeholders: a present and future challenge. *Academy of Management Executive* 18: 2, 114-120.
- Caselli L. (1998). Etica dell'impresa e nell'impresa. *Sinergie* 45, 85-88.
- Cavusgil S.T. (1980). On international process of firms. *European Research* 8, 273-281
- Commissione Cultura (2007). *Vademecum per la diffusione della CSR nelle piccole e medie imprese*. Confindustria
- Czinkota M. R. & Tesar G. (Ed) (1982). *Export management*, New York: Praeger Publishers.
- De Chiara A. & Minguzzi A. (1996). Servizi e competitività internazionale nelle piccole imprese. *Sinergie* 40: Maggio-Agosto, 155-207.
- Dunning J. H.(1977). Trade, location of economic activity and the M.N.E.: a search for an eclectic approach. In B. Ohlin (Ed). *The international allocation*, of economic activity London: MacMillan, 395-418.
- European Commission, (2001). *Promuovere un quadro europeo per la responsabilità sociale delle imprese*, Libro Verde, Bruxelles.
- Ferrucci L.& Varaldo R. (1993). La natura e la dinamica dell'impresa distrettuale. *Economia e Politica Industriale* 80, 73-97.

- Freeman R.E. (1984). *Strategic Management: a stakeholder approach*. Boston: Pitman.
- Freeman R.E. (2005). *Più qualità e più profitti*. Milano: Il Sole 24 Ore.
- Harvey B., Van Luijk K. & Corbetta G. (Ed) (1991). *Market morality and company size*. London: Kluwer.
- Hirsch S. (1976). An international trade and investment theory of the firm. *Oxford Economic paper* 28:2, 258-270.
- Horst T. (1972). Firm and industry determinants of the decision to invest abroad: an empirical study. *Review of Economics and Statistics* 54:3, 258-266.
- Hu Y. (1995). The International trasferability of the firm's advantages *California Management Review* 37:4,73-88.
- Hunt S.D.& Morgan R.M. (1995). The comparative advantage theory of competition. *Journal of Marketing*59: April, 1-15.
- Marshall A. (1919). *Industry and trade. A study of industrial technique and business organization*. London: MacMillan.
- Molteni M.(2004). *Responsabilità sociale e performance d'impresa*. Milano: Vita & Pensiero.
- Perrini F. (2007). Encouraging CSI in Italy: The enabling role of government in mandating.
- Motivating, and supporting responsible business practices. *Working paper* n. 35 of the Corporate Social Responsibility Initiative – Harvard University, 1-33.
- Perrini F. & Tencati A. (2008). *Corporate Social Responsibility*. Milano: Egea.
- Porter M.E. (1991). *Il vantaggio competitivo delle nazioni*. Milano: Mondatori Editore.
- Richardson J. D. (1977). On going abroad. The firm's initial foreign investment decision. *The Quarterly Review of Economics and Business* 11:Winter, 7-37
- Roth M.S & Romeo G.B. (1992). Matching product category and country image perceptions: a framework for managing country of origin effects. *Journal of International Business Studies* 3:Winter, 447-497.
- Sacconi L. (2004). Responsabilità come governance allargata dell'impresa: una interpretazione basata sulla teoria del contratto sociale e della reputazione. In G. Rusconi & M. Dorigatti (Ed). *La responsabilità sociale d'impresa*. Milano: Franco Angeli, 107-152.

Sciarelli S. (2007). *Etica e responsabilità sociale nell'impresa*. Milano: Giuffrè Editore.

Tencati A., Perrini F.& Pogutz S. (2004). New tools to foster corporate socially responsible behaviour. *Journal of Business Ethics* 53:1/2, 173-190.

Usunier J. C.& Lee J.A (2005). *Marketing across cultures* IV ed. England: Prentice-Hall.

Vernon R. (1966). International investment and international trade in the product cycle. *Quarterly Journal of Economics* 2: May, 190-207.

Werther W.B. & Chandler D. (2006). *Strategic Corporate Responsibility: Stakeholders in a global environment*. United Kingdom: Sage publications.

CSR-TOOLS FOR SMEs – COMPARATIVE ANALYSIS OF TWO DIFERENT TOOLS

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Abstract

CSR-activities range from single-issue-events to integrative triple-bottom-line approaches. Considering the latter only provides a multitude of tools with differing intentions, qualities and scopes of applicability.

This paper analyzes experiences from two processes of developing and implementing CSR tools in SMEs ISIS took part in (the enabler-concept BLISS and an official Austrian CSR-Quality-Seal, a visibility signal). It investigates criteria on which SME can select the appropriate integrative CSR-tool considering CSR goals, expenditures, time requirements, social, economic, and ecological risks and advantages. The investigation is accomplished by analyzing project reports, tools, guidelines, and indicators derived during the project and feedback from industry.

Comparison shows considerable differences as to application scope and stakeholder integration. Enabler concepts are more difficult to implement than visibility signals, but help enterprises gain the expertise to obtain a visibility sign. The more CSR has been mainstreamed within an enterprise, the more likely visibility signals are likely to suffice.

Keywords: CSR, SME, Implementation, CSR Tools

Introduction

Like in other European countries CSR-initiatives are gaining momentum in Austria, especially among the large listed enterprises. And although there are many approaches to establishing CSR in small and medium enterprises (SME) (European Commission 2005, European Multistakeholderforum on CSR 2004, for Austria e.g. Respect Austria 2009), full implementation of CSR is a long time coming (Spence, Schmidpeter & Habisch 2003: 19). Still, among the Austrian SMEs there are many with an excellent CSR-performance, but quite without being aware of the fact or at least without being able to take competitive advantage from it (McWilliams, Siegel & Wright 2006: 4).

Recently the Institute of Systems Sciences, Innovation and Sustainability Research (ISIS) at the university of Graz was involved in transdisciplinary processes directed at developing and testing two completely different tools for integrating CSR in SME practice. Together with the Inter-University Research Centre for Technology, Work and Culture ifz (University of Klagenfurt) and alpha nova BetriebsgmbH (a limited

social enterprise) and in cooperation with a medium-sized Styrian enterprise we developed BLISS (Business guideLines Inducing Social Sustainability, Seebacher et al 2005: 16 et seq.). BLISS aims at supporting an SME in establishing CSR from scratch while involving the employees right from the beginning. Furthermore the author was member of an expert board entrusted with developing an officially approved Austrian CSR Quality Seal (Gelbmann 2007: 151 et seq., Gelbmann 2008). The seal aims at providing SMEs with a simplified kind of “certification” as well as with an officially approved visible sign indicating a socially responsible enterprise. Thus the seal enables enterprises to check their sustainability performance and to communicate it to stakeholders.

This paper contrasts essential results from both projects, thus analyzing when and for which end different CSR-tools can be used for and whether they are applicable for SMEs. The purpose is to identify the potential and opportunities of the respective tools and to help SMEs identify the CSR tool appropriate for their intention. The methodology of this paper comprises a comparative analysis of project reports and the material developed during the projects as well as of first feedback from our industry cases.

Scientific Background

An Appropriate Notion of CSR

CSR comprises a multitude of heterogeneous notions and theories deriving from numerous fields (Carroll 1999, McWilliams, Siegel & Wright 2006, Windsor 2006, Dahlsrud 2008). In Europe according to the Greenpaper definition (European Commission 2001: 8) any voluntary commitment beyond legal demand is quite frequently put on the same level as CSR and made use of for PR reasons. In doing so the notion “voluntary” gets confused with “philanthropical” or even “arbitrary”. The Anglo-American view of CSR conceptualizes CSR much more comprehensively: E.g., Carroll defines several levels of CSR intensity, including efficient economic performance, legal compliance, ethical and finally philanthropical levels of CSR (Carroll 1979: 500).

Responsibility is not only a question of economic reason, but also refers to employees, society as a whole and natural environment. CSR can add to long-term economic prosperity of an enterprise and at the same time to fulfilling stakeholders’ needs (Burke & Logsdon 1996: 246). This approach is in accordance with sustainable development within an enterprise (Korhonen 2003: 27; Wheeler, Colbert & Freeman 2003: 2 et seq.; Wilson 2003: 2; Seebacher et al 2005: 151-155) in terms of a triple-bottom-line-approach (Elkington 1997: 69 et seq.). Referring to “development”, as we consider CSR, implies that the focus is not only on previous achievements, but on the willingness and ability of the enterprise to assume and undergo responsibility to an increasing degree. Only a comprehensive and dynamic approach allows for strategic implementation of CSR, directed at gaining competitive advantage. This is why a dynamic notion of CSR also fosters the integration of sustainability into an enterprise’s strategy and target system (Porter & Kramer 2002: 59, Porter & Kramer 2006: 2, Vogel 2005: 18 et seq.).

Features of CSR in SMEs

CSR was originally developed for large enterprises. Thus, applying the notion to SMEs in a consistent requires considering all of the three components of CSR (Jenkins 2004: 39).

As a rule, „corporate“ refers to large-scale enterprises featuring characteristics not typical of SMEs (like stockholders or a wide stakeholder spectrum). Even initiatives directed at SMEs focusing at implementing CSR in SMEs fall short of their goal if and when they are driven by experiences from large-scale enterprises.

„Social“ implies a relationship between enterprise and society (Swanson 1995: 54) that within SMEs is usually limited to the place or region where it is located – even if they serve international markets. CSR can help enterprises enhance their reputation whenever they attend to local or regional societal or social issues. There is, however, no close relationship between SMEs and their regional environment if e.g. they are located in industrial areas and lack public perception (Spence 1999: 168).

The term “responsibility” initially also relates to multinational corporations’ benefiting from the power society concedes to them in a responsible way (Wood 1991: 694 et seq.). The implications of their misconduct can affect the economies of whole countries, as the consequences of the collapses of major American banks currently prove. Eventually the influence of large-scale enterprises can be considered greater and with respect to ecological innovations more important than that of SMEs. Thus it must be questioned whether the influences of CSR as to stakeholders, employee motivation, risk factors, reputation, customer behaviour, and eventually the financial performance of SME equal those of large enterprises (Jenkins 2004: 43 et seq.). Quite often SMEs are family businesses with loyalty, commitment and involvement being stressed much more than in large enterprises (Vallejo 2008: 273): Quite usually even the level of participation is higher, which is a consequence of the central personality of the owner-manager, the entrepreneur. Due to the close relationship between him or her and his or her employees there will always be a close connection between his or her personal motives and the ethical conduct of the enterprise (Fuller & Tian 2006: 287).

Altogether these factors effectuate socially responsible enterprise conduct without the implementation of specific CSR efforts. Then again managers in SMEs are usually responsible of more than one business domain. This implies that SME manager can address less time and less commitment to matters beyond day-to-day-business (Spence 1999: 167, Tilley 2000: 35). Furthermore the entrepreneur usually does not dispose of much formal management know-how and applies intuition instead of common management tools. Eventually managers in SME s are rather sceptical about self-regimentation, quite disrelish things they think are bureaucratic and react reluctantly to influences arising from outside their enterprise (e.g. from NGOs) (Dex & Scheibl 2001: 420). Thus it proves difficult to implement CSR as a voluntary concept, which in addition and from their point of view does not appear to be a definite part of an enterprise’s strategy system and cannot be measured distinctly (Mendibil et al. 2007: 6).

Still SMEs can make use of an additional chance to differentiate from the competitors, given they are provided of both the information and the knowledge “to implement and report on their corporate social responsibility policies, processes and performance in an effective manner” (Castka et al. 2004: 141). In doing so, they can make their CSR performance transparent to their stakeholders.

Categorizing CSR-Tools

A multitude of tools and instruments is available for implementing and measuring CSR, even if we leave aside those which look only at a few of the aspects of CSR and concentrate on those which enable a broad approach that is contingent with corporate sustainability. The choice ranges from process guidelines for implementing CSR (*begin-of-the-pipe*) to indicators which allow for measuring CSR-performance (*end-of-the-pipe*).

In their communication concerning Corporate Social Responsibility the European Commission distinguishes five categories of CSR-approaches: codes of conduct, management standards, measurement/reporting/assurance, labels and finally Socially Responsible Investment (European Commission 2002: 13).

Further EC-Classifications distinguish aspirational principles and codes of practice, guidelines for management systems and certification schemes, rating indices typically used by socially responsible investment agencies and accountability and reporting frameworks (European Commission 2003).

Finally CSR tools can be divided into (European Commission 2003: 25):

- end of pipe with their focus on external reporting (e.g. the GRI)
- twins with their focus on improving social benefit in combination with a rise in corporate profits (e.g. CSR integration into Balanced Scorecard)
- enablers with their focus on ameliorating an enterprise’s internal CSR processes (e.g. different sorts of guidelines)
- visibility signals serving as a sort of certification to communicate credibility.

Below two of these groups will be portrayed in detail. They also make up the basis for practical application.

Guidelines and Handbooks

A guideline or handbook is a document that aims at devising processes in accordance with a certain pre-defined role. Basic idea of business guidelines is to make a scientific or practice driven approach developed by experts available to the enterprises. They are directed at fostering introduction, implementation and measurement of CSR in enterprises. Therefore they are enabler tools.

Enterprises make use of guidelines on their own will and can fit these to their requirements. Up to now, a broad range of guidelines has been developed which

mostly provide overviews and information on how an enterprise can implement CSR by itself (for an overview cf. European Commission 2008: 5, also cf. Honen & Potts 2007, World Bank. 2008, for Austria eg. Respect Austria 2007, Österreichisches Normungsinstitut 2004).

Quality Labels and – Seals

In the first quality labels and - seals serve as visibility-signals. A special mark signals that a product fulfils previously defined quality requirements or testing criteria. They also advise the customers that enterprises comply with defined quality standards (as to social and/or ecological preconditions of production). By this means quality seals and labels aim at influencing customers' buying decisions (e.g. the Fair Trade Label, Fairtrade 2009). If a label or seal is officially accredited, it equals a certification, too.

For example, accredited Austrian quality seals are registered trade marks awarded to organizations and companies that have been tested on the basis of a certified quality standard and have been checked by an independent, accredited body. They are granted on the basis of the Quality Label Regulation by the Austrian Federal Ministry for Economic Affairs and Labor. "Quality" refers to the characteristics of a product exceeding "normal" expectations ("state of the art", ÖQA 2007: 5). Accordingly CSR is a quality feature of a product or – as an innovation with the CSR Quality Seal – of an enterprise.

Basics of the BLISS Approach

The Business guideLines Inducing Social Sustainability BLISS (Seebacher et al. 2005) rest upon a bottom-up approach which requires both active commitment of the enterprise's management and active involvement of all employees. This is an essential discrepancy to other guidelines. As a comprehensive approach for implementing CSR throughout the enterprise BLISS considers all aspects inside and outside the enterprise, though the ecological aspects are not central to the concept. The goal of BLISS is to give practical guidance as to integrating social responsibility into strategic and operative management of an Austrian SME. Starting from the SME's actual conditions and requirements the guidelines help the enterprise to analyze its previous social responsibility, to identify opportunities for improving their corporate performance and to estimate the chance of success of alternative CSR measures.

BLISS was derived from a concept called "Social Analysis of Enterprises" which had been developed by project partner "alpha nova" to foster the analysis of intra-enterprise social performance. BLISS is more comprehensive and involves the responsibility of the enterprise within the region and towards society. BLISS is also attached to well-proven management concepts like EFQM (2004) and evaluation indices like GRI (GRI G2, Global Reporting Initiative 2002). Thus it can be adapted to the enterprise's situation to ensure implementation of CSR on a sustained basis.

BLISS features the characteristics of a manual and consists of several parts. A process-oriented phase model takes the center stage for evaluating the status quo and for introducing measures to increase sustainability. Implementing CSR according to our phase model involves a series of interviews, workshops and questionnaires. Systematically, more and more members of the enterprise become involved into the process in order to create interest and commitment. For every phase of the implementation process a number of tools like checklists, sample questionnaires or methodological expertise on design of interviews or workshops is provided to foster the efficacy of the process according to the enterprise's situation. This approach again facilitates concurrent evaluation of previous CSR performance and implementation CSR.

In addition to the phase model BLISS provides a set of indicators for measuring CSR. The set is flexible and can be tailored to the enterprise's requirements to stress the main areas of responsibility. The structure of the indicator set enables a connection to the EFQM Excellence Model which rests upon a self-evaluation of the enterprise on the basis of nine indicators. Consequently the BLISS CSR-indicators comprise leadership, policy and strategy, employees, partnerships and resources, processes and results as to customers, employees and society. EFQM aims at continuous improvement of the enterprises and consequently offers an ideal starting-point for CSR activities, as long-term enterprise prosperity depends on employee and customer satisfaction as well as on society's credit for the enterprise's corporate accountability. After devising the phase model and the set of indicators in cooperation with the scientists the enterprise was meant to design, target, control, and measure its CSR performance without any further external aid.

Basics of the Austrian CSR Quality Seal

In 2006 Quality Austria, "professional interlocutor for the comprehensive group of topics relating to quality management" (Quality Austria 2009), started developing an official Austrian CSR Quality Seal. The Seal is endorsed upon positive results of an inspection according to requirements specified in the „Quality Guidelines on CSR" for a 3-years-period, with a surveillance audit every year. The goal of the Austrian CSR Quality Seal is to provide especially SMEs with the chance to have their responsibility conduct certified by an independent, accredited body (for the whole chapter, cf. ÖQA 2007).

The Quality Guidelines on CSR rest upon an integrative view of CSR and sustainability in accordance with the triple bottom line approach. Considering an enterprise's own prosperity, a systematic and purposeful orientation towards the future, a broad perception of the enterprise's accountability, integration of stakeholders' as well as ecological requirements and implementation of a comprehensive opportunities and threat management are essential features of the CSR notion as in the Quality Guidelines. Consequently it is directly affiliated to strategic management, with the focus on the status quo, but also at continuous improvement of the enterprise's CSR performance over time.

The CSR Quality Seal is essentially available for enterprises, NPOs and all kinds of public or non-public organizations. Still the main target group comprises SMEs with an intuitively excellent performance, but without means or know-how to be able to present their activities to a wider audience in an effective way or to approach international NGOs like GRI. To all these the CSR Quality Seal provides an opportunity to differentiate and to communicate their sustainability performance effectively. Furthermore it serves as a signal sign for their stakeholders to help them identify socially responsive producers.

Due to the comprehensive application focus the Quality Guidelines rest upon a broad basis. They were derived by multidisciplinary and multi-institutional expert board from altogether 334 criteria which had been taken from Ethibel (2009), GRI (GRI G3, Global Reporting Initiative 2006), SA 8000 (Social Accountability International 2008), ETI (Ethical Trading Initiative 2009), IMUG (IMUG 2009) und EFQM (2004) in an elaborate and transparent top-down process. By the means of filtering and clustering we finally devised 48 criteria which cover the field of CSR, including general requirements of superior and/or strategic character, the economic situation of the enterprise, its human resource policy, the impact of the enterprise's action on society and stakeholder management and finally ecological aspects.

In accordance with a mandatory requirement of Austrian Quality Seals all the criteria are weighted equally and all the criteria have to be met by the applicant. Moreover, in the audit the criteria can only be categorized as fulfilled or not fulfilled – there is no further differentiation. For this reason the experts had to act very carefully in order to avoid unintentional knock out criteria. As a consequence – and also because the CSR Quality Seal is especially meant for SMEs – there are some facilitations of audit compared to other standards. If, for instance, a criterion is very difficult to prove, an affidavit can replace the objective evidence (e.g. concerning suppliers' compliance with ILO fundamental conventions.)

In addition to the criteria the CSR Quality Guidelines contain a comprehensive definition of CSR, instructions for application and implementation and a questionnaire for self evaluation and preliminary testing. Auditors get the retrieved data before the on-site inspection, which keeps the audit time very short (a half to four days). Other standards that have been implemented and certified (e.g. ISO 14 000) will be allowed for.

Comparative Analysis of BLISS and the Austrian Quality Seal

This section initially investigates similarities of BLISS and the Austrian CSR Quality Seal and in particular common divergencies to other concepts of implementing and/or measuring CSR. In the next step the two concepts are contrasted to investigate the major differences and when which approach is appropriate for an enterprise.

Common Features of the Two Concepts

Both approaches are meant for SMEs in the first instance, though with regard to their requirements and their elaborateness they are going beyond other approaches for SMEs. Firstly, this relates to the scope of CSR regarded. Both concepts apply a comprehensive notion of CSR, stressing the close connection of CSR and corporate sustainability. Though BLISS according to the requirements of our enterprise partner contains only a marginal ecological part, a full integration of the ecological dimension would not pose a problem at all.

The differences between BLISS and the Austrian Quality Seal on the one hand and similar approaches on the other are even more essential as to the tools applied. In most of the material devised especially for SMEs the (self-)evaluation rests upon self-estimation supported by very simple and intuitional tools (e.g. Respect Austria 2007). Supposedly these aim at arousing consciousness in CSR more than at actually evaluating CSR performance. In contrast, the evaluation scheme of BLISS is based on periodic statistical surveys and interviews. The enterprise is provided with concise guidance and with sample questionnaires to be able to conduct these surveys.

As to the Austrian CSR Quality Seal, impartial external auditors inspect the business conduct of an enterprise during the audit. They can also gather information from external third parties like trade unions. Consequently both concepts will bring about much more expense and expenditure of time than others, the quality of the results, however, will by far outstrip those of others.

This enables a straightforward integration of CSR into the enterprise's system of goals and strategies. That applies all the more as both concepts are closely affiliated to common management approaches: The indicator set of BLISS is directly attached to the main criteria of the EFQM excellence model. EFQM CSR criteria were also among the 334 criteria which served as a starting point for developing the Austrian CSR Quality Seal. Still the design of the Quality Seal refers to the Deming-/PDCA-Cycle (Deming 1986) and continuous improvement (Bhuiyan & Bagehel 2005: 762 et seq.) rather than to EFQM. Anyway, a strong interlinkage between the two concepts and strategic management is being allowed for.

Divergencies between the two Concepts

In the next step we are going to contrast the exact purposes and the application focus, resources needed for implementation and furthermore economic, ecological and social opportunities and risks of BLISS and the Austrian CSR Quality Seal, finally focusing on their suitability for SMEs.

Comparing Purposes and Aims of the two Concepts

The overall purpose of BLISS was to “exemplarily provide an Austrian enterprise with a practice-suited guidance for integrating the social dimension of sustainability

into its strategic as well as operational management” (Seebacher et al. 2006: 10). To this aim a set of indicators was devised to enable the enterprise to measure its current CSR performance itself. The Austrian CSR Quality Seal focuses at the opposite end of an enterprises CSR process. It does not aim at integrating CSR into an SME, but rather at measuring CSR performance in an independent, accredited process. The seal is endorsed upon positive auditing and aims at communicating excellent CSR performance to internal and external stakeholders in order to add to differentiating from the competitors thus fostering customer acquisition and loyalty.

Comparing the Application Scope of the two Concepts

BLISS is designed to foster implementation of CSR within an enterprise, thus it is an enabler concept. It combines a bottom-up and a top-down approach: First, the management must be convinced of and willing to introduce CSR and to provide the implementation process with resources and positive commitment. Involving the employees into the CSR implementation process at a very early stage strengthens the consciousness of CSR and the willingness of the employees to implement it within the enterprise. As BLISS is a voluntary concept without any legal obligation the concept itself and the indicators can easily be adapted to the enterprise’s requirements.

The Austrian CSR Quality Seal is suited for enterprises which have engaged in CSR over longer period of time and gathered experiences as to how to perform CSR. It serves as a visibility signals towards market partners and all sorts of stakeholders and as a competitive edge over other organisations (e.g. along the supply chain, esp. with productive enterprises, Gelbmann 2008a). As the CSR Quality Seal is officialized, it is not possible to adjust the indicators to the applicant’s requirements, as every applicant must be able to meet the same preconditions. Still, the quality guidelines highlight the fact that only indicators applicable in the special context of an enterprise have to be included in the audit (ÖQA 2007).

Comparing the Resources needed by the two Concepts

The comparison of the resources needed includes time expenditure, expense and requested human resources. Beforehand it must be clarified that BLISS as a concept for implementing CSR ties up more resources than would a CSR Quality Seal. Still a direct comparison is improper in this context, as obtaining a CSR quality label takes a full implementation of CSR throughout the enterprise for granted. In the initial phase BLISS ties up especially temporal and human resources, as at least one associate has to be exclusively assigned to the implementation, and the interviews and workshops tie up additional time. After BLISS has been fully implemented, the amount of resources needed decreases, and BLISS does not cause any major cost than the CSR Quality Seal.

As to the Austrian CSR Quality Seal, the collection of the data and the preliminary self-evaluation cause the bigger part of the cost involved. Additional costs arise from the initial, surveillance and sequel audits and finally from obtaining expert advice, a one-time registration fee and an annual user fee. The user fee and the fee for the audit itself conform to the number of employees. The fee for the audit amounts to 0.5 (up to 5 employees) and to 4 days (more than 1000 employees).

Comparing the Opportunities and Threats of the two Concepts

The opportunities and threats that may result from both concepts have to be measured in accordance with the underlying Triple-Bottom-Line-Approach of sustainability. Acting on the assumption that the implementation of CSR offers opportunities to the enterprise, e.g. as to customer loyalty, better cooperation with local stakeholders, employee motivation and –loyalty and reputation, it is also appropriate for enhancing the enterprise's economic performance and to create competitive advantage (Jenkins 2004: 43 et seq.).

As a visibility signal the CSR Quality Seal aims primarily at substantiating excellent CSR performance to stakeholders from outside the enterprise, including (prospective) customers, local politicians and possibly local political (pressure) groups and NGOs. BLISS focuses at improving internal CSR performance and consequently at employee-related topics like health or career management. The external opportunities described above are secondary in this approach.

In both approaches the risks consist in CSR not winning the benefit expected beforehand and thus the resources spent being wasted. Logically speaking, the risk of failing is greater in a concept like BLISS, as there is additional uncertainty on whether to implement CSR successfully within the enterprise at all. As regards introducing a CSR Quality Seal, however, at least the financial expenditure is easier to measure; it comprises the personnel costs attributable and the auditing and user fees.

Comparing the Suitability for SMEs of the two Concepts

BLISS is a comprehensive concept as to integration of the three bottom-lines of sustainability as well as to the complexity of investigating and implementing (guided interviews, written survey of all employees and external stakeholders, planning and conducting workshops). Thus it could easily overstrain a SME to implement the concept without any external support. If carried out properly the benefits resulting may by far exceed the cost of implementation. The CSR Quality Seal as state-approved CSR label is suited to creating transparency for producers, consumers and other stakeholders. The lean complexity, rather low expense due to a short audit time and the facilitations in parts of the audit make the CSR Quality Seal a good bargain for SMEs.

Outcome and Conclusions

BLISS was implemented in our partner company, but proved to be too complex to be fully implemented by the enterprise without the support of an external expert panel. Yet, the enterprise managed to make the management and staff aware of social responsibility. Not least due to the social involvement of the owner family the enterprise still effectuates socially responsible projects. The BLISS concept and indicators were extended to several enterprises and integrated into a successional project called “Social Profit” by two of the BLISS partners.

Due to concerns of official Austrian business representatives the Austrian CSR Quality Seal has not yet been put into practice. They fear that a quality seal could lead to a distortion of competition in favor of enterprises bearing the Seal due to their socially responsible behavior. The demand for such a visibility seal from the enterprises themselves, however, is so overwhelming that sooner or later this seal or something of the kind will certainly be introduced. Consumer Interest Boards also claim an official, registered seal. At any rate, the pilot audit met with great enthusiasm in a medium-sized Austrian food manufacturer who had been practicing active CSR for quite a long time.

Implementing CSR in an enterprise in a credible way goes along with involvement in all relevant areas of commitment. It requires an enabler approach that

- clearly defines the purposes and goals that have to be striven for,
- fosters commitment of management AND employees right from the beginning,
- helps to implement CSR within the enterprise in a fast, uncomplicated and efficient way,
- builds on CSR activities which have already been accomplished (maybe without having been realized so far),
- communicates precise ideas of the utilities of the CSR activities.

If a CSR approach has already been well-established in the enterprise and tied to the strategy system, the enterprise must make its involvement and its responsibility performance visible to the public. For this purpose, it can use visibility signals that

- allow for effectively communicating CSR activities externally,
- provide access to all the benefits implementation of CSR can offer,
- due to their certification features guarantee reliability to the customers,
- are able to generate a comparative advantage for the enterprise.

Thus we can draw the following conclusions:

- The less an enterprise has already been “living” CSR (even unnoticed, cf. Ketola 2008: 423) the more it will have to make use of (usually rather time-consuming, expensive and complex) enabler concepts.
- The more CSR has already been mainstreamed, has become going without saying, the sooner the application of visibility signals and certification, as an end-of-the-pipe measure will be sufficient to communicate the enterprise’s CSR performance.
- Eventually, within an enterprise, interest in CSR does not usually occur overnight, but commences with a little interest, a bit of philanthropy, some commitment and involvement, which all increase and gain momentum over time. Thus „implementing CSR“ willingly and in a top-down-approach would equal a sort of „be spontaneous-paradigm“ (Watzlawick 1993).

Because of the inductive case-study approach these conclusions must not be generalized, but need verification by some quantitative empirical surveys. Experience from field-studies in Austrian waste industry, however, show, that especially SMEs are not acquainted enough with CSR to be able to judge different approaches (Gelbmann 2008b).

References

Bhuiyan, N. & Bagehel, A. (2005). An overview of continuous improvement. From the past to the present. *Management Decision* 43:5, 761-771.

Burke, L. & Logsdon, J. M. (1996). How Corporate Social Responsibility pays off. *Long Range Planning* 29:4, 495-502.

Carroll, A. B. (1979): A three-dimensional conceptual model of Corporate Performance *The Academy of Management Review* 4:4, 497-505.

Carroll, A. B. (1991): The pyramid of corporate social responsibility. Toward the moral management of organizational stakeholders: *Business Horizons* 34 39-48.

Castka, P. et al. (2004): How can SMEs effectively implement the CSR Agenda? A UK case study perspective *Corporate Social Responsibility and Environmental Management* 11:3, 140–149.

Dahlsrud, A. (2008): How Corporations social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management* 15:1, 1-13.

Deming, W. E. (1986): *Out of the crisis*. Cambridge, MA: MIT Center for Advanced Engineering Study.

Dex, S. & Scheibl, S. (2001): Flexible and Family-Friendly Working Arrangements in UK-Based SMEs: Business Cases. *British Journal of Industrial Relations*. 39:3, 411-431.

EFQM (2004): *EFQM Framework for Corporate Social Responsibility*. Brussels: EFQM.

Elkington, J. (1997): *Cannibals with forks. The triple bottom line of 21st Century Businesses*. Oxford: Capstone.

EMAS (2001): *EU Regulation No. 761/2001 of the European Parliament and Council of 19 March 2001 allowing voluntary participation of organisations in a community eco-management and audit scheme*. Brussels: EMAS.

ETHIBEL (2009). *Measuring sustainability: ETHIBEL's evaluation scheme*. [Online] [Referred to 10.07.2009]
Available http://www.ethibel.org/subs_e/2_label/sub2_2.html.

Ethical Trading Initiative (2009). *The ETI Base Code*. [Online] [Referred to 10.07.2009] Available
http://www.ethicaltrade.org/sites/default/files/resources/ETI%20Base%20Code%20-%20English_0.pdf.

European Commission (2001). *Promoting a European framework for Corporate Social Responsibility. Green Paper*. Luxembourg: Office for Official Publications of the European Communities.

European Commission (2002): *Communication from the Commission concerning Corporate Social Responsibility: A business contribution to Sustainable Development*. Brussels: EC.

European Commission (2003): *Mapping Instruments for Corporate Social Responsibility*. Luxembourg: EC.

European Commission (2005): *Introduction to Corporate Social Responsibility for Small & Medium-Sized Enterprises*. Brussels: European Commission Directorate General for Enterprises.

European Commission (2008): *Results of the European funding programme "Mainstreaming CSR among SMEs"*. Luxembourg: EC, also cf. Corporate Social Responsibility [Online] [Referred to 10.07.2009] Available http://ec.europa.eu/enterprise/csr/ms_sme_projects.htm.

European Multistakeholderforum on CSR (2004): *Report of the round table on "fostering CSR among SMEs"*, n.p.

Fairtrade Austria (2009): *Fairtrade*. [Online] [Referred to 10.07.2009] Available <http://www.fairtrade.at/>.

Fuller, T.; Tian, Y. (2006). Social and symbolic capital and responsible entrepreneurship: An empirical investigation of SME narratives. *Journal of Business Ethics*, 67:3, 287-304.

Garriga, E.; Mele, D. (2004). Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics* 53:1-2, 51–71.

Gelbmann, U. (2008a). Establishing Strategic CSR: An Austrian CSR Quality Seal to substantiate the strategic CSR Performance of SMEs. In: *Proceedings of the 14th Annual International Conference on Sustainable Development*. New Delhi.

Gelbmann, U. (2008b). Sustainability and CSR in Austrian Waste Industry. An Empirical Survey. In: *Proceedings of the CRR Corporate Responsibility Research Conference*, Belfast.

Global Compact Office (2007). *Corporate Citizenship in the world economy*. New York: United Nations 50761.

Global Reporting Initiative (2002). *Sustainability reporting guidelines*. Version 2.0. Amsterdam: GRI.

Global Reporting Initiative (2006). *Sustainability reporting guidelines*. Version 3.0. Amsterdam: GRI.

Honen, P. & Potts, J. (2007). *Corporate Social Responsibility: An Implementation Guide for Business*. Winnipeg, CND: International Institute for Sustainable Development

Imug (2008). *CSR und Stakeholder*. [Online] [Referred to 10.07.2009]. Available: <http://www.imug.de/content/blogsection/6/161/>.

Ketola, T. (2008). A Holistic Corporate Responsibility Model: Integrating Values, Discourses and Actions. *Journal of Business Ethics*, 80:3 , 419–435

Korhonen, J. (2003). Should we measure Corporate Social Responsibility? *Corporate Social Responsibility and Environmental Management*, 10:1, 25-39.

Laszlo, C. (2003). *The sustainable company. How to create value through social and environmental Performance*. Washington: Island Press.

McWilliams, A. Siegel, D. & Wright, P.M. (2006). Corporate Social Responsibility: Strategic Implications. *Journal of Management Studies*, 43:1, 1-18.

Mendibil, K. et al. (2007). *How Can CSR Practices Lead to Successful Innovation in SMEs*. Strathclyde: Publication from the RESPONSE Project.

ÖQA. 2007. *Quality Guideline on CSR*. Vienna (in German Language).

Österreichisches Normungsinstitut (2004): *Corporate Social Responsibility - Handlungsanleitung zur Umsetzung von gesellschaftlicher Verantwortung in Unternehmen (CSR-Leitfaden)*. Vienna: ON-V 23: 2004 05 01 (Toolkit in German language).

Porter, M. E. & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review*, 80:12, 61-78.

Porter, M. E. & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and Corporate Social Responsibility. *Harvard Business Review*, 84:12, 78-92.

Respect Austria (2007). *CSR-Ratgeber. In 7 Schritten zu einer CSR-Strategie*. Vienna: Respect Austria (Toolkit in German language).

Respect Austria (2009). *A platform for Corporate Social Responsibility (CSR) and Sustainable Development* [Online] [Referred to 10.07.2009]. Available: <http://www.respect.at/content/site/projekte/article/1491.html>.

Seebacher, U. et al (2005). Project Report: *Guidelines für sozial nachhaltige Unternehmensführung*. Vienna: Fabrik der Zukunft.

Seebacher, U.; Friesenbichler, M.; Gelbmann U.; Suschek-Berger, J. (2005): Making Corporate Social Responsibility Operational. In: I. Oehme & U. Seebacher. (Eds.): *Corporate Sustainability. Theoretical Perspectives and Practical Approaches*. Munich, Vienna: Profil, 147-169.

Social Accountability International (2008). Social Accountability 8000. International Standard. New York: SAI.

Spence, L. J. (1999). Does Size Matter: The State of the Art in Small Business Ethics. *Business Ethics: A European Review*, 8:3, 163-174.

Spence, L. J., Schmidpeter, R. & Habisch, A. (2003): Assessing Social Capital: Small and Medium Sized Enterprises in Germany and the U.K. *Journal of Business Ethics*, 47:1, 17–29.

Tilley, F. (2000). Small Firm Environmental Ethics: How Deep do they Go, *Business Ethics: A European Review*, 9:1, 31-41.

Vallejo, M. C. (2008). Is the culture of family firms really different? A value-based model for its survival through generations. *Journal of Business Ethics*, 81:2, 261–279.

Vogel, D. (2005). Is there a market for virtue? The business case for Corporate Social Responsibility. *California Management Review*, 47:4, 18-45.

Watzlawick, P (1993): *The situation is hopeless, but not serious. The pursuit of unhappiness*. New York: Norton & Company.

Wheeler, D., Colbert, B. & Freeman, R. E. (2003). Focusing on value: reconciling corporate social responsibility, sustainability and a stakeholder approach in a network world. *Journal of General Management*, 28:3, 1-28.

Wilson, M. (2003). Corporate sustainability: What is it and where does it come from? *Ivey Business Journal*, 67:4, 1–5.

Wood, D. J. (1991). Corporate Social Performance Revisited. *Academy of Management Review*, 16:4, 691-718.

World Bank (2008). *Managing Environmental and Social Impacts of Local Companies. A Response Guide and Toolkit*. Washington.

SUPPLY – CHAIN ENVIRONMENTAL MANAGEMENT: A CASE STUDY OF ENGAGEMENT WITH SMEs?

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Abstract

Although not vast there is an existing body of literature which addresses and investigates Small and Medium Sized Enterprises (SMEs) and their environment related behaviour. This body of work regularly highlights the impact SMEs have on the environment and the current ‘problem’ of SMEs in this area (i.e. large overall/grouped impact and limited current activity).

When considering the overall change process, much of the current literature (and theory) identifies the importance of external factors and, in particular, external ‘pressure’ (i.e. from regulation and the supply-chain). The impacts of such ‘pressure(s)’ coming alongside other factors such as external support and guidance and internal factors such as available resources, champions, ethics and so on.

With the above in mind, and as a result of a specific knowledge transfer project (and case study problem), this paper engages this overall area but focuses on SME behaviour and the practice of environmental supply-chain management (ESCM). In doing so the author specifically considers the case(s) for engagement in an ESCM context from theory and practice and the benefits of this.

Keywords: SMEs, Environmental Supply-Chain Management, Sense-Making, Dialogue

SMEs and the SME-Environment Behaviour Context

SMEs and why SMEs in a/the Supply-Chain Context

Storey (1994), whilst noting there are varied definitions and interpretations of what SMEs are, suggests that SMEs account for the majority of businesses around the globe and in the UK. The DTI (2005) identify that SMEs constitute over 99% of UK business and of the organisations ‘captured’ by the EU definition of SMEs¹⁸

98% have fewer than 50 employees and the grouping contributes just over 50% of employment and just over a quarter of UK GDP. Graham (1996), amongst others (E.g. Beaver and Jennings, 2000), supports this overall impact and both the predominance and importance of SMEs and Storey (1994) further notes their

⁹ The European Union (EC, 2005: 14) defines an SME as a company: which is an independent enterprise (i.e. 25% or more of the capital or voting rights can not be owned by a large enterprise, with fewer than 250 employees) and has either: an annual turnover not exceeding 50m Euros or an annual balance sheet total not exceeding 43m Euros

contribution to innovation, development and change; Burns (2001) and Curran and Stanworth (1991) agree.

Curran and Stanworth (1991) go on to identify that the economic impact of SMEs has grown since the 1970s and this growth was at odds with the outlined predictions of Bolton (1971); Bolton having investigated the sector at that time in order to identify impacts and trends. Burns (2001, p12) supports the ongoing impact and role of SMEs and suggests that this has resulted from a number of factors, but in particular:

- an overall move from manufacturing to service industries and thus a changing market-place and opportunities; and
- structural changes in organisations, plus downsizing an other supply-chain based reasons, which have led to an increase in the contracting out of work and services.

The above highlights how smaller, often niche, producers can operate within the overall economy and, in doing so, how they offer an alternative source of employment and growth. It also provides an initial outline of the potential influence and responsibilities that organisations who ‘contract out’ have. Such responsibilities may be further supported in the context of Corporate Social Responsibility (CSR as discussed by, for example: McWilliams et al, 2006; Pedersen, 2006; Porter and Kramer, 2002; Smith, 2002; Windsor, 2006). Thus customers/a customer may be seen to have role in affecting the behaviour of their suppliers as a result of their ‘contracted out’ impacts and their responsibilities linked to CSR.

SME-Environment Attitudes and Behaviour (and affecting these)

Fay (2000: 9) agrees with the above and goes on to note that SMEs: ‘also account for their share of pollution, waste and other unsustainable practices’

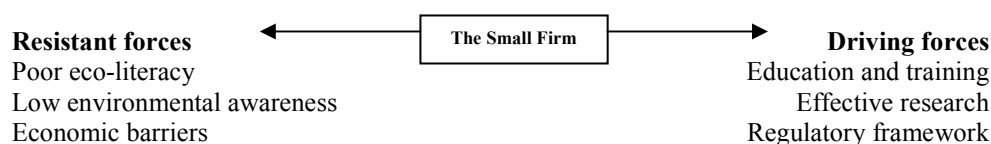
Interestingly, and in this context, it has been observed that SMEs have a ‘head in the sand’ attitude and approach when it comes to engaging and addressing their environmental impacts (Netregs, 2003); impacts which would otherwise appear to demand a change in behaviour (i.e. by SMEs). SMEs per se are, therefore, of interest to researchers and interventionists and it is evident from current theory and practice that SMEs can, and do, face both internal and external drivers for, and barriers to, behaviour and conduct change; a finding widely supported in literature (E.g. ECOTEC, 2000; ETBPP, 1998; Groundwork, 1995 and 1998; Hillary, 1999 and 2000; Merritt, 1998; Netregs, 2003 and 2005; Petts et al, 1998 and 1999; Tilley, 1999).

This situation and the concern associated with current SME-environment behaviour comes despite the time since the ‘SME problem’¹⁹ and solutions were identified (E.g. by Groundwork, 1995; Tilley, 1999; Welford, 1994). Tilley (1999) in particular

¹⁹ Merritt (1998) suggests the ‘problem’ may be one of activity resulting from intervention and SME management (as compared to larger business) not necessarily performance per se.

offers a useful discussion and view of SME attitudes and behaviour and, in doing so, also highlights a ‘twin track’ approach to addressing the situation (as outlined in Figure 1 below; Tilley, 1999: 242). The approach centres on a causal logic of minimising resisting forces and the strengthening of driving forces to affect change; this must, ideally, be done at the same time and in balance:

Figure 1 - Factors Affecting Attitudes and Behaviour in SMEs



This overall interpretation of the situation is widely supported (E.g. by Revell and Blackburn, 2004; Taylor et al, 2001; Williamson and Lynch-Wood, 2001; Worthington and Patton, 2005). The logic of this view and the linked approach (i.e. to affecting change) further supports the potential role for customers (i.e. related to policies and processes which lead an understanding of why act and what action) and the role of customers is furthered in Tilley’s discussion of overall ‘regimes of change’.

Environmental Supply-Chain Management (ESCM)

From the above it may be suggested that customers should place environment related requirements on their suppliers, and they possibly do in practice, and there are proposed benefits in literature (i.e. for the wider environment and SMEs related to their environment behaviour). Such action may come as a result of an engagement with wider responsibilities and ‘contracted out’ impacts and a customer’s own practices (E.g. related to risk reduction, improved efficiency and the ‘win-wins’, for profits and the planet, linked to such an approach). Action may also come as a result of the requirements (and ‘pressure’) placed on a customer by its own customers and/or its wider stakeholders; the/an overall chain effect. Within this overall context of environmental supply-chain management (ESCM) action is often grounded in the value chain (and the value added up the chain) and this view is widely evident in the literature (E.g. see comments/discussion in for example: Abukhander and Jonson, 2004; Beamon, 1999; Cousins et al, 2004; Hall, 2001; Walters and Rainbird, 2004; Walton et al, 1998; Wu and Dunn, 1994). Of concern here, however, in terms of SMEs and SME improvement(s), is that much of the ESCM theory-base, locates benefits with, and for, customers and not suppliers/SMEs. Much of the ESCM literature thus notes management, efficiency, benchmarking and/or image benefits for large organisations (i.e. to address what is in it for me? and the value from action) but offers less when it comes to approaches to the performance of suppliers/SMEs); i.e. to address: what is in it for them? and how to affect and facilitate change in theory (as suggested in the earlier discussion of theory) and practice (as needed).

The role of customers in much of this literature is, as a result, risk and efficiency led/driven and, on the whole, is based on rational views, and interpretations, of supplier behaviour (and thus how to affect change?). As such, the approach here sees SMEs/suppliers at arms length and driven to change, and improvements to conduct based on specifications and/or supplier policies. Therefore, and although there are potential wider benefits of ESCM for SMEs (as outlined earlier and, for example, as discussed by Tilley, 1999), the process of change and strategy development is based on a prescription (i.e. of conduct and behaviour) and this does not see customers engaging their suppliers/SME nor does it really engage process issues and considerations (i.e. it deals with issues of ‘why act’ and ‘what action’ grounded in a prescription of action but not how to address some of the factors affecting SME attitudes and behaviour from Tilley, 1999 and Figure 1). This situation and view is considered concerning given the potential role of customers and ESCM in SME-environmental literature and the CSR context noted earlier and the need for change in practice.

Supporting SME-Environment Related Behaviour and Attitude Change

This apparent situation comes despite the comments of Berger et al (2001), Henningson et al (2004) and Tilley (1999; as noted) who identify supply-chain dialogue as important to affecting SME-environment behaviour and, in the case of Berger et al (2001) and Tilley (1999), the benefits of wider social discourse too. Berger et al (2001), Groundwork (1998) and ECOTEC (2000) also clearly identify a potential ‘mentor’ role for larger businesses/customers; Fanshawe (2000) and Tunnessen (2000) agree. This role is particularly useful in addressing supplier/SME understanding of what action and why action (as identified by Tilley, 1999) and such comments also lead insight into how action occurs (i.e. the processes which drive/lead change). de Bruijn and Hofman (2001, and also: Hunt, 2000; Shearlock et al, 2001) offer further insight via their discussion of stakeholder-power links and Roome and Wijen (2005) further this in relation to learning impacts and benefits. Interestingly, Holt et al (2001) caution that ESCM activity should, and must, not be just a ‘hurdle’ for business retention (the thrust of the ESCM literature?) as such an approach may simply condition rather than change behaviour and attitudes.

Rothenberg and Becker (2004) further support the need for customers to intervene and engage their suppliers/SMEs to affect behaviour change. They offer such comments as a result of an identified problem with SMEs; this time related to their limited propensity to access government support. This lack of engagement and use of such support comes as a result of a lack of both awareness and, more importantly, trust in its quality and in those who provide it (Fanshawe, 2000 and Howarth, 2000 agree). Such findings are evidenced in the general SME support literature too with SMEs often being seen to prefer informal, personal and non-traditional networks (such as supplier and customer links) rather than formal sources of support (such as government agencies; E.g. Bennett and Robson, 1999a). Holt et al (2001) also support the notion that SMEs do not often willingly look for, or seek, support (i.e. from ‘formal’ sources) and related to SME-environment behaviour this situation is likely to be further shaped by current SME perceptions and levels of understanding related to the environment and their impacts. This situation is essentially the ‘catch

22' noted by Fanshawe (2000) and the situation is potentially further fuelled by context problems (i.e. related to customer/ESCM pressure) noted by Baylis et al (1998a and b), the inward orientation of many/most SMEs, their overall (and individual) approach(es) to strategy development (approaches which differ from those observed in large organisations too).

Strategy Development and the Interpretation of Behaviour in the Chain

Theory: Strategy as what Organisations (and SMEs) Do and Beyond

Related to the above, and to address current deficiencies (see also Worthington and Patten, 2005), it is suggested that the behaviour of organisations may be grounded in, and interpreted through, the discussion of strategy and Johnson and Scholes (2002, p10) define strategy as:

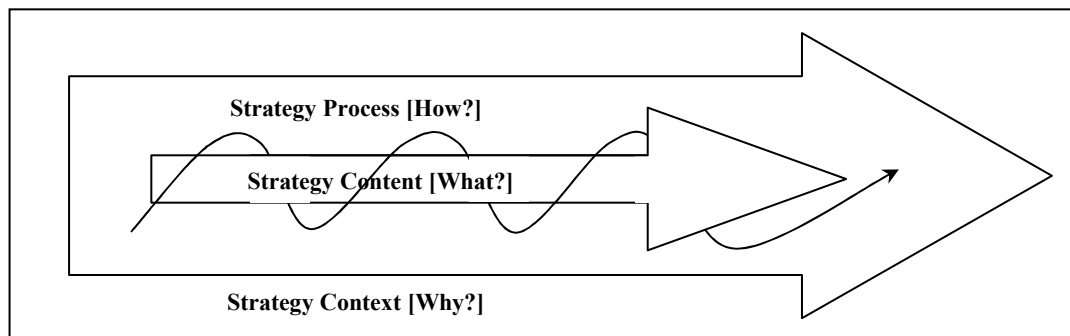
“the direction and scope of an organisation over the long term, which achieves advantage for the organisation through its configuration of resources within a changing environment and to fulfil stakeholder expectations”

This definition of strategy captures the link between why act (linked to the/a theory of action and affected by context) and what action (i.e. practice and observed behaviours) captured and in much of the literature outlined above. The link being evidenced here through, for example, the logic/sense in the creation of ‘advantage for the organisation’ from its ‘direction and scope’ and the associated, and important, ‘fulfil[ment of] stakeholder expectations’ (i.e. a customers requirements). There is also an inferred need for an orientation towards, and an approach to engaging, making sense of and resolving, the organisation’s needs and those of its stakeholders.

As well as offering an insight to behaviour, the above also begins to highlight the complex nature of strategy, behaviour and the development of strategy. It also highlights some of the problems and complexities related to understanding these areas and in particular why organisations do not act and how they act; the latter essentially relating to the processes which activate the ‘why/why not’ act and ‘what action’ logic. In the definition, this dimension of strategy is seen through/in, for example, and in a changing environment, the configuration of resources (E.g. how people are organised to make sense of and resolve various needs and opportunities), how ‘advantage’ is created (E.g. through knowledge about needs and the associated knowledge creation and learning processes). As a result, consideration of ‘how act’ is important to both the development of strategy (and/or strategies) and to the interpretation of behaviour and practice and the affecting of change.

The strategy process elements noted are further observed in the work of De Wit and Meyer (1996: 6) who identify the following as their conceptualisation of the ‘dimensions of strategy’:

Figure 2 - Dimensions of Strategy



Ultimately, as proposed in Figure 2, deWit and Meyer (1996) see the dimensions of strategy as both synthesised and systematic in their relationships and, as such, they are not simple stages in a rational/linear strategy development process (Stubbs, 2000 agrees). deWit and Meyer (1996) also identify here the influential and important role of, and interplay with, the ‘why’ and ‘what’ dimensions and the strategy process (i.e. ‘how act’) as noted earlier. This impact is also engaged by Mintzberg and Waters (1985) in their discussion of deliberate and emergent strategies and organisational practices, policies and processes. In particular, related to the latter processes the consideration of areas/activities such as planning, knowledge creation and learning.

Strategy as the/an Interplay of Sense-Making and Giving and Leading Intervention(s)

Kay (1993), like Mintzberg and Quinn (1991), agrees with the above and describes strategies as observable patterns of behaviour over time based on sense-making (i.e. understanding ‘why/why not act’ linked to ‘how’ and, for example, knowledge/truths grounded in knowledge creation processes) and sense-giving (i.e. ‘what action’ and what is acted on linked to ‘why/why not’ act and the causal ‘logic’ of action). With this in mind, it is clear that (and whether related the environment and sustainable development, SD, or not) ‘why/why not act’ and ‘how’ are important to understanding strategy and the strategy development process (i.e. of customers and suppliers) and both the understanding and affecting of behaviour and change (i.e. in SMEs).

Related to the above, and the case organisation (who are seeking to act based on commitments within their ISO14001 management system), issues of why act, what action and how to act are grounded in the customer organisation’ understanding of its context and environment related role and responsibilities, its own policies and processes (both current and future) and the perceived and actual impact or influence it should, can or does have on its supplier(s) (SMEs in particular for this work). Supplier/SME behaviour in the chain is similarly grounded in a wider understanding of the logic of action, with associated perceptions (of why/why not act and what

action) and the sense made of this (i.e. by owners, managers and others) in context; with impact(s) here, and on the process, from current policies and processes (i.e. how action occurs with links to, for example, an external orientation) and current sense and practice(s).

From the perspective of this research, and with the current literature and the desire to affect change in practice as necessary as a backdrop, there is clearly a need to engage in order to interpret and understand the (actual) behaviour of SMEs in the case organisation's supply-chain. Essentially this will be achieved through the investigation of current supplier/SME practices, the sense made of such practices and the underpinning processes. This will lead an understanding/description of what happens (in this case) and this will lead the development of an approach to intervention(s) and change(s) to attitudes and behaviour (as necessary). The focus here being on engaging what does happen not what should happen and, whilst ESCM theory often engages the whole chain, the focus here will be on SMEs in the first tier of the own label chain as this is the focus of the management system (related to control rather than influence) and thus the area where impact/the affecting of change is most likely (at this time and in this case in practice).

Research Methodology and Method(s)

Overall Comment and Support for the Research Approach

Wolfe (1998), with support from others (E.g. Berger et al, 2005; Shrivastava, 1994; Stubbs, 2000; Welford, 2003), identifies that much of the business and sustainable development research:

- is written from a narrow scientific perspective and fails to engage social dimensions; and
- has thus not effectively placed business in the context of the wider 'systems' (and processes) within which they operate.

Wolfe (1998) suggests that this focus on engineering and science, and positivism, comes from:

- the 'natural scientific' (and pragmatic) background of early research (and need for 'facts');
- the desire to provide solutions as a result of, and based on, a deductive approach;
- the misplaced belief in the higher value of (positive) 'science' based research; and
- a lack of true engagement with a critical research agenda, associated practices and developments and the failure to seek in-depth understanding of phenomenon (E.g. social dimensions and processes).

In this context, and through reference to Burnes (2000) the view and understanding of environment/SD strategy and behaviour can, in general, be seen as either:

- a process grounded in a rational/scientific and narrow view of phenomenon; and/or
- the outcome of a/rational process.

This approach (i.e. to understanding SME strategy and describing strategy development and behaviour) is evidenced by discussions of the ESCM literature above and it has been commented that this potentially takes a narrow view of the 'situation' and phenomenon. This leads in turn to the prescriptive nature of the work and the policy led approach to behaviour change contained. The issue with this being that in doing this the work fails to consider or understand the wider process impacts and elements (i.e. organisations as social and socially constructed entities/systems) and the wider responsibilities and roles of business(es) in the system (i.e. business' role as a key actor within the sustainable development process and/or related to CSR; with links to contracting out and the potential impact of customers and larger organisations on SMEs as also noted).

Interestingly, the work of Wolfe (1998), like that of Stubbs (2000), responds to earlier comment by Welford (1998) and, in turn, is linked to Welford (2003). In his 1998 article, Welford identifies the complex nature of the environment/sustainable development, the link with business, the current approaches taken to manage issues and the associated research agenda (with specific reference here to the importance of overall systems and supply-chains too). This agenda, as noted, has been heavily influenced by positivism (and normative views) and the paradigm is seen, by Welford (1998), as 'sterile' and one which offers little real insight to, and outcome for, practice; as is also the case with rational views of business and strategy (E.g. Johnson, 1988; Whittington, 2004).

The Information Tool, Response and Observations

To collect the information necessary for the author's sense-making a tool was developed based on the literature/theory available, and specifically the work of Williamson and Lynch-Wood (2001), and the needs of the research and the case organisation. The author did not completely replicate the work of Williamson and Lynch-Wood (2001) due to the overall focus and intention of this work (and its intended outcomes). The organisational learning indicators (identified by Petts et al, 1998; which are similar to the generic knowledge/learning characteristics of organisations, identified by, for example, Nonaka et al, 2006) were also used as these provided an assessment of current learning capacity, processes and approaches (i.e. to learning and knowledge creation and strategy development) and thus the internal processes which may assist with the description of how strategy is developed and deployed in the case SMEs.

The latter provided clear benefit to this work and the study outcomes as Petts et al (1998) identified these characteristics in proactive companies and it is not clear if there is latent capacity in seemingly ‘inactive’ businesses (i.e. is there potential for activity but constraints to action related to cost-benefit assessments and sense-making processes?).

In total, 57 responses were received from the tier one own label suppliers of the case organisation (a 47% response and 74% of this response being SMEs). Whilst 60% is an exemplary level of response for questionnaires (Remenyi et al, 1998), the 47% response is deemed acceptable for this work as a result of its focus (i.e. the behaviour of SMEs within tier one of the client’s own label supply-chain and interventions based on behaviour here). To illuminate the findings and descriptions developed from the information tool case observations were also used. These facilitate understanding and the author’s interpretation and descriptions of behaviour (within size groups and at the level of the firm) and his overall sense of the processes that lead strategy(ies) and behaviour.

Describing Behaviour(s) and Sense-Making

Overview

It is noted that the interpretations and sense-making in this work are primarily grounded in author defined size groups with the focus here on small SMEs (as per EU definition and 10-49 employees).

Comparing this work and Williamson and Lynch Wood (2001):

Williamson and Lynch-Wood (2001)	This Work
40 responses and prominent sector was ‘other manufacturing’; a 95% response from SMEs, as defined by the EU, overall; and 55% of companies who responded had 50 or fewer employees	46 responses the majority were ‘food manufacturing’; a 74% response from SMEs; and of this 24% of companies had 50 or fewer employees

To offer insight to the behaviour of SMEs in tier one the supply-chain, and in particular the sense made of this, the author first seeks to description the observed behaviour of small SMEs (with small SMEs defined by the author as noted above). It is noted that the author relates, and grounds, this description and the subsequent interpretations in a framework originally developed by Ghobadian et al (1998) and modified through further research for the SME context by the author. The framework essentially proposes that external and internal factors mediate (i.e. customer requirements and the tradition of the organisation) and the outcomes of this

interaction are moderated by other factors (i.e. cost-benefit assessments) in the strategy/decision-making process.

Small SMEs: Conceptualisation/Description of Behaviour

Small SMEs in this study are those with between 11-50 employees and as such this grouping maps the EU definition of SMEs of this category/classification; 24% of companies were in this grouping. Case C is highlighted as an example of an individual SME within this overall sub-size group.

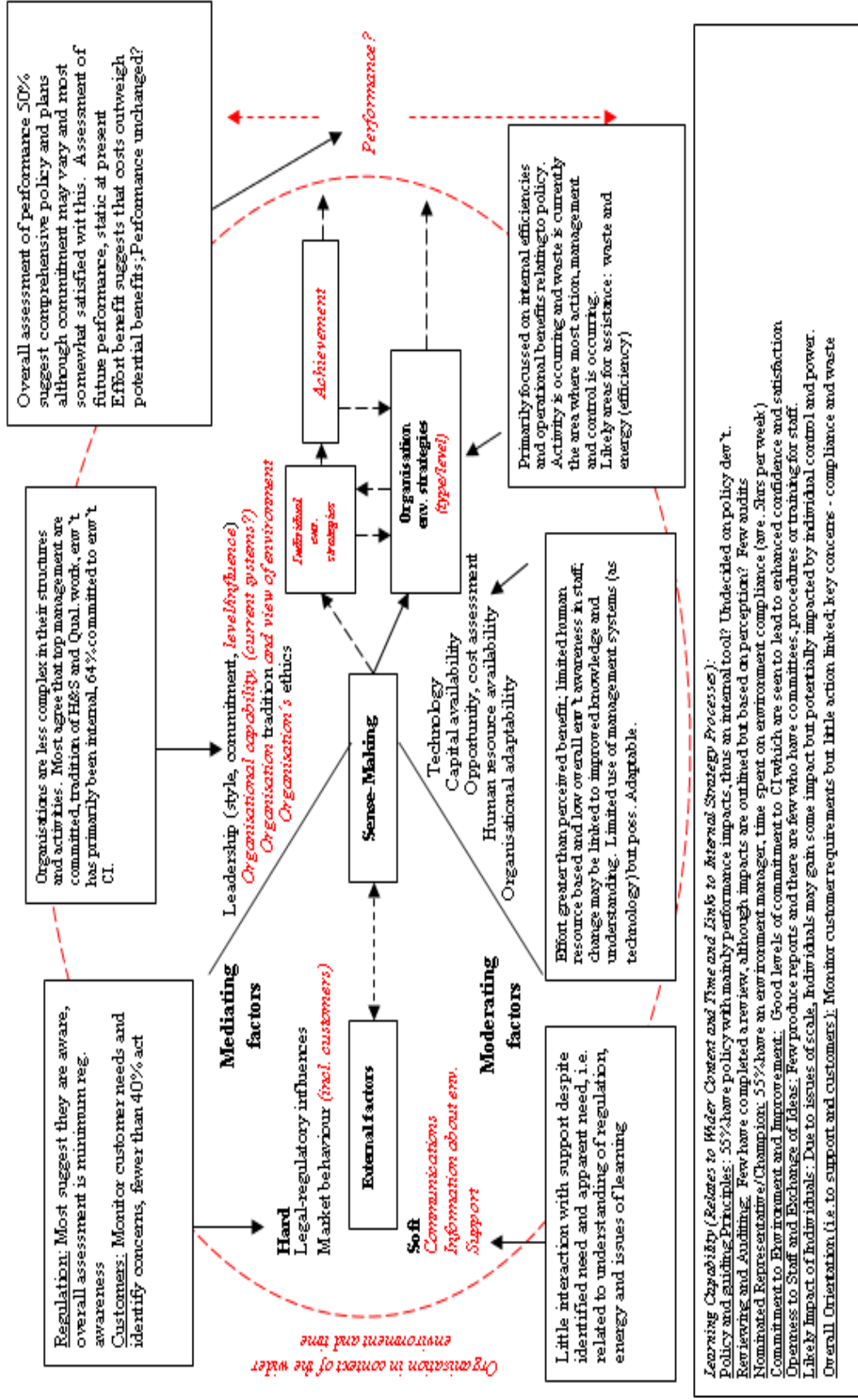


Figure 3 – Describing the Behaviour of Small SMEs Overall

Small SMEs: Interpretation and Sense of Behaviour

With the ideas and comments of Merritt (1998) regarding the SME-environment 'problem' in mind (i.e. one of management practices rather than actual performance?) some of the practices of small SMEs can be observed above. For example, over half small SMEs have an environmental policy and manager of some sort (mostly a shared responsibility). However, few undertake environmental reviews, although most can identify their environmental impacts (mainly related to energy and waste) and few undertake audits and produce reports. Few have committees, undertake training or have an EMS. It is also noted, however, that most suggest that managers have positive attitudes towards the environment and nearly all undertake activity related to health and safety and quality.

From the above, there appears a mix of management practice(s) in small SMEs in this supply-chain. In some instances their practices look good, for example, most have overall environmental policies and sub-policies and targets (i.e. related to waste, energy and water) and managers (and this correlates well with performance assessments by this group) but it is recalled that few undertake reviews or audits. As such, the overall and specific policies appear not to have been developed as a result of reviews and are not apparently audited to ensure, therefore, that they are being implemented, they are relevant and they are, where necessary, being updated.

This situation appears to support, and is supported by, the performance assessment of most in the grouping (i.e. they have policies and plans but awareness and commitment within can vary). Most appear 'somewhat satisfied' with this level of performance. When looking a little more at this headline detail, and attempting to make sense of it and the performance assessment, it is noted that small SMEs in the chain do appear to be doing something to address the environment. In this regard, it can be seen that they are broadly internal/operational in their focus and appear to concentrate on issues of efficiency (i.e. waste and energy management) rather than, for example, the performance of their products. The group as a whole do suggest that they are also motivated by external factors and issues of 'compliance' and this includes adherence to both legal controls and also the requirements of customers (most suggesting that they monitor such requirements).

Related to the latter, it is noted that most of the group only have one customer, the case organisation, and the supply-chain is not subject to a lot of churn (i.e. suppliers are not regularly replaced). The customer also has not, to date, placed any specific environment related requirements on its suppliers and this may fuel current assessments of effort and benefit by the group. The customer does focus heavily on price (particularly for own brand label products and suppliers) and this may also contribute, alongside the reported management commitment to the environment, to the focus on issues of efficiency. As such actions can address costs and can possibly increased the margins and/or competitiveness of those suppliers who take action. The focus on issues of quality and health and safety are also not surprising given the customer interest in the former (and the nature of the food industry) and legal controls (and the immediacy of impact) related to the latter.

Interestingly though, and despite their focus on operations and efficiency and the support available in these areas, few small SMEs engage and interact with environmental support organisations. This is despite the group's self-assessment of their need for assistance and comment on the areas where support is needed (E.g. energy, waste, water and air pollution). As the relationship between mediating factors is a two-way one (as shown in Figure 3), the current use of support by small SMEs may not be just result from an environment attitude/understanding or SME 'problem'. The situation may also result from the support offer (i.e. how it is communicated and by whom) and the lack of tailoring of the offer to the needs of the group (with, for example, the national organisations noted not clearly segmenting their offers). Any interaction, and this process, will also, potentially, be moderated by, for example, individual and SME's resources (E.g. time, people) and competences of SMEs and the individuals within (i.e. experience and understanding of how to access support).

To further illuminate and support, and despite the group's identified propensity to act based on legal requirements, the overall legal awareness of small SMEs was assessed to be minimal and few SMEs actually used external support to aid their understanding (E.g. the Netregs site). Furthermore, and again despite reported action based on customer requirements, correlations do not support a clear link between the monitoring of needs and incidences of action based on requirements. Specifically, many small SMEs suggest they monitor their customer requirements and many do take action, however, these factors/areas are not linked at the level of the firm (i.e. individual firms who say they monitor their customer requirements and who also take action).

Linked to their use of support, their internal focus and issues of awareness (i.e. of laws and self-assessed internal problems), a further concern for the grouping is their apparent limited engagement with knowledge creation and sharing activities (with links to Petts et al, 1998 and learning/knowledge creation processes, for example).

In this overall context, and as noted above, small SMEs were the least likely grouping in the chain to create knowledge about the environment through reviews and were least likely to audit their activities to refine and develop their understanding. Small SMEs also had few environment committees and few undertook specific staff training (i.e. to share knowledge and encourage challenge of current truths and facilitate learning); although they were more likely to have emergency plans and tests (with these often linked to health and safety). Consequently the 55% group suggested that staff were not aware of environmental impacts/risks and many did not know what their overall level of staff awareness/understanding there was. The size and complexity of SMEs in this grouping may influence this (i.e. these organisations are relatively small and are informal in many of their activities) and they may be seen not to need the formality of management systems and procedures to manage the complexity evident in larger SMEs and organisation.

What the above suggests, therefore, is that SME are taking some action to address the environment and that there is an interaction between internal and external factors; current activity is, however, internal and operations/efficiency focussed and little action appears to actually be driven by external factors. It is also proposed that some form of sense-making is occurring related to this situation (the situation as perceived

by owners, managers and others within these SMEs) and this is highlighted to some degree by the discussions and interpretation above and the performance and effort benefit assessments from the SMEs. It is proposed that this grouping have the potential to act (and some already do) and, possibly counter to resource-based views, small SMEs are not necessarily constrained by resources and they may even be helped by their lack of resources and complexity.

Sense-making and activity is, however, limited/constrained by current approaches to knowledge creation and transfer and small SMEs are maybe, and at best, just improving current understanding and perceptions of the environment and their need to act. This is clearly affected by, and affects, their use of support and their actual/evidenced (rather than reported) engagement with legal requirements, their customers and the expectations of their stakeholders and wider society. In this situation, current perceptions, understanding and effort-benefit assessments (and the sense made) are likely to limit further action by the grouping as a whole (as the perceived effort out-weighs the benefits within current frames of understanding/sense). Without intervention, and engagement with small SMEs in the chain by the customer (as suggested in the SME and support literatures but not necessarily the ESCM literature), behaviour may remain unchanged and the example of Case C suggests that change is possible once the customer engaged its supply-chain and began dialogue.

Here is noted that Case C took positive steps to improve its performance following the intervention of the client and the company representative's attendance at networking events. It is noted that the company representative was personally committed to the environment and was able to persuade managers/owners (through knowledge transfer) to adopt a more positive approach in the area. This action was supported by the knowledge transfer activities of the customer, subsequent contacts and information provision and a change in the overall context which saw the customer signal its interest in this area (although it is noted this was not based on a prescription of what suppliers/SMEs should be doing). Also, key to this intervention and change was the commitment of the individual in Case C and also the commitment of the coordinator from the customer. It is, therefore, considered that, and whilst the impact on sense-making and knowledge was influential and important to behaviour change for this SME in context, a further important factor here was the engagement of the customer and the relationship that was developed as a result of the approach to intervention. The relationship driven approach was/is relevant and useful in this supply-chain as it is an own label chain and, as noted earlier, there is not a great deal of supplier churn. The relationship developed was firmly grounded a mutual trust between the individuals, commitment and a sense of what should and could be done in this area by this organisation (albeit in a more supportive and clear context now). Also important here was the approach taken, one which was informal and based on personal contacts and understanding, rather than a 'designed' and structured approach grounded in formal contacts and processed. This led to the level of commitment and trust implied but also the willingness on the part of the customer representative to go beyond what may have been deemed necessary.

Summary and Comment

In the earlier review and discussion of SMEs, CSR and current literature related to SME-environment behaviour, ESCM and environmental support to SMEs an overall (and theoretical) case for engagement with SMEs was presented. It was noted that for this research, which was grounded in practice and potential and actual interventions in the context of the first tier of an own label suppl-chain, the current theory was not sufficient to guide actions (and interventions) as it did not sufficiently inform either understanding of SME behaviour (i.e. in this chain) and/or the processes which underpinned this behaviour and the provision of support, or forming of interventions, in an ESCM context. There was, and is, therefore, a further need to engage SMEs in this chain (and in other chains and situations) to understand their actual behaviour and how they actually do develop their strategies (and behaviour) rather than simply following prescriptions of how SMEs should behave and how customers should intervene. Finally, and following the interpretation and description of behaviour based on sense-making the need for engagement with SMEs (in this case small SMEs) was discussed and highlighted. This discussion also described how engagement could, and did, affect SME-environment behaviour. This insight being supported and facilitated through discussion of the actual engagement (i.e. of Case C), how the approach to engagement addressed some of the constraints to action and how this approach may benefit others.

References

- Abukhader, S. & Jonson, G. (2004). Logistics and the Environment: Is it an Established Subject? *International Journal of Logistics: Research and Applications*. 7:2, 137-149
- Baylis, R., Connell, L. et al. (1998a). Sector Variation and Ecological Modernisation: Towards an Analysis at the Level of the Firm. *Business Strategy and the Environment*. 7, 150-161
- Baylis, R., Connell, L. & Flynn, A. (1998b). Company Size, Environmental Regulation and Ecological Modernization: Further Analysis at the Level of the Firm. *Business Strategy and the Environment*. 7, 285-296
- Beamon, B. (1999). Designing the Green Supply Chain. *Logistics Information Management*. 12:4, 332-342
- Beaver, G. & Jennings, P. (2000). Editorial Overview: Small Business, Entrepreneurship and Enterprise Development. *Strategic Change*. 9, 397-403
- Bennett, R. & Robson, P. (1999a). Intensity of Interaction in Supply of Business Advice and Client Impact: A Comparison of Consultancy, Business Associations and Government Support Initiatives for SMEs. *British Journal of Management*. 10, 351-369
- Bennett, R. & Robson, P. (1999b). The Use of External Business Advice by SMEs in Britain. *Entrepreneurship and Regional Development*. 11, 155-180
- Berger, G., Flynn, A., Hines, F. & Johns, R. (2001). Ecological Modernization as a Basis for Environmental Policy: Current Environmental Discourse and Policy and the Implications on Environmental Supply Chain Management. *Innovation*. 14:1, 55-72
- Bolton, J. (1971). *Report of the Committee of Inquiry of Small Firms (Bolton Report)* Cmnd 4811 London: HMSO
- Burns, P. (2001). *Entrepreneurship and Small Business*. Basingstoke: Palgrave
- Burnes, B. (2000). *Change Management: A Strategic Approach to Organisational Dynamics*. Harlow: Pearson Education Ltd.
- Cousins, P., Lamming, R. & Bowen, F. (2004). The Role of Risk in Environment-Related Supplier Initiatives. *International Journal of Operations and Production Management*. 24: 6, 554-565
- Curran, J. & Stanforth, J. (1991). The Small Firm in Britain – Past Present and Future *European Small Business Journal*. 1:1, 16-25
- De Bruijn, T. & Hofman, P. (2001). Pollution Prevention in Small and Medium-Sized Enterprises: Evoking Structural Changes Through Partnerships. *Green Management International*. 10, 71-82

de Wit, B. and Meyer, R. (1999). *Strategy Synthesis: Resolving Strategy Paradoxes to Create Competitive Advantage* London: Thomson Learning

DTI (2005). *Small and Medium Enterprise (SME) Statistics for the UK 2004*. Statistical News Release London: DTI

ECOTEC. (2000). *Report on SMEs and the Environment*. ECEDGE, 17 February 2000

ETBPP (1998). *Attitudes and Barriers to Improved Environmental Performance 1998* Faversham House Group Ltd: HMSO

Fanshawe, T. (2000). *The interrelationship between environmental regulators, small and medium-sized enterprises and environmental help organisations* in Hillary (2000).

Fay, C. (2000). *Foreword* in Hillary, 2000.

Graham, P. (1996). Small Business Participation in the Global Economy *European Journal of Marketing*. 33:1/2, 88-102

Groundwork. (1995). *Small Firms and the Environment. A Groundwork Status Report*, Groundwork: Birmingham

Groundwork. (1998). *Small Firms and the Environment*. Groundwork: Birmingham

Hall, J. (2001). Environmental Supply-Chain Innovation. *Green Management International*. 35, 105-119

Henningson, S., Hyde, K., Smith, A. & Campbell, M. (2004). The Value of Resource Efficiency in the Food Industry: A Waste Minimisation Project in East Anglia, UK. *Journal of Cleaner Production*. 12, 505-512

Hillary, R. (1999). *Evaluation of Study reports on the Barriers, Opportunities and Drivers for Small and Medium Sized Enterprises in the Adoption of Environmental Management Systems*. Report for DTI Environment Directorate 5th October 1999. London: NEMA

Hillary, R. (Ed) (2000). *Small and Medium-Sized Enterprises and the Environment: Business Imperatives* Sheffield: Greenleaf Publishing.

Holt, D., Anthony, S. & Viney, H. (2001). Supporting Environmental Improvements in Small and Medium-Sized Enterprises in the UK. *Green Management International*. 30, 29-45

Howarth, R. (2000). *Marketing Funded Environmental Business Support to Engineering SMEs in Greater Nottingham: Field of Dreams?* MSc Dissertation. The Nottingham Trent University. November 2000

- Hunt, J. (2000). *Environment, Information and Networks: How Does Information Reach Small and Medium-sized Enterprises?* In Hillary 2000
- Johnson, G. (1988). Processes of Managing Strategic Change *Management Research News*. 11:4/5, 43-46
- Johnson, G. & K. Scholes (2002). *Exploring Corporate Strategy*. Harlow: Pearson Education Ltd
- Kay, J. (1993). *Foundations of Corporate Success* Oxford University Press
- McWilliams, A., Siegel, D. & Wright, P. (2006). Corporate Social Responsibility: Strategic Implications *Journal of Management Studies*. 43:1, 1-18
- Merritt, J. (1998). EM into SME Won't Go? Attitudes, Awareness and Practices in the London Borough of Croydon. *Business Strategy and the Environment*. 7, 90-100.
- Mintzberg, H. & Quinn, J. (1991). *The Strategy Process: Concepts, Contexts, Cases* New Jersey: Prentice Hall
- Mintzberg, H. & Waters, J. (1985). Of Strategies, Deliberate and Emergent *Strategic Management Journal*. 6:3, 257-272
- NetRegs. (2003). *SME-Environment 2003: A Survey to Assess Environmental Behaviours Among Smaller UK Businesses*. Environment Agency
- NetRegs. (2005). *SME-Environment 2005: UK Summary*. Environment Agency
- Nonaka, I., von Krogh, G. & Voelpel, S. (2006). Organizational Knowledge Creation Theory: Evolutionary Paths and Future Advances *Organization Studies*. 27:8, 1179-1208
- Pedersen, E. (2006). Making Corporate Social Responsibility (CSR) Operable: How Companies Translate Stakeholder Dialogue into Practice *Business and Society Review*. 111:2, 137-163
- Petts, J., Herd, A. & O'Heocha, M. (1998). Environmental Responsiveness, Individuals and Organisational Learning: SME Experience. *Journal of Environmental Planning and Management*. 41:6, 711-730
- Petts, J., Herd, A., Gerrard, S. & Horne, C. (1999). The Climate and Culture of Environmental Compliance within SMEs. *Business Strategy and the Environment*. 8, 14-30
- Porter, M. & Kramer, M. (2006). Strategy & Society: The Link Between Competitive Advantage and Corporate Social Responsibility *Harvard Business Review* HBR Spotlight, December 2006

- Remenyi, D., Williams, B., Money, A. & Swartz, E. (1998). *Doing Research in Business and Management: An Introduction to Process and Method*. London: Sage
- Revell, A. & Blackburn, R. (2004). *SMEs and Their Response to Environmental Issues in the UK*. Small Business Research Centre, Kingston University. July 2004
- Roome, N. & Wijen, F. (2005). Stakeholder Power and Organizational Learning in Corporate Environmental Management. *Organizational Studies*. 27:2, 234-263
- Rothenberg, S. & Becker, M. (2004). Technical Assistance Programs and the Diffusion of Environmental Technologies in the Printing Industry: The Case of SMEs. *Business and Society*. 43:4, 366-397
- Shearlock, C., Hooper, P. & Millington, S. (2001). Environmental Improvement in Small and Medium-Sized Enterprises: A Role for the Business-Support Network. *Green Management International*. 30, 50-60
- Shrivastava, P. (1995). The Role of Corporations in Achieving Ecological Sustainability. *Academy of Management Review*. 20:4, 936-961
- Smith, N. (2002). Corporate Social Responsibility: Not Whether, But How? *Centre For Marketing Working Paper* No 03-701, April 2003
- Storey, D. (1994). *Understanding the Small Business Sector*. London: Routledge
- Stubbs, M. (2000). Action, Knowledge and Business-Environment Research: A Case For Grounded Constitutive Process Theories and a Sense of Audience. *Business Strategy and the Environment*. 9, 24-35
- Taylor, N., Barker, K. & Simpson, M. 2001. Achieving 'Sustainable Business': A Study of the Perceptions of SMEs to 'Environmental Best Practice' in South Yorkshire *Marketing and Logistics Internet Register* available at [referred to 1.9.2007] Available at: <http://www.mcbuf.com/Researchregisters/mkt.asp>
- Tilley, F. (1999). The Gap Between the Environmental Attitudes and the Environmental Behaviour of Small Firms. *Business Strategy and the Environment*. 8, 238-248
- Tunnessen, W. (2000). The Mentoring of Small and Medium-sized Enterprises: Insights from Experiences in the United States In *Hillary 2000*
- Walters, D. & Rainbird, M. (2004). The Demand Chain as an Integral Component of the Value Chain. *Journal of Consumer Marketing*. 21:7, 465-475
- Walton, S., Handfield, R. & Melnyk, S. (1998). The Green Supply Chain: Integrating Suppliers Into Environmental Management Processes. *International Journal of Purchasing and Materials Management*. 34:2, 2-11
- Welford, R. (1994). *Cases in Environmental Management and Business Strategy*. London: Pitman Publishing

- Welford, R. (1998). Corporate Environmental Management, Technology and Sustainable Development: Post-modern Perspectives and the Need for a Critical Research Agenda. *Business Strategy and the Environment*. 7, 1-12.
- Welford, R. (2003). Beyond Systems: A Vision for Corporate Environmental Management for the Future. *International Journal of Environment and Sustainable Development*. 2:2, 162-173
- Whittington, R. (2004). Strategy After Modernism: Recovering Practice *European Management Review*. 1, 62-68
- Williamson, D. & Lynch-Wood, G. (2001). A New Paradigm for SME Environmental Practice. *The TQM Magazine*. 13:6, 424-432
- Windsor, D. (2006). Corporate Social Responsibility: Three Key Approaches *Journal of Management Studies*. 43:11, 93-114
- Wolfe, R. (1998). Beyond Environmental Management – Perspectives on Environmental and Management Research *Business Strategy and the Environment*. 7, 297-308
- Worthington, I. & Patten, D. (2005). Strategic Intent in the Management of the Green Environment within SMEs: An Analysis of the UK Screen-printing Sector. *Long Range Planning*. 38, 197-212
- Wu, H. and Dunn, S. 1994. Environmentally Responsible Logistics Systems. *International Journal of Physical Distribution and Logistics*. 25:2, 20-38

FACTORS AFFECTING THE ENGAGING IN CORPORATE SOCIAL RESPONSIBILITY OF SMALL AND MEDIUM ENTERPRISES IN TAIWAN

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Abstract

Corporate Social Responsibility (CSR) has become increasingly popular in the West and recently is receiving more attention by corporations in Asia. Many large corporations or manufacturers have already make decisions to engage in CSR initiatives or done much to improve the social and environmental performances. However, researchers have paid much attention on study in the large companies. Actually, many Small and Medium Enterprises (SMEs) may be doing CSR in some way or form, but don't call it "CSR" as such. There are few investigations about the situation of practices of CSR in SMEs. The total number of SMEs account for 97.63% of the whole business in Taiwan. And the employees of SMEs account for 79.13% in whole. SMEs, in fact, play an important role in CSR field. Consequently, there are urgent needs for academic researchers to study in the SMEs' engaging in CSR.

This study intends to apply the diffusion theory of innovation model (Roger, 1983) to test the effect of five dimensions, namely relative advantage, compatibility, complexity, observability, levels of non-voluntariness. Business ethicists must acknowledge that the large multinational firm is not a standard business form against which other types are benchmarked. This research intends to take an examination of the influencing factors of five dimensions that affecting the engaging in CSR of SMEs in Taiwan manufacture. The result will contribute to understanding the practices in SMEs of Taiwan manufacturing, also to the suggestion to Government concerning for CSR, and for those SMEs intending to engage in CSR in the future.

Keyword: Corporate Social Responsibility (CSR); Small and Medium Enterprises (SMEs)

Introduction

Since the scandals of Enron and WorldCom in the US and Parmalat in Italy, corporate social responsibility (CSR) has become a high-profile issue in the western world. However, this issue has been gaining attention in Asia too. Ip (2008) indicated that although the percentage of the Asian companies that perceive and recognize the importance of CSR remains low, many Asian companies already start to implement CSR policies. For example, Global Views Monthly Magazine in Taiwan has been issuing Corporate Social Responsibility Award for a few years. Common Wealth Magazine also grants Taiwan's Excellence in Corporate Social Responsibility Award. However, the vast majority of academic studies on CSR over the world focus on large companies or multinational companies. There is a scarce of research on CSR

policies of Small and Medium Enterprises (SMEs), particularly on the factors that influence the implementation of CSR policies by SMEs. This may be because that many scholars suggested that large companies have stronger influence compared to SMEs whose capitalization tends to be small and hence do not have sufficient resources or influence (Auken & Ireland, 1982; Thompson & Smith, 1991; Petts, Herd, Gerrard & Horne, 1999; Longo, Mura & Bonoli, 2005; Revell & Blackburn, 2005).

Jenkins (2004) suggested that large companies have clearer strategies compared to SMEs. Most SMEs do not have specific corporate strategies as they only seek for survival. In such an instance, if the external pressure is not strong enough, they tend not to implement CSR policies. Meanwhile, many scholars think that even though some SMEs would like to focus on certain social issues and seek active participation as part of their CSR policies, they are never noticed (Auken & Ireland, 1982; Friedman & Miles, 2001; Grayson, 2004; Petts et al., 1999; Revell & Blackburn, 2005; Schoenberger & McKie, 2005; Spence, 1999; Spence et al., 2000; Spence and Lozano, 2000; Spence and Rutherford, 2003; Spence and Schmidpeter, 2003; Thompson and Smith, 1991; Tilley, 2000). Many scholars also notice that there is very little literature dealing with the studies of CSR policies of SMEs in developing countries (Centre for Social Markets, 2003; Luken and Stares, 2005; Raynard and Forstater, 2002). Concerning the fact that SMEs do not attract much attention, Matten & Moon (2008) explained this phenomenon with the concepts of explicit CSR and implicit CSR.

In other words, many SMEs implement CSR activities but these activities are not called doing CSR (Niblock-Siddle et al., 2007). This may be the reason that SMEs take actions in CSR (implicit CSR) but are unnoticed. For example, SMEs may offer superior services and quality or pay considerable respect to the rights of stakeholders. Or, they may pursue sustainable development and reduce the consumption of natural resources. Although these items can all be labeled as CSR, SMEs do not call them CSR. In fact, the number of SMEs accounts for approximately 90% of the companies throughout the world. The number of SME employees reaches 50%-60% of the employed population. In Taiwan, the number of SMEs accounts for 97.63 % of all companies and the size of SEM employees reaches 79.13% of the employed population (Ministry of Economic Affairs, 2008). These figures demonstrate the importance of the role by SMEs and their potential influence in social benefits and social responsibilities. Therefore, any research work on CSR cannot afford to ignore the empirical studies on SMEs.

The purpose of this paper is to examine the perceived attributes that influence the implementation of CSR policies by SMEs in Taiwan based on the theory of diffusion of innovations. According to Rogers (1962), innovations are defined as the adoption of new concepts, techniques or objects by individuals or organizations. Williamson et al. (2006) also suggested that the market-dominated decision-making frame of SMEs is transformed into voluntary-action dominated decision-making frame for CSR. For companies, the adoption of CSR is also an introduction of new concepts. These two frames are conflicting and mutually exclusive. The market-dominated decision-making frame does not encourage voluntary CSR actions. In other words, when companies face the decision of whether they should take voluntary CSR actions, they reach their decisions under the market-dominated decision-making frame. Therefore,

this issue can be examined with the theory of diffusion of innovations. McManus (2008) also suggested that, for companies, CSR is an innovation in management, the same as new management decisions. Therefore, it is possible to examine the factors that influence the motivations of SMEs in Taiwan in CSR implementations with the theory of diffusion of innovations. Past studies indicate that the perception of innovation management tends to be the most important factor that influences the ultimate adoption. This structure combined with literature review can establish an understanding of the factors that influence the motivations of Taiwanese SMEs in CSR implementations. It is also possible to identify the conceptual framework to address the issues concerning whether Taiwanese SMEs execute CSR policies. Whilst CSR concept has been seriously discussed and implemented overseas, it remains a fledgling concept in Taiwan. Therefore, this paper aims to investigate the factors that influence the CSR implementations of Taiwanese SMEs, so as to establish a deeper understanding of the CSR policies of Taiwanese SMEs. It is also hoped that the finding of this paper can stimulate the interest of Taiwanese SMEs in CSR implementations. To sum up, the research purposes are as follows: (1) to examine the current status of the CSR implementations of Taiwanese SMEs in the manufacturing industry with the theory of diffusion of innovations; (2) to gain an understanding of the factors that influence the CSR implementations of Taiwanese SMEs in the manufacturing industry.

Background and Research Propositions

Although the studies on the CSR policies by SMEs are less than the studies on the CSR policies of large companies, few scholars make their contributions to the research on the issues concerning the CSR implementations by SMEs. Williamson et al. (2006) conducted a survey on 31 small-and-medium-sized manufacturers in the UK, and found that the performance of CSR implementations and regulations set by the government have the most significant influence on whether companies both with CSR policies. Perrini (2006) sampled 400 SMEs in Italy, and found that the motivations for Italian SMEs to execute CSR strategies are not based on purposeful strategies. Rather, they are based on the factors of social capital, such as reputation, trust of stakeholders, company legitimacy and consensus pressure. Therefore, he suggests that studies on the motivations of SMEs on CSR policies should pay attention to the factors associated with social capital. Cochiuș (2006) investigated the motivations of Dutch SMEs in CSR policies, and found that most of these SMEs implement CSR policies based on moral motives. They become engaged in CSR more with long-term benefits in mind, rather than simply focus on short-term gains. The major obstacle that stands in the way for SMEs to get involved in CSR is a lack of sufficient funding. Niblock-Siddle et al. (2007) summarized the studies by the institutions dedicated on CSR in Australia, and indicated that the motivations for Australian SMEs in CSR implementations include the acknowledgement and understanding of CEOs or managers in CSR. They indicated that it is able to attract and retain valuable employees and reduce staff turnover. In this way, it is possible to develop more unique sales strength and competitive advantage, to lower costs, improve efficiency and enhance reputation. The obstacles include the restrictions in time and resources, a lack of acknowledgement of the benefits (or a lack of SMEs' understanding in how CSR can help). The existing tools for CSR implementations

are mostly tailor made for large companies. There is no systematic structure in CSR that companies can follow. Meanwhile, all of the above studies focus on developed countries and mostly based on generic surveys. The effective samples of the survey conducted by Cochius (2006) are too small in numbers. Some questions only receive four replies. There is a lack of statistical empirical study exploring the correlation between motivations and CSR implementations.

When facing an increasingly difficult market competition and business environment as well as a need to maintain trust and satisfaction from the public, SMEs are expected to respond better to the expectations for CSR in order to upgrade company profiles and create sustainable niches. The lists of CSR tasks and solutions mentioned in literature include the development and training of employees, enhancement of work motivations of employees, protection of health and safety of employees, provision of equal opportunities to the physically or mentally challenged, new immigrants and women, reduction of impacts and pollutions to the environment, submission of environmental reports, moral persuasion to suppliers or downstream players, suspension of dealing with companies not legally compliant, offering safe and high-quality products and comprehensive product information, handling of customers' complaints, offering fair prices to support local campaigns in culture, sport, safety or social welfare, donations to charities, and participation of volunteer workers. Cochius (2006) provided a detailed classification of CSR items and tasks for SMEs in the Netherlands, and extracted the CSR activities and initiatives in the questionnaire with factor analysis, in order to ensure the reliability of the questionnaire. Many researches indicated that the motivations for CSR implementations include long-term interests, short-term interests, enhancement of competitive advantages, improvement of corporate image or reputation, cost reduction and efficiency upgrade, recruitment of valuable employees, consistency with social needs, compliance with government regulations to avoid breaking the law, compliance with customers' needs, pressure from shareholders, pressure from supply chains, pressure from communities, pressure from NGOs and moral reasons. Table 1 summarizes the factors influencing for CSR initiatives based on literature review.

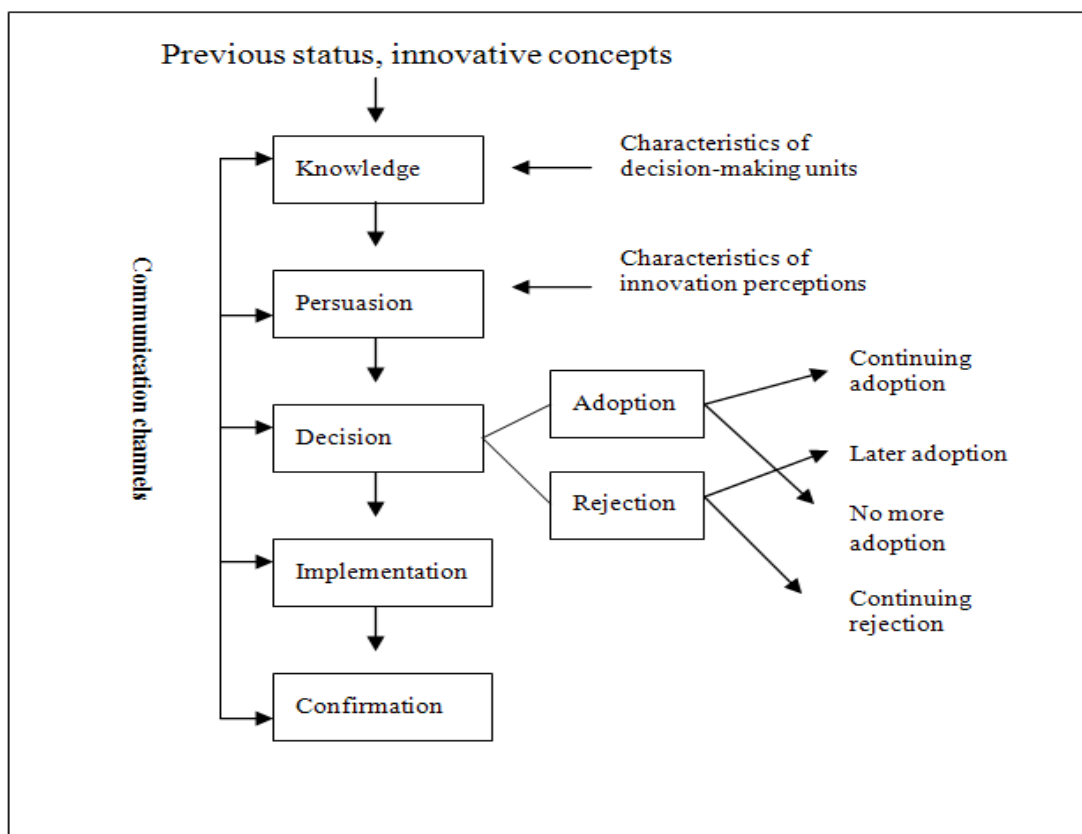
In this section, the theory of innovations and diffusion will be adopted to construct the perceptions of factors affecting CSR implementing model. The theory of diffusion of innovations is first proposed by Rogers (1962), who defined the diffusion of innovations as a procedure to deliver a new concept through specific channels over time to the members of a social system. This is a unique communication format, with a focus on the distribution of new concepts (Rogers, 1983). Rogers (1962) first defined innovations as the adoption of new concepts, techniques or objects by individuals or organizations. Bradford and Kent (1977) defined innovations as the successful introduction of new concepts to the internal of a social organization. As long as the region or social organization concerned believes that the concept is, in essence, new, it can be qualify as an innovation. According to this definition, the innovation recognized by the region or social organization in question may have appeared or existed in other forms in other places. However, as long as the concept is new for the companies that decide to adopt CSR policies, CSR can be regarded as an innovative management concept for management decisions. Therefore, this paper suggests that it is a reasonable approach to apply the idea of diffusion of innovations as the conceptual foundation for the research.

Table 1 List of factors affecting for CSR Implementations

Factors	Scholar (Year)
Motivations:	
Long-term benefits	Longo et al. (2005)
Short-term benefits	Besser & Miller (2001); Friedman & Miles Jenkins (2004a)
Enhancement of competitive	Article 13 (2003); Toyne (2003)
Improvement of corporate image or	Perrini (2006) ; DTI (2003)
Cost reduction and efficiency	Niblock-Siddle et al. (2007)
Recruitment of valuable employees reduction of staff turnover	Niblock-Siddle et al. (2007)
Consistency with social needs	Enderle (2004)
Compliance with government avoid breaking the law	Haigh & Jones (2006)
Compliance with customers' needs	Castka et al. (2003), Simpson, Taylor & Longo et al. (2005), Haigh & Jones(2006)
Pressures from shareholders	Haigh & Jones (2006)
Pressure from supply chains	Jenkins (2004a)
Pressure from communities	Princic (2003);
Pressure from NGOs	Haigh & Jones (2006)
Moral factor or personal value	EC (2002); Longo et al. (2005); Princic Jenkins (2004b); DTI (2003); Toyne Hemingway & Maclagan (2004)
corporate cultures	Lynes & Andrachuk (2008)
Barriers:	
restrictions in costs	Niblock-Siddle et al. (2007)
restrictions in time and resources	Niblock-Siddle et al. (2007)
lack of tools	Niblock-Siddle et al. (2007)
lack of acknowledgement of	Niblock-Siddle et al. (2007)

Rogers (1962) proposed the model of “innovation—adoption” to divide the adoption process into five stages, which are knowledge, interests, assessment, trials and adoption. Among the large number of models for the process of organizational innovativeness, the most widely adopted one is the diffusion of innovations proposed by Rogers (1983). Rogers defined the diffusion process as the process of the distribution of a new concept to final adopters or users from the sources of innovation or creation. This process is divided into five stages, as shown in Figure 1. For the persuasion stage, Rogers (1983) proposed five “innovation perception characteristics”, and suggested that these characteristics have influence on the persuasion stage of potential adopters in innovations. Below is an explanation of these five characteristics.

Figure 1 Rogers' Diffusion of Innovation model



1. Relative advantage: The level of improved benefits that potential adopters believe the innovations can bring.
2. Compatibility: The levels of consistency with the organizational needs, values and norms that potential adopters believe the innovations can bring.
3. Complexity: The levels of understandability and feasibility of the innovations.
4. Observability: The levels of innovations and benefits that potential adopters can observe.
5. Trialability: Under a limited basis, the levels of experiments that potential adopters can exercise by applying the innovations.

Since CSR implementations are of a new concept, rather than a technique, it is possible to have trials first before a cross-the-board adoption. Therefore, the construct of triability is eliminated. Therefore, this paper applies those factors affecting CSR implementation mentioned in former literature into Rogers' five "innovation perception characteristics" and one more characteristic "levels of non-

voluntariness” proposed by Moore & Benbasat (1991) to construct the empirical model for CSR implementation willingness as shown in Figure 2.

Below are the regression equations:

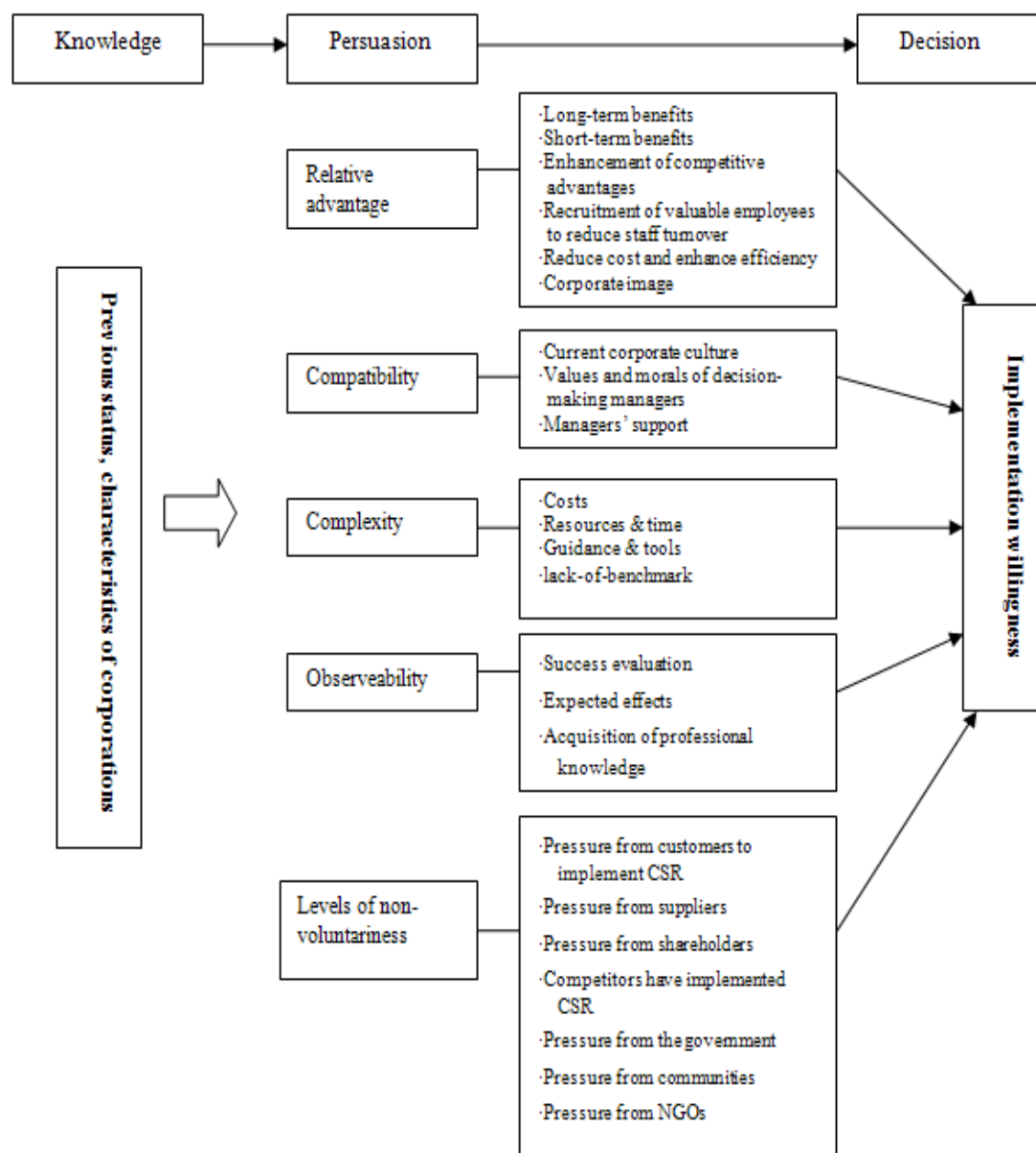
$$\begin{aligned} \text{CSR}_i = & \alpha_0 + \beta_1 \times (\text{relative advantage})_i + \beta_2 \times (\text{compatibility})_i + \beta_3 \times (\text{complexity})_i \\ & + \beta_4 \times (\text{observability})_i + \beta_5 \times (\text{levels of non-voluntariness})_i \\ & + \varepsilon_i \dots\dots\dots(1) \end{aligned}$$

where, α_0 is a constant; β_i is the coefficient of the i -th independent variable; ε_i is the residual.

And the research hypotheses are as followings:

- H1: The acknowledgement of the relative advantage of CSR implementations has **positive** impact on willingness of engaging in CSR.
- H2: The acknowledgement of the compatibility of CSR implementations has **positive** impact on willingness of engaging in CSR.
- H3: The acknowledgement of the complexity of CSR implementations has **negative** impact on willingness of engaging in CSR.
- H4: The acknowledgement of the observability of CSR implementations has **positive** impact on willingness of engaging in CSR.
- H5: The level of the non-voluntariness of CSR implementations has **positive** impact on willingness of engaging in CSR.

Figure 2 Model of innovation perception factors affecting in engaging in CSR



Empirical Analysis

The empirical survey was carried out during the period of January-May in 2009. We used the random sampling method to send 385 on-line questionnaires from Taiwanese SMEs manufacture databank via e-mail, internet and reminder letters with a foldable bicycle prize lottery and collected a total of 130 respondents. The response rate is 33.3%. For final analysis, 128 questionnaires were used, excluding 2 questionnaires with numerous missing answers. Table 2 shows the state of CSR practices of the respondents of Taiwanese SME manufactures.

Table 2: The state of CSR practices in Taiwanese SME manufactures

		No. of responses
Engaging in CSR now	Yes	59 (46%)
	No	69 (54%)
Intend to engage in CSR in the future 3 years	Probability	36
	21%-40%	18
	41%-60%	5
	61%-80%	3
	81%-100%	4
	Missing data	3
CSR Activities		
<input type="checkbox"/> Providing employee training and		81 (63%)
<input type="checkbox"/> Facilitating employee motivation for jobs		52 (41%)
<input type="checkbox"/> Improving health and safety of employee		82 (64%)
<input type="checkbox"/> Non-discrimination to physically or disabled, women, and immigrants		36 (28%)
<input type="checkbox"/> Reducing environmental pollution		79 (62%)
<input type="checkbox"/> Moral persuading upper-stream suppliers		31 (24%)
<input type="checkbox"/> Avoiding relations with companies that		57 (45%)
<input type="checkbox"/> Providing environmental report		15 (12%)
<input type="checkbox"/> Recycling and reducing waste		105(82%)
<input type="checkbox"/> Active in energy saving and carbon		92 (72%)
<input type="checkbox"/> Using recycled material in manufacturing		43 (34%)
<input type="checkbox"/> Providing high quality and service beyond		48 (38%)
<input type="checkbox"/> Offering safe products and service beyond		49 (38%)
<input type="checkbox"/> Providing full information of products		60 (47%)
<input type="checkbox"/> Fair pricing		77 (60%)
<input type="checkbox"/> Handling customers' complaint beyond		90 (70%)
<input type="checkbox"/> Support local either cultural or social		46 (36%)
<input type="checkbox"/> Volunteer work in local communities		24 (19 %)
<input type="checkbox"/> Donations for large charities in the name of		56 (44%)
<input type="checkbox"/> Donations for temple, church or community		61 (48%)
<input type="checkbox"/> Offering scholarships for universities		3 (2%)

In Table 2, there are 46% Taiwanese SME manufactures that are engaging in CSR now. If we plus the probability over 80% of intending to engage in CSR in the future 3 years into 46%, then that would be half of SME manufactures doing CSR. However, more than 50% responses of SMEs that practice CSR activities but answer not doing CSR imply that many Taiwanese SMEs implement these CSR activities but don't call them 'CSR' as the literature called 'implicit CSR'. Recycling and reducing waste, active in energy saving and carbon reduction are the top two proportions of CSR activities of Taiwanese SMEs, which reveals that Taiwanese SMEs take much more account of these two topics than other CSR activities.

Factor Analysis

Before regression analysis, exploratory factor analysis have been conducted to reduce the number of variables and to extract the underlying dimensions in order to check questionnaires of reliability and validity. Principal component analysis (PCA) and the varimax rotation method were employed for factor extraction. Eigenvalue tests showed a five (relative advantage, compatibility, complexity, observability, levels of non-voluntariness) factors structure (eigenvalue=1.06–8.03) for independent variables, and these factors explained 73.3% of the total variance, respectively. The relatively high factor loading scores verified the construct validity in the questionnaires. The calculation of Kaiser-Meyer-Olkin (KMO) statistics of 0.85, which can be described as ‘meritorious’, indicated that data are very suitable for factor analysis. Also, Bartlett’s test of sphericity ($\chi^2=2172.28$, $df = 253$, $p<0.01$) is also consistent with the 5-factor structure and shows that there is communalities existed. In addition, the Cronbach’s α resulted in values of 0.856–0.922 for the independent variables which are considered high and satisfactory as a measure of reliability. Generally, a Cronbach’s α greater than 0.7 indicates internal consistency in the measured questionnaire. Most of the factor loadings were greater than 0.63, indicating a good correlation between the items and the factor grouping they belong to. Only the factor loading of the corporate image variable is under 0.63 but still larger than 0.5 and still suitable for its dimension. This result reveals that the structure of five factors (dimensions) reflecting the factors affecting the engaging in CSR support the previous factor structure developed from the literature review. The results of the factor analysis are shown in Table 3.

Multiple Regression Analysis

To examine that independent factors constructed in this study are significantly related to engaging in CSR, multiple regression analysis was conducted between the factors and the dependent variable, engaging in CSR. Dependent variables, CSR_i , are then processed in the following two methods:

1. If the interviewed companies have implemented CRS policies, a corresponding score of “5” is given as an indication to implementation willingness.
2. If the interviewed companies have not implemented any CSR policies, the probability of these companies of initiating CSR policies is evaluated within the next three years. The probabilities are divided into five bands, which are below 20%, 20%~40%, 40%~60%, 60%~80%, and above 80%. They are granted a score of “1”, “2”, “3”, “4”, and “5”, respectively, as an indication to implementation willingness.

Table 3 Factor analysis: variables affecting engaging in CSR

Factors and variables	Loadings	Reliability
Factor 1 : Relative advantage		
Long-term benefits	0.638	0.888
Short-term benefits	0.703	
Enhancement of competitive advantages	0.772	
Recruitment of valuable employees to	0.663	
Reduce cost and enhance efficiency	0.743	
Corporate image	0.533	
Factor 2 : Compatibility		
Current corporate culture	0.819	0.873
Values and morals of decision-making	0.773	
Managers' support	0.830	
Factor 3 : Complexity		
Costs	0.855	0.858
Resources & time	0.890	
Guidance & tools	0.828	
lack-of-benchmark	0.738	
Factor 4: Observability		
Success evaluation	0.729	0.856
Expected effects	0.782	
Acquisition of professional knowledge	0.743	
Factor 5: Levels of non-voluntariness		
Pressure from customers to implement CSR	0.729	0.922
Pressure from suppliers	0.851	
Pressure from shareholders	0.789	
Competitors have implemented CSR	0.790	
Pressure from the government	0.832	
Pressure from communities	0.855	
Pressure from NGOs	0.782	

Eigenvalue: component 1 = 8.034, 2 = 3.719, 3 = 2.905, 4 = 1.142, 5 = 1.060
(Cumulative total variance percentage explained 73.30%)

**Table 4
Multiple regression analysis**

Model	<i>B</i>	β	<i>t</i>	<i>p</i> -value
Constant	2.472		0.818	0.415
Relative advantage	1.398	0.172	1.519	0.131
Compatibility	2.670	0.363	3.572	
Complexity	-1.905	-0.254	-3.277	0.001**
Observability	0.346	0.044	0.424	0.673
Levels of non-voluntariness	0.260	0.031	0.359	0.720

Dependent variable: degree of engaging in CSR. β represents standardized coefficients.

$R^2 = 0.317$, adjusted $R^2 = 0.289$. Regression model test (ANOVA): $F = 11.344$, p -value = 000.

***Indicates statistical significance at 0.01 level.

In addition, if there are more than two operational variables for question measurement, this paper aggregates the scores of individual questions and derives the average as the score for the construct concerned. The result of the regression is shown in Table 4. The regression shows no autocorrelation and multicollinearity (Durbin-Watson= 1.944, VIF<3, Tolerance rate >0.1). Based on the results, the research propositions in this study were examined. The results of the analysis in Table 3 show that two independent variables, compatibility ($p < 0.01$) and complexity ($p < 0.01$), are significantly related to engaging in CSR. In support of hypothesis 2, the increase of the degree of compatibility contributes to the increase of firms' engaging in CSR (coefficient = 2.670, $p = 0.001$). This verifies that personal value of managers and morality as a driver of CSR is more consistent with the findings of Hemingway and Maclagan (2004).

In contrast, complexity (H3) contributes to the decrease of firms' engaging in CSR (coefficient = -1.905; $p = 0.001$), which means that time, resource, costs of CSR, tools, and lack-of-benchmark all are considered as barriers for CSR. However, relative advantage, observability, levels of non-voluntariness, although they carry positive sign which are consistent with hypothesis 1, 4, and 5 separately, are not statistical significant. This may be because the following reasons: (1) Implementing CSR might increase costs in the short term might partially offset the effect of long term benefit. (2) That SMEs cannot clearly evaluate the possibility of CSR's success might partially offset the influencing of expected effects of CSR practices. (3) Although SMEs have pressure of implementing CSR from suppliers, shareholders, community and NGOs, almost little pressure from governments or customers might offset the effect of influence.

Conclusions

Through this study, we found out that the two independent factors representing the 2, 3 are significantly related to Taiwanese SMEs' engaging in CSR. In particular, from the results of the multiple regression analysis, the compatibility is the important driver and has an effect on firms' CSR fulfill. Therefore, this finding not only shows the importance of top managers' value and decision consistent with many literatures of large firms' CSR studies, but also reveals that one should notice that whether the SMEs' culture is compatible with CSR playing a vital role in research of SMEs' engaging in CSR. Therefore, we can conclude that if SMEs can make their culture more compatible with CSR concept, it would be more possible to practicing CSR in SMEs. In addition, Taiwanese SME manufactures regard the complexity factor as an obstacle for implementing CSR. The result indicates that the complexity dimension would cause SMEs hesitate to enroll in CSR activities. Therefore, the results of our study will not only contribute to greater understanding of the factors influencing in engaging in CSR for academics and policy makers who desire to facilitate CSR, but also contribute to the very limited amount of literature in developing countries.

However, there are also challenges for future research. First, in developing countries, respondents might think their SMEs didn't engage in CSR caused by their recessive CSR implementing or their educational level. Therefore, researchers need to be careful when comparing CSR practices between developed and developing countries without noticing this point. CSR researchers could use the costs spending in CSR activities to be the dependent variable in order to bring the recessive CSR into the measurement of CSR degree. Second, the high reliability of factor analysis shows the suitable dimension extraction. However, the information of offsetting the affecting effect between variables may be hidden in the dimensions when the dimensions took into as independent variables in regression analysis. This may cause the statistical un-significant results for coefficients. We suggest that further research could examine the regression model again after clearly finding and eliminating the effect of counteracting in order to obtain better results for relative advantage, observability, levels of non-voluntariness. Third, this paper reveals that the compatibility of firms' culture, managers' value and support, time, resource, costs, tools, and benchmark of best practices are the most important concerns for engaging in CSR of Taiwanese SMEs. Nevertheless, if further researches on study of CSR targeted in SMEs of developing countries intend to cite these factors, the different national context and different SME structure should be considered.

Acknowledgements

The authors would like to thank the National Science Council of the Republic of China, Taiwan, for financially supporting this research under Contract No. NSC 98-2410-H-035-001.

Reference

Article 13. (2003). The Small Business and corporate social responsibility. Research Paper Article 13. [Online] [Accessed 5. May. 2009] <http://www.smallbusinessjourney.com/output/Page213.asp>.

Auken, van, P. M., & Ireland, R. D. (1982). Plain talk about small business social responsibility *Journal of Small Business Management*, 20, 1, 1-3.

Besser, T. L., & Miller, N. (2001). Is the good corporation dead? The community social Responsibility of small business operators. *Journal of Socio-Economics*, 33, 221-241.

Bradford, M. G. & Kent, W. A. (1997). *Human Geography Theories and their Applications*. Oxford:Oxford University Press.

Castka, P., Balzarova, M. A., Bamber, C. J., & Sharp, J. M. (2003). How can SMEs Effectively Implement the CSR Agenda? A UK Case Study Perspective. *Corporate Social Responsibility and Environmental Management*, 11, 140-149.

Centre for Social Markets, (2003). Corporate Responsibility and SMEs, in Third Annual Conference on Corporate Citizenship: Focus on SMEs (Kolkata, India).

Cochius, T. (2006). Corporate Social Responsibility in Dutch SMEs- Motivations and CSR Stakeholders , Maastricht University, International Business Studies Final thesis.

Department of Trade and Industry of the UK (DTI). (2003). *Engaging SMEs in community & social issues*. Consortium research study by Business in the Community. [Online] [Accessed 2. May. 2009] http://www.bitc.org.uk/resources/publications/engaging_smes.html.

Enderle, G. (2004). Global competition and corporate responsibilities of small and medium-sized enterprises. *Business Ethics: A European View*, 13, 1, 51-63.

European Commission. (2002). *European SMEs and Social and Environmental Responsibility*. Luxembourg: Office for Official Publications of the European Communities.

European Commission. (2003). *Responsible Entrepreneurship. A collection of good practice cases among small and medium-sized enterprises across Europe*. Luxembourg: Office for Official Publications of the European Communities.

Friedman, A. L., & Miles, s. (2001). SMEs and the Environment: Two Case Studies. *Eco Management and Auditing*, 8, 200-209.

Garriga, E., & Melé, D. (2004). Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics*, 53, 1/2, 51-71.

- Grayson, D. (2004). How CSR Contribute to the Competitiveness of Europe in a More Sustainable World, in The world Bank Institute and the CSR Resource Centre (Netherlands), pp. 1–5.
- Haigh, M. & Jones, M. (2006). THE DRIVERS OF CORPORATE SOCIAL RESPONSIBILITY: A CRITICAL REVIEW, *The Business Review*, 245-251.
- Hemingway, CA.& Maclagan, PW. (2004). Managers'Personal Values as Drivers of Corporate Social Responsibility, *Journal of Business Ethics*, 50, 33-44.
- Longo, M., Mura, M., & Bonoli, A. (2005). Corporate social responsibility and corporate performance: the case of Italian SMEs. *Corporate Governance*, 5, 4, 28-42.
- Luken, R. and R. Stares: 2005, Small Business Responsibility in Developing Countries: A Threat or an Opportunity?, *Business Strategy and the Environment*, 14(1), 38–53.
- Lynes, JK. & Andrachuk, M. (2008). Motivations for corporate social and environmental responsibility: A case study of Scandinavian Airlines, *Journal of International Management*, 14, 377
- Ip, P.-K.(2008). Corporation social responsibility and crony capitalism in Taiwan. *Journal of Business Ethics*, 79, 167-177.
- Jenkins, H. M. (2004a). A Critique of Conventional CSR Theory: An SME Perspective. *Journal of General Management*, 29, (4), 37-57.
- Jenkins, H. M. (2004b). Corporate Social Responsibility– Engaging SMEs in the debate. *Working paper series*, 18. Cardiff: BRASS Centre.
- Matten, D. & Moon, J. (2008). “Implicit” and “Explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33 (2),404-424.
- McManus, T. (2008).The business strategy/corporate social responsibility “mash-up” *Journal of Management Development*, 27, 10, 1066-1085.
- Ministry of Economic Affairs, 2008, White Report of SMEs in Taiwan (in Chinese); Taipei: Smanll and Medium Enterprises Administration. [Online] [Accessed 20. April. 2009]
http://book.moeasmea.gov.tw/book/doc_detail.jsp?pub_SerialNo=2008A00937&click=2008A00937.
- Moore, G.C., & Benbasat, I. (1991). Development of an Instrument at Measure the Perceptions of Adoption an Information Technology Innovation, *Information System Research*, 2:3, 192-222.
- Niblock-Siddle, R. J., & Black L. (2007). The Importance of Corporate Social Responsibility for SMEs, Australian Centre for Corporate Social Responsibility, Web: <http://www.accsr.com.au>

Nunally, J.C. (1978). *Psychometric Theory*, NY : McGraw-Hill.

Petts, J., Herd, A., Gerrard, S., & Horne, C. (1999). The Climate and Culture of Environmental compliance within SMEs. *Business Strategy and the Environment*, 8, 14-30

Perrini, F. (2006). SMEs and CSR Theory: Evidence and Implications from an Italian Perspective. *Journal of Business Ethics*, 67, 305-316.

Princic, L. (2003). *Engaging Small Business in Corporate Social Responsibility: A Canadian Small Business Perspective on CSR*. Canadian Business for Social Responsibility. [Online] [Accessed 1.May. 2009]
http://www.cbsr.ca/files/ReportsandPapers/EngagingSME_FINAL.pdf.

Raynard, P., & Forstater, M. (2002). Corporate Social Responsibility. Implications for Small and Medium Enterprises in Developing Countries (United Nations Industrial Development Organization, Vienna, Austria).

Revell, A., & Blackburn, R. (2005). The Business Case for Sustainability? An Examination of Small Firms in the UK's Construction and Restaurant Sector. *Business Strategy and the Environment*.
 [Online] [Accessed 6. May. 2009]. Available:
<http://www3.interscience.wiley.com/cgi-bin/jissue/110431545>.

Rogers, E. M. (1962). *Diffusion of innovations*, New York: Free Press.

Rogers, E. M. (1983). *Diffusion of innovations*, (3rd ed.), New York: Free Press.

Scherer, F.M., & Ross, D. (1990). *Market Structure and Economic Performance*, Houghton Mifflin, Boston.

Schoenberger-Orgad, M., & McKie, D. (2005). Sustaining edges: CSR, postmodern play and SMEs. *Public Relations Review*, 31, 578-583.

Spence, L. J. (1999). Does size matter? The state of the art in small business ethics. *Business Ethics: A European View*, 8, (3), 163-174.

Spence, L. J., Coles, A., & Harris, L. (2001). The Forgotten Stakeholder? Ethics and Social Responsibility in Relation to Competitors. *Business & Society Review*, 106, (4), 331-352

Spence, L.J., Jeurissen, R. & Rutherford, R. (2000). Small Business and the Environment in the UK and the Netherlands: Toward Stakeholder Cooperation, *Business Ethics Quarterly*, 10(4), 945-965.

Spence, L.J., & Lozano J.F. (2000). Communicating About Ethics with Small Firms: Experiences from the U.K. and Spain, *Journal of Business Ethics*, 27,1, 43-53.

- Spence, L. J. , & Rutherford, R. (2003). Small Business and Empirical Perspectives in Business Ethics: Editorial , *Journal of Business Ethics*, 47,1, 1–5.
- Spence, L. J. , & Schmidpeter, R. (2003). SMEs, Social Capital and the Common Good_ , *Journal of Business Ethics* 45(1–2), 93–108.
- Thompson, J. K. , & Smith, H. L. (1991). Social Responsibility and Small Business: Suggestions for Research. *Journal of Small Business Management* (January), 30-44.
- Tilley, F. (2000).Small Firm Environmental Ethics: How Deep Do They Go?, *Business Ethics: A European Review*, 9,1, 31–41.
- Tornatzky & Fleischer. (1990). *The Process of Technological Innovation*, Lexington, MA: Lexington Books.
- Toyne, P. (2003). *Corporate social responsibility – good business practice and a source of competitive edge for SMEs?* Written for the 48th World Conference International Council for Small Business: Advancing entrepreneurship and small business. [Online] [Accessed 6.Jun.2009]. Available: <http://www.smallbusinessjourney.com/output/Page212.asp>.
- Williamson, D., Lynch-Wood, G. & Ramsay, J. (2006). Drivers of Environmental Behavior in Manufacturing SMEs and the Implications for CSR, *Journal of Business Ethics*, 67, 3, 317-330.

SUSTAINABLE ENTREPRENEURSHIP IN SMEs: A CASE STUDY ANALYSIS

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Abstract

Sustainability is oft thought of as the privilege of the large corporate – with sufficient funds to invest in anything from effective green PR¹ to improving its carbon footprint. What is perhaps less well-understood and documented is the range of activities undertaken by SMEs², including very small entrepreneurial start-ups, some of which base their entire business rationale around sustainable principles. This paper uses a case study approach to explore the modus operandi of ecopreneurship and draws on both primary research and secondary data to develop and explore sustainable entrepreneurship in this sector. Preliminary findings suggest that ecopreneurial SMEs are looking to other goals alongside financial ones and are prepared to go to significant lengths to achieve such goals. Monetary measures are not, of course entirely absent, but are very strongly conditioned by the eco-conscious nature of the business. In short, sustainability imperatives remain paramount.

Keywords: SME, Sustainability, Ecopreneur, Shecopreneur, Green Business

Introduction

Sustainability in the green, environmental sense seems to be a lagging concept in the corporate management world. Goodall (2008) for example, tells us that in her study of the top academic journals between 1970 and 2007 she found only “nine articles that refer to climate change or global warming” - this out of a total of approximately 31,000 articles. Green issues appear to be going niche - becoming enveloped in the functional areas - lean operations or green marketing for example, rather than pervading an organisation’s fundamental strategy. There are of course brave and trendsetting exceptions - Marks & Spencer's Plan A3, for example. However it may be in the SME sector that the “Green Green” business defined by Isaak (2002) as “one that is designed to be green in its processes and products from scratch” is making headway. As Holt et al (2001) comment, “...the involvement of SMEs is also vitally important in achieving the national environmental targets...Indeed, it is difficult to see how some of these national targets can be achieved without significant involvement of SMEs.” This paper sets out to explore a subset of those SMEs - the “Green Green SME” and the factors that drive both them and their entrepreneurial founders forward in their sustainable agendas.

¹ Public Relations

² Small and Medium-sized Enterprises

³ <http://www.plana.marksandspencer.com>

This paper draws on both primary and secondary data and looks at three case studies of UK-based SMEs. The research intends to investigate the specific characteristics of sustainable entrepreneurship in these companies and looks for the commonalities therein. It looks at start-up issues and investigates how the principles of sustainability versus those of growth and profit play out in the small company arena. The study seeks to analyse both the entrepreneurial characteristics of the ecopreneur and the defining eco-elements of the business. The first of the case studies is *Pachacuti*©, a fair trade clothes business run by Carry Somers. The second is *Ecocabin*, an environmental holiday business run by Kate Grub and the third is *Bricks and Bread* - a sustainable building organisation run by Trudy Thompson.

Literature Review

The phenomenon of ecopreneurship is still an emerging one and its literature is a comparatively young (see Linnanen, 2002, Pastakia, 1998, Schaltegger, 2002.) A working definition is offered to us by Schaltegger (2002): “ecopreneurship can be roughly defined as ‘entrepreneurship through an environmental lens’. This paper will build on this comparatively young literature base and will focus on a particular element within the broader definition of ecopreneurship - sustainable entrepreneurship in SMEs. One of the main thrusts in the literature is the development of a typology of ecopreneurs, defined by Pastakia (1998) to be “a new breed of eco-conscious change agents who may be called ecological entrepreneurs (ecopreneurs for short.) Individuals or institutions that attempt to popularise eco-friendly ideas and innovations either through the market or non-market roots may be referred to as ecopreneurs.” As yet there is little consensus on such typology and little distinction of the particular behaviours of SMEs. One of the more common distinctions however, is the delineation between social and commercial ecopreneurs according to their objectives. Linnanen (2002) seems to agree stating that ecopreneurs can be classified according to 2 criteria: 1: their desire to change the world and improve the quality of the environment and life, and 2: their desire to make money and grow as a business venture. He goes on to say that: “these two dimensions seem to be independent. The first dimension of pursuing the good life, like sustainability, is an acceptable goal but it is primarily an inefficient business concept” (Linnanen, 2002). Linnanen typifies ecopreneurs along these conflicting axes and notably a high “desire to change the world” coupled with a low “desire to make money” results, in this typology at least, in a “non-profit business.”

<i>Desire to change the world</i>	<i>Desire to make money</i>	
	LOW	HIGH
HIGH	Non-profit business	Successful idealist
LOW	Self-employer	Opportunist

Table 2 DRIVERS OF ECO-BUSINESS SECTORS

(Linnanen, 2002).

Schaltegger’s typology (below) uses similar labels to similar effect. His plot of high priority environmental goals against low/medium market effect generates the somewhat pejorative labels – in a business sense at least – of “alternative actors/bioneers.” To make the grade as an ecopreneur here, one needs to hit the “mass market” end of the spectrum.

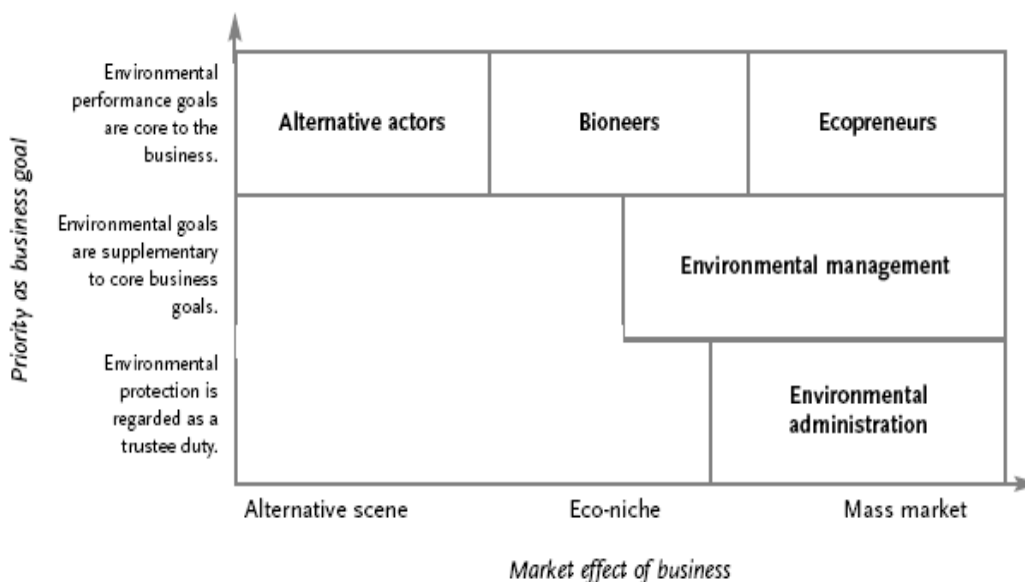


Figure 1: BUSINESS CONTINUUM: THE RELATIONSHIP BETWEEN THE PRIORITY GIVEN TO ENVIRONMENTAL ISSUES AS BUSINESS GOALS AND THE MARKET EFFECT OF THE BUSINESS

Source: Schaltegger and Petersen 2001: 10

(Schaltegger, 2002).

Isaak (2002) reiterates with his “ideal type of ecopreneur” being “one who creates green-green businesses in order to radically transform the economic sector in which he or she operates.” These analyses seem to suggest that the ecopreneur must score on both environmental and “big business” parameters to be a valid concept. That is, to be not only successfully green, but also “successful” in the traditional economic sense. The balance between these two factors bears further investigation, particularly with regard to ecopreneurial SMEs where profitability may rank lower per se than sustainability.

Case Studies

The case studies evidenced here are drawn from both primary and secondary data. The first case is that of Pachacuti⁴, a fair trade clothes company run by Carry Somers. The second case is Ecocabin – “a one-off holiday experience in the UK⁵.” The third is Bricks and Bread⁶ - a sustainable building organisation founded, after much practical experience and a career change, by Trudy Thompson. What follows is a necessarily brief presy of the case material generated. This is then used to reflect upon both the factors that drive their entrepreneurial founders and what may be the distinctive attributes of ecopreneurship in an SME context.

Pachacuti

Pachacuti is a successful contemporary fashion and accessories business built on a foundation of Fair Trade and run by female entrepreneur Carry Somers. The organisation is determined to protect the interests of the Latin American producers who supply goods and their traditional skills to the company. The word Pachacuti means “world upside down” in the language of the Andean region and Somers used the name as she felt it represented the aim of the business, redressing the economic balance for her suppliers by reversing “inequitable trading patterns.” Somers comments, “I was shocked to see how the trading system favoured affluent intermediaries with the knitters and knitting cooperatives being put at a financial disadvantage.” Pachacuti is also a “green green” business which “encourages the use of resources and production methods which are environmentally sustainable and appropriate to the region.” This includes routinely managing waste and recycling levels and sourcing the raw materials for the products as locally as possible, “including the use of rainforest friendly tagua nuts for our buttons⁷.”

Rationale and Start –up

Somers acknowledges that her entry into business in 1992 was naive; assuming as she did that she could change the extant situation. However, some years on, she's proud to see the difference that she has made. Carry began Pachacuti in 1992 having completed a Masters in Native American studies. She acknowledges being inspired by Anita Roddick and began in a small way by working with two co-operatives – both financing them and working directly with them to produce a first range of clothes. Initial business success came easily on a small scale at least: this first range sold out within six weeks. (<http://shop.pachacuti.co.uk/about-us-1-w.asp>.) Pachacuti now specialises in Panama hats, and Carry has set up initiatives which continue to directly support her weavers in a myriad of ways including profit retention, providing

⁴ <http://www.pachacuti.co.uk/>

⁵ <http://www.ecocabin.co.uk>

⁶ <http://www.bricksandbread.com>

⁷ <http://www.pachacuti.co.uk/about.html>

pension schemes and financing loans. Due to the activities of Pachacuti, traditional skills are being preserved, endorsing the rich textile heritage of the Andes.

Business Skills

Having given up her PhD to concentrate on business development Carry was inspired by the difference she was making. However there were setbacks including losing money to an armed robber! Despite such difficulties Pachacuti can now boast a retail outlet and website and wholesale businesses supplying around 200 retailers globally. The business continues to pioneer, and "is the first Fair Trade organisation to complete the new World Fair Trade organisation certification process." This new label provides "an externally audited guarantee of adherence to Fair Trade and environmental principles in every aspect of business transactions." (<http://shop.pachacuti.co.uk/about-us-1-w.asp>)

Barriers and success

Somers has already had considerable success including winning a number of awards. Significantly they include "Entrepreneur with a Conscience 2008" and "British Small Business Champions Ethical Award 2007." Presumably the greatest success however, is her own claim that, "Pachacuti shows that in a world of mass-produced clothing, people can wear individual, stylish garments which have been created by hand using traditional skills, with respect for the environment and ensuring that the producers receive a living wage." <http://shop.pachacuti.co.uk/about-us-1-w.asp>

EcoCabin

Ecocabin is described as "environmentally-responsible self catering in the Shropshire hills⁸." It is essentially a sophisticated log cabin within the footprint of a mobile home, which is eco in its every aspect. All were exhaustively researched by Kate Grubb, the ecopreneur who sees the "Ecocabin experience" as an opportunity to "educate" people into living in a more eco-friendly way. Thus the cabin includes a wormery or two; composting sites; recycling opportunities and very constrained waste facilities; an eco-friendly washing machine; solar water power; a state of the art woodchip burning stove; an eco-provisioned honesty shop and even eco décor! Ecocabin is striking as soon as you see it as a thing of natural beauty, an impression which is reinforced as you feel the spiritual sense of peace within.

⁸ All direct quotes are taken from original research carried out by the author.

Rationale and Start up

In this case, our ecopreneur's background suggests little to prepare her for entrepreneurship but she does describe herself as being, "quite into eco stuff" - and is, by her own admission, not simply the driving force behind ecocabin but the "the only force." Her rationale for launching ecocabin is very clear: "Flexibility was the real driving force: lifestyle issues." She wanted to find some way to both contribute economically and care for her daughter and family. Starting her own business seemed the only option - but - that business had to be grounded in environmental sustainability. Eighteen months later, the business opened under the Ecocabin banner, although Kate describes herself as "too altruistic" to have a trademark. She reports that, although "people said to expect 35% lettings in year" (breakeven,) Ecocabin achieved 70% occupancy in its first year of trading." It has continued to perform at levels exceeding this.

Business Skills

The comments above illustrate this ecopreneur's precedence for a "lifestyle" rather than a "business." She asserts "I have an anti-business strategy – and I have the long straw, I live here all the time." However, there is also business acumen - she describes the challenge of "balancing an eco business and marketing it to be appealing." The target market is also clearly defined: - "those who are time poor but have a relatively high disposable income... They can pay me for the time..." She is also clear about her pricing strategy - "I wanted to compete – not be elitist – but maintain higher rates than traditional cottages." However, those rates are not set to increase by anything other than an inflationary measure, even in the face of demand outstripping supply. Her rationale? "If I go significantly higher, I will get people I don't like."

Future Developments

Significantly, and despite continued excellent success in the venture, Kate has no desire to grow the business. When prompted to replicate Ecocabin and thus generate greater income, her response was "I definitely won't build another one – money doesn't drive me... Ecocabin will tick over nicely and I'll have more time when the children are at school." However, she continues in perhaps typical entrepreneurial spirit: "I'm going to be a writer next." Her business goals appear low-key, but are perhaps, simply realistic: "a network of people coming back; a loyal set of customers; and further development of the eco – perhaps wind-turbine/photo-voltaic power." Major business growth, per se, does not figure.

Barriers and Success

Kate felt that she faced significant issues as a direct result of being not only an eco-entrepreneur – but a *female* one! Gaining funding was initially very difficult and planning departments were, she found, “particularly condescending!” However issues closer to home were most prevalent: “responsibility with family, for example, I still cook dinner for 12 everyday... But that’s what life is all about – keeping the fire going.” Her definitions of success are also about lifestyle rather than money: “Being happy every day. Doing what I want to do... and fit it round everything else.” When asked how she would know when “she’d made it,” she replied: “I’m there, I wouldn’t change my life. Everyone wants the same thing underneath – family, someone who’s nice to them, health, children to be OK.” Significantly she continues; “Money confuses the issue. The thought of winning more than £75K fills me with dread” - but her green ideals remain firm.

Bricks and Bread

Bricks and Bread, a newly opened company housed in an industrial warehouse utilises its space for many and varied activities. On entering, one is initially greeted with architectural salvage, rescued fireplaces and light fittings - the results of Trudy's work as a sustainable building consultant. Also in the space is a public ‘arena’ complete with lectern and church pews and surrounded by blackboards all proclaiming messages of sustainability. Bricks and Bread will undertake a variety of different kinds of work, from the social enterprise of educating the local populace about sustainability to acting as a hub for the building trade. In this latter role the company will stock information and sustainable building products and is in the process of creating a network of both manufacturers and trained suppliers for the building industry.

Rationale and start-up

Trudy Thompson, the ecopreneur behind Bricks and Bread had something of an epiphany in order to start this business. She describes herself as an entrepreneur, businesswoman and “petrol head!⁹” Following a career in the motor industry which ended with a serious accident, Trudy Thompson realised “how much I was doing that I wasn't enjoying.” Questioning the consequences of her own consumerism and indulgent use of fossil fuels, she decided to devote her time to “finding a more rewarding and valuable way of living her life.” Trudy set about educating herself in the business of building sustainably. Significantly self taught - she said "it took two years of research before I was confident that I knew enough about sustainable construction" - she began project managing sustainable buildings. Her aim she says was "to build healthy properties that would meet Passive House standards¹⁰." Her

⁹ All direct quotes are taken from original research carried out by the author.

¹⁰ Passive House is an approach to construction that produces very energy efficient buildings. This can include offices, schools and factories, as well as houses. The approach has been developed into a standard in Germany and this has guided the design and construction of thousands of buildings in a number of different

own standards, and those of her business, are very high. Although happy to combine modern systems with natural materials including paints, clay-plaster and timber, her remit to build healthy properties had significant challenges, including a self-imposed zero landfill policy which it should be noted, she achieved despite the best efforts of some of the construction workers!

Business Skills

Thompson's sustainable construction business was fuelled by friends and their referrals and thus grew the initial consultancy business. Not all factors however were in her favour and Thompson refers to her situation in an industry which "fought against me all time." She cites some of the problems facing sustainable building as; "a lack of skilled labour; a lack of trained professionals; a lack of information and supply of reliable products and getting accurate quotations product and labour." Bricks and Bread in attempting to address these issues, says Thompson, "a huge undertaking. There is no manual for this business only my experience." Having already gone close to bankruptcy, surviving debt and yet making new, significant investments in space - it is obvious that Thompson is a shrewd entrepreneur who understands business.

Future Developments

Bricks and Bread aims to be not only a hub of information and product supply for the sustainable building industry, but also takes a practical part as a consultancy prepared to get its hands dirty in eco-renovation. In this line, Trudy engages directly in both retrofit and new builds which take advantage of a variety of technologies including rainwater harvesting, green roofs, ground source heat pumps, underfloor heating, solar hot water and low-energy lighting to name but some. However, it is perhaps in its educational facility that the Bricks and Bread sees its brightest future.

Barriers and Success

The lack of information in the supply chain remains a significant barrier to sustainable building. Thompson has identified that much more needs to be done and Bricks and Bread will develop a research and project library; exhibition space and a showroom for the products and manufacturers which support the sustainable building industry. It is an investment setting out, in Isaak's terms, to change an industry. As Thompson comments, "I can't build houses without the right, appropriately educated people around me."

Analysis

Seeking commonalities in the three case studies gives us some insight into what may be “a new breed of eco-conscious change-agent” in the form of ecopreneurs and the companies they start up. A number of threads appear significant:

Firstly, what emerges from the primary and secondary data generated in this paper is that *the entrepreneurial force is more powerful because of its ethical element.*

Indeed, the extant business models as discussed in the literature review above appear to neglect the fundamental importance of the ethical drivers in the small business arena. In a business world which is moving ever faster towards social responsibility, it is perhaps exactly this ethical element which will determine the success of small and large businesses alike. A more appropriate model may then begin by analysing the ethical motivation of the entrepreneur and thus the *raison d'être* of the business.

Secondly, in all three case studies *the entrepreneurs undertook their own 'green' education to become experts in their chosen fields; they are pioneers in the environmental sense as well as in business.*

Carry Somers for example, followed her MA by travelling in the Andean mountains and seeing for herself the conditions and *modus operandi* of the textile businesses already there. Kate Grubb thoroughly researched all aspects of eco-technology, both simple and complex, before beginning what was essentially a self build of her eco-cabin. But perhaps most extreme is Trudy Thompson, acknowledging that she spent a full two years conducting her own research into sustainable building, educating herself to consultant level, before launching Bricks and Bread.

Thirdly, it is also important to acknowledge that *all three of these sustainable enterprises were launched with a great deal of practical knowledge and impetus. That is, much of what was required was simply not available to 'buy in off the shelf.'*

Trudy Thompson for example claims that she's driven by “a real need to *do* things and if she does them, she's a better person for it.” These entrepreneurs are not of the sit back and move money around variety but much rather are hands-on and even ‘hands-dirty’ in launching their business. It is perhaps also this pragmatic approach which urges these entrepreneurs to overcome what at times must have seemed overwhelming obstacles. Changing the fundamentals of the supply chain in an established industry in the Andean mountains, for example, is no mean feat. Closer to home - being refused support by most of the main banks must have seemed equally formidable to Kate Grubb.

Fourthly, it seems that *because of the sustainable elements, these eco-enterprises require a risk tolerance perhaps over and above that which we expect in a “regular” entrepreneur.* The eco-entrepreneur appears to be on an even thinner wicket – perhaps due to the infancy of their green industry sectors. It seems that adherence to the green ethics of one's business only adds to the challenge. However the creativity and stamina of these entrepreneurs is self-evident and “business creativity can do a great deal to provide solutions and...can contribute to enhanced competitiveness” (Design Council, 2009.)

Finally all three of these case studies have *an extra challenge in common – that of educating the market*. All three businesses cite market education as central to their *raison d’être*. Pachacuti highlights a particular supply chain scenario and seeks to inform western markets about the issues therein; Eco-cabin sees as part of the reason for its existence an ability to educate the tourist allowing them to sample a greener way of living if only for a short time; and Bricks and Bread sets out to be, in part at least, an education centre. In Trudy's words, “it takes Sustainability as a business and starts to look at what we are all doing.”

In summary, all of these factors lead us towards a different kind of model - one that is less interested in the quantity of business growth per se, and more interested in the quality of that business growth and its impact upon the supply chains, markets and industry sectors around it. It may be too big a leap to suggest, at this stage, that this is a business model pertaining to ‘shecopreneurship¹¹’ per se, but there are grounds for further research!

Conclusions

The case studies in this paper make clear that although sustainable entrepreneurship, or ecopreneurship, in the SME sector remains in its infancy, findings here are contrary to Hitchens et al’s conclusion that “environmental performance is a necessary constraint on the activities of the firm and an interruption to production-related activities” (Hitchens et al, 2003.) The cases reported here are all small start-up businesses which tend to follow Isaak’s basic definition of the “green green” business where sustainability and the associated ethical principles remain paramount in the business venture. In a world where, in the words of Daniel Pink, “abundance has satisfied and even over-satisfied the material needs of millions...” and “...more of our basic needs are met, we increasingly expect sophisticated experiences that are emotionally satisfying and meaningful” (Pink, 2006.)

These experiences, Pink says, “will not be simple products” (Pink 2006.) It is perhaps also the case that the organisations providing these sophisticated experiences will not be simple either, but may be those which can take on board a paramount ethical perspective and a newfound demand for environmental performance and accountability ahead of profit. In short, such organisations maybe exactly these “green green” SMEs – the brainchildren of our shecopreneurs. Perhaps it is only these businesses which are sufficiently infused with values, and are sufficiently ethically driven, which can counteract that material over-satisfaction and provide what the world of the future may need. Perhaps this new generation of “green green” businesses - firmly rooted in the ethical principles of their ecopreneurs; strongly supported with a high risk tolerance and based upon a platform of self- education in green issues - can provide experiences that are *‘emotionally satisfying and meaningful.’* These are perhaps a new form of organisation heralded by both business and environmental pioneers, that is, the work of ecopreneurs. Clearly, all

¹¹ Shecopreneurship – a termed coined by the author to describe these female ecopreneurs.

three of the ecopreneurs in the case studies above view their business not just as an income stream but as a vehicle for social change.

This is in line with Birkeland's reflection that, "perhaps the defining insight of green thought is that sustainability requires more than eco-efficiency, or the minimising of energy, resources and waste; it also requires fundamental personal, social and institutional transformation" (Birkeland, 2002) and perhaps these kinds of ecopreneurial businesses and their shecopreneurs will provide a route towards that. If indeed, even in a business context, "we are faced with the prospect of taking charge of our own freedom... then... with choice comes responsibility [including that] - for our own lives" (Ridderstrale, 2000). This is perhaps the prescient point; that these shecopreneurs are investing their own lives into their organisations in a fundamental way. These businesses are expressions of self; exposés of personal principles and ethics, and as a result they are stronger and more far-reaching. If in "an increasingly uncertain world for business... being green is a way to find certainty in today's shifting world" (Friend, 2009) then these ecopreneurial businesses are set to prosper. But at the same time, perhaps our shecopreneurs have seen "the stockbroker and the great barrister going indoors to make money and more money" and have recognised its futility when "it is a fact that five hundred pounds a year will keep one alive in the sunshine." (Woolf, 1928.)

References

Journal Articles

Goodall A.H. 2008. Why Have the Leading Journals in Management (and Other Social Sciences) Failed to Respond to Climate Change?" *Journal of Management Inquiry*; 17: 408-420. Originally published online Apr 24, 2008.

Hitchens D. Clausan J. Trainor M. Keil M, Thankappan S. 2003. Competitiveness, environmental performance and management of the SME. *Greener Management International* 44 (Winter:) 45-57.

Holt, D. Anthony S. Viney H. 2001. Supporting environmental improvements in small and medium-sized enterprises in the UK. *Greener Management International* 30: 29-49.

Isaak R. 2002. The Making of the Ecopreneur. *Greener Management International (GMI)* 38, Summer: 81-91.

Linnanen L. 2002. An Insider's Experiences with Environmental Entrepreneurship. *Greener Management International (GMI)* 38, Summer: 71-80.

Pastakia A. 1998. Grassroots ecopreneurs: change agents for a sustainable society. *Journal of Organizational Change Management*, 11(2): 157-173.

Schaltegger S. 2002. A Framework for Ecopreneurship: Leading Bioneers and Environmental Managers to Ecopreneurship. *Greener Management International (GMI)* 38, Summer: 45-58.

Schaper M. 2002. The Essence of Ecopreneurship. *Greener Management International (GMI)* 38, Summer: 27-30.

Books:

Birkeland J. 2002. Design for sustainability: A Sourcebook of integrated, ecological solutions. EarthScan Publications Ltd. London.

Friend G. 2009. <http://planetark.org/wen/53301>. Originally published in "The Truth about Green Business." FT Press.

Pink D. 2006. A Whole New Mind. Riverhead Trade; Rep Upd edition.

Ridderstrale J. Nordstrom K. 2000. Funky Business. Pearson Education Ltd.

Woolf V. 1928. A Room of One's Own. Penguin Classics; New Ed edition (28 Feb 2002)

On-line Sources:

Bricks and Bread. 2009. [Online] Available at:<http://www.bricksandbread.com> [Accessed 10 April 2009].

Design Council. 2009. [Online] Available at:<http://www.designcouncil.org.uk>. [Accessed 10 June 2009].

Ecocabin. 2009. [Online] Available at: <http://www.ecocabin.co.uk/> [Accessed 10 April 2009].

Marks and Spencer. 2009. [Online] Available at:
<http://www.plana.marksandspencer.com> [Accessed 20 April 2009].

Pachacuti. 2009. [Online] Available at: <http://www.pachacuti.co.uk/> [Accessed 10 April 2009].

A Note on Case Material:

The case study material in this paper was generated via secondary research and primary research in the form of informal interviews with the entrepreneurs. Thanks to Carry Somers of Pachacuti, Trudy Thompson of Bricks and Bread, and Kate Grubb of eco-cabin and the best of luck to them all.

CORPORATE RESPONSIBILITY: A CRICIAL CHALLENGE FOR SMALL – AND MEDIUM-SIZED ENTERPRISES?

Markus Schenkel, Michael Walther

Abstract

Corporate Responsibility (CR) is of growing relevance for companies. Especially major enterprises increasingly align their business to social and ecological demands whereas SMEs recently and cautiously started dealing with CR. SMEs traditionally take above average responsibility for the local community and for their employees. Responsibility expresses itself mainly in philanthropic activities directed at these stakeholder groups. However CR-management in SMEs is less comprehensive than in major enterprises and not embedded within strategy and organisation.

The strategic task for SMEs is twofold. First, CR could become a prerequisite for company success. At the moment it seems that SMEs are not sufficiently prepared. Second, CR could even be an opportunity for SMEs as they enjoy more public trust than major enterprises. These threats and opportunities are discussed regarding owner-manager's perception patterns and subsequent roles in behaviour. This shows difficulties for SMEs to effectively deal with CR.

Keywords: Corporate Responsibility, Small and medium sized companies, Sensemaking

Introduction

Corporate Responsibility (CR) has become a basic part of corporations' business policy and actions by now. Nevertheless, it seems to be mainly a topic for large corporations. Politics, academia and the public have focused their attention on large corporations in recent years and made sure that they take on this issue. On the other hand, small and medium sized enterprises (SMEs) were empirically and theoretically neglected and their importance for the discourse about CR often was underestimated (Morsing & Perrini 2009), even though more than 99% of all firms world-wide are small- or medium-sized and account for up to 70% of employment (IfM 2007). Thus, the collective size makes SMEs highly important in the advancement of CR.

In research SMEs were – and often still are – considered to be „little big firms“ (Tilley 2000). This ignores the fact that SMEs differ considerably from large corporations both quantitatively and qualitatively. Among other things SMEs have a lower level of organizational differentiation and usually only limited financial resources due to their lower annual turnover and total assets. Even more important than these quantitative characteristics, however are the qualitative characteristics that distinguish small and medium from large companies and determine to a considerable degree how and why SMEs act and behave in a specific manner. In contrast to large

corporations the entrepreneur or owner manager plays an important role. Accordingly, corporate decisions and action strongly reflect the „personality, values, character, attitudes, education or background of the entrepreneur or the owner-manager“ (Hammann et al. 2009). They are not only often the sole deciders, but strongly influence corporate culture as well (Walther 2004). Other important qualitative characteristics are a lack of strategy and a strong focus on flexibility.

By now a sufficient number of quantitative studies on CR in SMEs are available, which allow for first significant conclusions. Based on these findings, a qualitative survey was carried out. In this paper we present first findings, dealing with two questions, both not analysed enough so far: (1) Understanding corporate actors', especially decision-makers', sensemaking and the underlying structures of signification and (2) the relation of CR and economic success. We start with a short overview of companies' external structures relating to CR that offer an explanation on why CR at the moment is mainly an issue for large corporations. We will then outline our theoretical framework and methodology and present findings on SMEs owner-managers' sensemaking and reasoning on CR. Based on these findings we discuss whether or not CR can be a success factor and draw conclusions.

CR: Clearly Unclear

What CR exactly is and how to justify the duty of companies to take on social and environmental responsibility is still discussed controversially (Garriga & Melé 2004). One important reason for this is a different national interpretation and connotation of CR due to different national social structures and systems and hence different societal expectations how corporations should take on responsibility and in turn deal with CR (e.g. Matten & Moon 2008).

In Germany the concept of “social market economy“ (Soziale Marktwirtschaft) forms the core of the economic model. The basic idea of the conception is to balance economic freedom and social justice. The economic constitution should guarantee free enterprise and efficient markets but not without governmental regulation and monitoring. Therefore, many aspects of CR (e.g. worker participation or ecological standards) are regulated and obligated by governmental law. However, a regulatory framework is considered necessary but not sufficient to ensure social justice. In this respect, the concept of social market economy, by and large, is not only an economic but also a general societal outline. Thus, every (economic) actor is expected to act in accordance to societal goals as well as economic principles (Abländer & Ulrich 2009). Small- and medium-sized enterprises are generally considered by the public to comply with this conception more than large corporations do and hence to be more trustworthy than them.

A more pragmatic approach is to look at stakeholder demands as a basis for (the discussion on) CR. Corporate scandals severely disturbed large parts of society's trust in companies and the market economy. This is accompanied by a decreasing global and national influence of politics. The critical public plays the most important role in advancing CR.

The most visible parts of the critical public at the moment are NGOs. They express demands and threaten companies with scandalisation and loss of reputation. The power of NGOs is based on their influence on the public (as customers). Customers potentially have the fastest and most direct influence on companies. It comes as no surprise that they are identified as the most important stakeholders in nearly every survey. It has to be stated, however, that customers currently offer only very little rewards for companies with superior CR-performance. The majority doesn't feel responsible themselves, is often poorly informed, not endowed with the financial room for manoeuvre and/or stuck in consumption routines (Eckert et al. 2007, Chatzidakis et al. 2007). The stated willingness to consider social and ecological issues in consumption is far from being observable on the markets (the same can be said about the biggest customer: the state, RNE 2008). It is primarily scandalisation that triggers reactions in the form of (temporary) sanctions.

An additional driver for CR, that is becoming more and more important, is Socially Responsible Investing (SRI). A growing number of private and institutional investors consider social and ecological aspects. Even though, with respect to the total amount of financial assets the SRI market is still relatively small it has increased constantly in every country and grown faster than conventional markets in recent years (Tometschek 2008).

The stakeholder demands are in line with the (especially) European scientific discourse on CR, focussing on the way profits are generated and not the way profits are used. CR is considered a part of the core business. Corporate giving and sponsoring are creditable but the centre of CR is not „do good“, but „first, do no harm“ (Palazzo 2008). A socially and ecologically responsible performance throughout the complete supply chain is expected.

In this context business tries to protect and regain their “license to operate”. CR becomes the business case especially for larger companies that experience stakeholder pressure much more than SMEs. First, the global capital markets are much more relevant for (listed) major enterprises than for SMEs. Second, NGOs pose a much bigger threat for larger multinational companies, because effective scandalisation and mobilisation of market power especially works if there is a well-known target. Despite efforts to present themselves as actively responsible in most cases CR is an instrument of defensive risk-minimisation (Viehhöfer et al. 2006).

Theoretical Framework and Methodology: The Importance of Sensemaking

How companies or rather decision-makers perceive possibilities depends on a multitude of internal and external factors. The question of how stakeholder influence and supporting framework conditions influence these perceptions has to be analysed in greater detail. People operate in a highly complex field of overlapping social systems. Structures and individual actions are recursively connected (Giddens 1984).

It is important to determine the history and the main influences of perceptions and search for robust patterns.

Perceptions and the subsequent decisions are always subjective and – at best – intentionally rational. The human capability to consciously reflect on their own (and others') perception, decisions, actions and effects leads to rationalisation, *ex ante* as well as even more often *ex post*. Sensemaking usually is a retrospective process (Weick 1995). As these reflections are again influenced by unconscious factors, they remain subjective. Insight in the subjective rationality of decisions has been a research topic for a long time (Simon 1957). It is often voiced that CR needs a strategic anchoring, whereas findings of the descriptive theory of (strategic) management give evidence that most of the time company activities do not so much follow strategies established by rational planning, but that company strategies can be more accurately described as "patterns in a stream of decisions" (Mintzberg 1979). Even though in the case of companies, formal structures and conscious actions of the responsible actors play an important role in the analysis, it would still be incomplete without the consideration of informal structures (like cultural norms or informal power structures) and unconscious structural influences.

The often unconscious nature of perception/ sensemaking is so important, because of the many social systems people operate in. They are influenced by different, often contradictory, structures without being able to distinguish between them and to consciously switch roles and social systems. Subjective attitudes of the actors evolve interrelated to structures. Furthermore, individual actions possess the potential to change structures not only of the systems they refer to but also of other connected systems

Social systems are dynamic (autonomy of action) and historical (structural dependence). Thus they evolve on continuous paths. Self-energising correlations of structures and actions on the one hand provide orientation for actors and on the other hand limit perceived and actual possible courses of action (path dependencies). However, path limitations are dynamic. At the same time new fields of action come up on a regular basis, due to the discontinuation or overcoming of structural limitations (Schreyögg et al. 2003).

Companies (in contrast to other social systems) are characterised by much more formal structures, (intentionally) conscious actions and are strongly influenced by exogenous changes. These can be expectations (structures) of superordinate or interrelated systems (DiMaggio & Powell 1991) which become manifest in legal norms or changed behaviour of stakeholders but can also be technological developments or new members with different attitudes. But again, how changes in the environment are perceived depends on individual attitudes and the company's structures (Ortmann 1995). At this point we have to analyse the rate of external change (in the case of CR mainly stakeholder demands) and changes in the values and attitudes of SMEs decision-makers.

Accordingly, referring to Basu and Palazzo (2008), CR can be defined as:

“...the process by which managers within an organization think about and discuss relationships with stakeholders as well as their roles in relation to the common good, along with their behavioural disposition with respect to the fulfilment and achievement of these roles and relationships.“

We carried out a two-part empirical study. First, generalisable findings could be extracted from the empirical studies at hand. Although the different studies had to be compared very carefully because of different research designs, sample sizes, differences in focus (Sustainability, C(S)R, Corporate Citizenship) and research objects (e.g. SMEs or family enterprises), there are robust patterns of CR-engagement of German SMEs. These findings served as hypotheses that were tested and confirmed in a quantitative survey.

After that, the main study was carried out. Sensemaking of corporate actors, perception patterns and structures of signification were analysed qualitatively with narrative interviews, focusing on generating narratives as a retrospective interpretation of past actions. It is important, that the interviewees are enabled to report on histories they experienced themselves as involved actors. The stories are told without being influenced by the researcher and his hypotheses. These narratives deliver “thick descriptions” of complex situations and processes and serve as a basis to analyse perception patterns and their structural influences (Geertz 1973). We not only interviewed SMEs owner-managers but also employees with different backgrounds from different departments in 16 medium-sized companies about their perception of CR and their main decision-makers’ world-views, values, actions etc.

The interviews were recorded, transcribed and interpreted using qualitative content analysis. Giddens’ theory of structuration (1984) provided the analytic framework. The structures are a combination of the structural dimensions (1) legitimation (rules of the sanctioning of social action), (2) signification (rules of the constitution of meaning) and (3) domination (allocative and authoritative resources). Path-dependencies can be analysed in reference to the establishment and allocation of corporate knowledge („absorptive capacity“, Cohen & Levinthal 1990), as well as the development of re-configurable competence („dynamic capabilities“, Teece et al. 1997) for the ability of innovation.

CR in Small-and Medium-Sized Enterprises: Empirical Results

SMEs started dealing with CR later and less comprehensively than major enterprises. One reason is the significantly lower stakeholder pressure they face at the moment. By now a sufficient number of empirical studies are available to offer empirically reliable results on motives, stakeholders and activities (e.g. UMU 2008, ZEW 2008, Backhaus-Maul & Braun 2007, Bader et al 2007, Bertelsmann Stiftung 2007, BDI 2007, CCCD 2007, Ernst&Young 2007, GILDE 2007, sneed Hamburg 2007, Bertelsmann Stiftung 2006, Mutz & Egbringhoff 2006, forsa 2005, Maaß & Clemens

2002). The same patterns are often found in international studies as well (e.g. Nielsen & Thomsen, Russo & Tencati 2009, Jenkins 2009, Grant Thornton 2008, Hudson & Roloff 2008, Jamali et al 2009, Miller et al. 2008, Burton & Goldsby 2007, Vives 2006, Fuller & Tian 2006, Murillo & Lozano 2006, Jenkins 2004, 2006, Spence et al 2003).

Fundamental aspects of SMEs CR-approach that we consider highly important when working on SMEs compared to large companies and which are found in almost every study are the following:

- Ethical motives based on the self-perception as entrepreneur
- Focus on the local community and the employees
- Focus on corporate giving (donations, sponsoring, corporate volunteering)
-

These findings go hand in hand with weaknesses which are not limited to the field of CR but in fact basic weaknesses of SMEs. Particularly relevant are:

- Lack of resources (time, money, information)
- Lack of strategy

All of these results were confirmed in both our quantitative and qualitative survey. While analysing CR-perceptions, trying to examine the (still not fully clarified) question of ethical motives vs. economic motives, we found two behavioural patterns which the owner-managers, often unknowingly, adopt and switch between: (1) The ethically motivated entrepreneur and (2) the economically oriented managers. These patterns are closely connected to the CR-approach as described above.

(1) The first role they take on is that of the ethically motivated entrepreneur. This follows most empirical findings of above-average responsibility for the local community and (as part thereof) the employees. Medium-sized entrepreneurs are much more part of the local community than it is the case with large enterprises. The local community and the employees are the most important drivers for CR just by closely observing corporate activities and not even explicitly making demands (see also Impulse/ Sparkassen Finanzgruppe 2004) or exercising power. The scope of CR-activities increases noticeably with higher „public awareness“.

Large companies point to their employees and the society too, when asked about which stakeholders they feel responsible for and they are equally or even more active (especially regarding employee-oriented activities) compared to SMEs. But while large companies are primarily reacting to (much more potential than current) pressure from NGOs and SRI-analysts influencing their most important stakeholders (customers and shareholders) and perceived economic opportunities, in SMEs we observe a rather normative approach.

To take on responsibility is considered common standard and goes without saying. An owner-manager summarized his company's social and ecological activities – all of them usually referred to as CR-activities in literature – as follows: ‘To denote this as social responsibility surely is far-fetched’. The objects of community-oriented

measures on the other hand show huge differences. Systematic work on the most pressing problems is as often observable as owner-managers' pet projects.

Lesser stakeholder pressure leads to a more autonomous preoccupation with responsibility. In subject areas with lesser pressure (like responsibility for the local community) SMEs outperform larger companies (Bertelsmann 2006). This self-ascribed responsibility expresses itself mostly in philanthropic activities. The entrepreneur gives something back. When referring to greater societal issues, like the norms of inter- and intragenerational justice in the concept of sustainable development, statements are much more personal than business-related. For the ethically motivated entrepreneur the potentially positive economic effects of CR (win-win-situation) play a lesser role in CR-related decision-making. In contrast to large enterprises, SMEs seldom think about CR-reporting and marketing measures. Internally CR is communicated much more.

(2) At the same time, owner-managers take on a second role, acting as strictly economically oriented managers. This role is taken on almost always when making decisions concerning the core operations of the company. Contrary to the use of profits, managers see less potential for activities when it comes to the way profits are generated. SMEs largely avoid binding integration of social and ecological aspects into business operations. Even in the case of employee-oriented activities, most can be relatively easily undone. CR-activities in core processes are bound to be economically profitable and calculable *ex ante* (the exception again being some employee-related policies). Especially ecological aspects beyond legal compliance – admittedly quite comprehensive in Germany – play a subordinate role in SMEs' CR-approach and in many cases are only processed where possible cost savings are to be expected. Although innovation potential and possible cost savings are seen in connection with CR and stated as reasons for CR-measures (ZEW 2008, Gilde 2007, Bertelsmann Stiftung 2006, forsa 2005, Ifo-Ökoradar 2002), the often cautious approach impedes competitive advantages.

In this role long-established entrepreneurial self-perceptions take effect as well. SMEs' managers are quite different from managers in large corporations. Firstly, SMEs' owner-managers describe themselves as businessmen, not "gamblers". This again is part of the responsibility towards employees and the community. Secondly, the entrepreneurs are not used to actively consider stakeholder demands they can't relate to. While large companies have learned the hard way to accept demands even if they don't make sense to them, owner-managers still perceive their business as "my affair, nobody is allowed to interfere". Thirdly, and most important, they feel constrained, partly because of a factual lack of resources, partly self-constrained by a traditional perception of what SMEs are, especially fearing a loss of flexibility when taking measures in core processes (e.g. sneep Hamburg 2007).

A weakness remains on the strategic level, as is generally the case in most SMEs. They rightly consider themselves to be more reactive than pro-active. The same applies to organisational implementation. This mirrors results from environmental management research (e.g. the articles in Hillary 2000). CR as well as environmental or sustainability management is often considered a „matter for the boss“. While this has positive connotations in large corporations, meaning the top management level

supports the work on these issues and ensures the integration in corporate policy, strategy, core processes etc., in SMEs it often means that only the owner-manager takes care of CR. Alongside the perception of CR as a matter of course, this too offers explanations for little reporting and marketing.

Just like larger companies, middle-sized companies identify customers as their most important stakeholders. When it comes to CR, SMEs face two highly different forms of customer pressure. In theory, SMEs are directly confronted with demands expressed by end users. However, in practice this almost only applies if customers are part of the local community, which is the exception rather than the rule. Damages to their reputation is nothing to be feared by SMEs on nationwide or international markets as long as the majority of customers are not actively looking for information and are unwilling to convert knowledge into action. Much more important for SMEs are customers in the form of large corporations, passing down their customers' requests as part of their sustainability-oriented supply chain strategy.

In this regard CR is considered a threat. SMEs fear that large companies and to a lesser extent political regulations begin demanding CR verifications through formalised instruments and management systems, often not suited for them. The more CR is regarded as evidence of efficient business or even as a precondition for business, demand for certification will increase (as could best be observed in the case of quality management and ISO 9.000).

„[...] an insane effort for middle-sized companies, getting this dictated from above: „You have to have that“.

Overall, it can be said that in SMEs responsibility is still less broad and less integrated in core processes but has a much more solid ethical basis instead. The specific national context (as characterized above for Germany) becomes more noticeable in the case of SMEs. The majority of owner-managers do not refer to the concept of CR but to personal (and thereby corporate) beliefs (Jenkins 2009), which are rooted in culture. This coincides with the stronger legal and societal regulations in Germany which made the concept of CR/CSR deemed unnecessary (“something we do anyhow”) and lead to the current perception of first and foremost a threat (“I hope this whole CR-thing will pass soon”).

Despite lesser stakeholder pressure SMEs don't fall short behind large companies in the scope of CR (relative to their possibilities). The width of tackled issues however is smaller. SMEs concentrate on fewer issues which they deal with comprehensively. This is directly connected to nature and scope of stakeholder expectations. Just like large companies SMEs take responsibility for the stakeholders particularly visible to them.

CR as a Success Factor for Small-and Medium-Sized Companies?

The question of the relevance of managerial decisions and activities for company success is as fundamental as it is impossible to answer conclusively (Nicolai & Kieser 2002). In this, CR is no exception. Even though it can be shown that CR

policies are accompanied by company success this could also mean that CR is a luxury only successful companies can afford.

The quantitative empirical studies that are investigating the correlation of a company's social and financial performance additionally suffer from problems in response and existing knowledge gaps of the respondents. On the one hand, those companies that actively and successfully practice CR show a higher participation in surveys. Besides, with strongly normative topics like CR the "socially desired" answers of the respondents can easily be identified.

On the other hand, qualitative studies time and again show the limits of self-evaluation of company actors. Not only reputation effects are hard to measure but also other positive effects attributed to CR such as employee motivation, improved communication, higher capacities for learning and innovation etc. Interviews with corporate actors clearly showed that activities usually are neither purposefully employed nor are the supposed success factors measured. The positive effects brought into play by scientists and consultants are merely reproduced verbatim. This repeats findings of empirical environmental management studies (e.g. Walther 2004). Regarding the current and potential stakeholder demands and stakeholders' willingness to penalise and reward companies we think it is important to differentiate between CR as a *necessary* and as a *sufficient* condition for success.

Against the background of stakeholder pressure CR already is regarded as a necessary condition by large companies. This trend will most likely accelerate. Of growing importance in this process are social and ecological problems along the supply chain (e.g. EIRIS 07). Next to the threat of scandalisation, it is expected that the mass market will increasingly consider social and ecological aspects. This won't take the form of an expansion of today's actively sustainability-oriented group of consumers, but will manifest as the activation of a different consumer segment. Today's small group of sustainability-oriented consumers is marked by a high level of knowledge and an intensive concern for social and ecological questions. The consumer segment moving up, on the other hand, will be characterised by an acceptance of social and ecological aims in the form of minimum standards and a (limited) willingness to pay for them. However, they will also have a lower level of knowledge, a lesser willingness to search and less reservations concerning big business.

Furthermore, trading firms can promote CR on the market side. For consumers the image of certain trading firms plays an important role. Certain characteristics are attributed to trading firms that both influence and are influenced by the entire perception of the range of products offered. Trading firms can take the role of a gatekeeper for sustainability issues. It is to be expected, that trading firms will increasingly consider the orientation of their product line-up on CR criteria as relevant for success (HDE 2007).

Product labels and process certificates will play a major role. To work with or respectively participate in labels/ certificates requires an organisational foundation (and in many cases makes this foundation itself a part of the certification). Besides, a stronger sustainability orientation is more and more intensively discussed in the field

of public procurement. Here, too, a formal orientation towards labels and certificates is to be expected.

Large companies seem to be prepared. They already manage social and ecological issues quite explicitly and comprehensive and regard CR as a topic of still increasing importance. The larger companies monitor trends and realise where they have catching up to do, e.g. supply chain responsibility (EIU 2008) or the use of CR-management systems und –instruments (Bertelsmann 06). The latter is something larger companies are familiar with. Also, few of these companies do without the professional communication of their CR policy and measures. As defensive as their CR-approach may be, overall larger companies seem to be relatively well prepared for an increase in stakeholder demands on the markets as well as by politics.

The “protected niche” of medium-sized businesses, far from the pressure of NGOs and financial markets, however is endangered. The philanthropic activities are only positively perceived by the employees and the local community and are therefore hardly effective for companies with super-regional sales markets (e.g. Pleon Kothes Klewes 2005). Increasing demand for confirmation of CR goes in hand with the requirement to integrate CR in the core processes and for organisational implementation. Management systems such as the shortly available ISO 26.000 norm will promote such proceedings. SMEs seem to be ill-prepared. It remains an open question whether these systems are suitable for medium-sized businesses (Fassin 2008), but SMEs rightly fear that this question won’t arise in practice.

That CR is a sufficient condition for a company’s success is often asserted but far from being proved. In addition to the methodical problems mentioned above, one has to ask for the imitability of success factors. Although internal resources like dynamic capabilities play an import role, the specific CR-measures, -performance and -reporting take centre stage. These are relatively easy to imitate. Another question is whether or not there will be a “race to the top” regarding CR. The market for CR is characterised by high search costs and inertia. Once a company is considered “good”, it is hard to displace. Even if there will be a higher willingness on the side of the customers to pay for superior CR-performances, decisions will be oriented on self-set or collective standards rather than on the search for the best, aiming at satisficing instead of optimising.

There are however cases where CR leads to economic success. Often cited positive effects (e.g. improvement of reputation and image, increases in profits or higher employee motivation) are observable, but predominantly attained by those companies that act from an ethical motivation (or at least are perceived as such) and not because they have identified a success factor (BMVIT 2007). Such an approach to CR was attributed to SMEs. Additionally SMEs enjoy public confidence much more than large businesses (e.g. Stiftung Wertvolle Zukunft 2006). But, given the current market conditions, a general claim of CR as a sufficient condition for economic success remains impossible, especially because an alleged success factor can not reasonably be connected with “not doing it for success”.

Conclusion

The described perception and behavioural patterns, routines the decision-makers are stuck in, pose a threat for SMEs. Both the presented ideal roles in which decisions are made more impede than support a timely preparation for an intensified discourse and demands regarding CR. SMEs have to make up leeway and need to take a closer look at what different stakeholders demand. They need to work on CR in core business activities, organisational integration and have to prepare for increasing importance of certification and labels and accompanying management systems and instruments, even though this is not considered the way SMEs work.

It is no surprise that most SMEs don't associate their social and environmental values and measures with the concept of CR (because it is normal for the responsible businessman) and regard CR as a threat (from a management point of view). „In most cases, the term CSR is not a concept that makes people feel comfortable or one with which they can identify“ (Murillo & Lozano 2006). There has been research on how the concept CR can be made useful for SMEs, how small- and medium-sized management can be supported etc., but what we tried to highlight is that established patterns of perception and SMEs' culture have to change too.

As we observe robust patterns of perception and behaviour, structural influences much more than individual aspects should offer explanations. These have to be analysed in more depth. Global and national society's view on sustainability issues and corporate responsibility influence decision-makers in large companies as well. But we also know that the professional social environment that corporate actors move in differs with company size. The global business-class elite of big companies' management (incidentally including the leaders of the bigger NGOs, Shell 2002) most likely develops different structures of meaning than SMEs' owner-managers, much more embedded in the local community. Also, it has to be asked whether society has different expectations and views on the scope for actions of different-sized companies. The much bigger trust in SMEs regarding social and environmental aspects for example is not backed up by the width and depth of CR performance and reporting. Last but not least we have to observe the structures emerging right now, as CR still is in a very dynamic state of uncertainty and change (of meaning, power and rules).

References

- Tometschek, G. (2008). Ethik und Nachhaltigkeit in der Wirtschaft. *Glocalist* 26:8, 13.
- Abländer, M.S. & Ulrich, P. (Eds.) (2009). 60 Jahre Soziale Marktwirtschaft – Illusionen und Reinterpretationen einer ordnungspolitischen Integrationsformel. St. Galler Beiträge zur Wirtschaftsethik 44, Bern u.a.
- Backhaus-Maul, H. & Braun, S. (2007). Gesellschaftliches Engagement von Unternehmen in Deutschland. Rote Seiten. Beilage zur Zeitschrift "Stiftung und Sponsoring" 5/07.
- Bader, N. et al. (2007). Corporate Social Responsibility bei kleinen und mittelständischen Unternehmen in Berlin. Berlin.
- Basu, K. & Palazzo, G. (2008). Corporate Social Responsibility: A Process Model Of Sensemaking. *Academy of Management Review* 33:1, 122–136.
- BDI - Bundesverband der Deutschen Industrie e.V. (Ed.) (2007). BDI-Mittelstandspanel. Ergebnisse der Online-Mittelstandsbefragung, Berlin.
- Bertelsmann Stiftung (Ed.) (2006). Die gesellschaftliche Verantwortung von Unternehmen. Gütersloh.
- Bertelsmann Stiftung (Ed.) (2007). Das gesellschaftliche Engagement von Familienunternehmen. Gütersloh.
- BMVIT - Bundesministerium für Verkehr, Innovation und Technologie (Ed.) (2007). TRIGOS. CSR rechnet sich. Wien.
- Burton, B. & Goldsby, M. (2007). Corporate Social Responsibility Orientation, Goals, and Behavior - A Study of Small Business Owners. *Business & Society* 48:1, 88-104.
- Chatzidakis, A. et al. (2007). Why People Don't Take their Concerns about Fair Trade to the Supermarket: The Role of Neutralisation. *Journal of Business Ethics* 74:1, 89–100.
- CCCD - Centrum für Corporate Citizenship Deutschland (Ed.) (2007). Corporate Citizenship. Gesellschaftliches Engagement von Unternehmen in Deutschland und im transatlantischen Vergleich mit den USA. Berlin.
- Cohen, W. & Levinthal, D. (1990). Absorptive Capacity: A New perspective on Learning and Innovation. *Administrative Science Quarterly* 35:1, 128-152.
- DiMaggio, P. & Powell, W. (1991). Introduction. In: Powell, W. & DiMaggio, P. (Eds.). *The New Institutionalism in Organizational Analysis*. Chicago / London, 1-38.

- Eckert, S. et al. (2007). Nachhaltiger Konsum aus Sicht der Verbraucher. In: Belz, F.-M. et al. *Nachhaltiger Konsum und Verbraucherpolitik im 21. Jahrhundert*. Marburg, 53-79.
- EIRIS - Ethical Investment Research Services Ltd (Ed.) (2007). The state of responsible business: Global corporate response to environmental, social and governance (ESG) challenges. London.
- Ernst&YoungAG (Ed.) (2007). Verantwortung und Entrepreneurship. Nachhaltige Unterne mensführung im Mittelstand. Essen.
- EIU - The Economist Intelligence Unit (Ed.) (2008): Doing good. Business and the sustainability challenge. London.
- Fassin, Y. (2008). SMEs and the fallacy of formalising CSR. *Business Ethics: A European Review* 17:4, 364-378.
- Forsa (Ed.) (2005). Corporate Social Responsibility in Deutschland. Berlin.
- Fuller, T. & Tian, Y. (2006). Social and Symbolic Capital and Responsible Entrepreneurship: An Empirical Investigation of SME Narratives. *Journal of Business Ethics* 67:3, 287–304.
- Garriga, E. & Melé, D. (2004). Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics* 53:1/2, 51-71.
- Geertz, C. (1973). Thick Description: Toward an Interpretive Theory of Culture. *The Interprettion of Cultures: Selected Essays*. New York, 3-30.
- Giddens, A. (1984). The Constitution of Society: Outline of the Theory of Structuration. Cambridge.
- GILDE GmbH (Ed.) (2007). Gesellschaftliches Engagement in kleinen und mittelständischen Unternehmen in Deutschland. Detmold.
- Grant Thornton International Ltd. (Ed.) (2008). Corporate Social Responsibility: a necessity not a choice. London.
- Hammann, E. et al. (2009). Values that create value: socially responsible business practices in SMEs—empirical evidence from German companies. *Business Ethics: A European Review* 18:1,37-51.
- HDE - Hauptverband des Deutschen Einzelhandels (Ed.) (2007). Verantwortlicher Handel. Wahrnehmung der sozialen Verantwortung durch deutsche Einzelhandelsunternehmen. Brüssel.
- Hillary, R. (Ed.) (2000). Small and Medium-Sized Enterprises and the Environment. Sheffield.

- Hudson, S. & Roloff, J. (2008). Idealism, compliance or cooperation – Why do Breton SMEs engage in corporate social responsibility. International Conference “Strategy of Sustainable Development in the E.U and neighbours” Czestochowa, Poland, October, 13-14.
- IfM – Institut für Mittelstandsforschung (Ed.) (2007). Schlüsselzahlen des Mittelstands in Deutschland. Bonn.
- Impulse / Sparkassen Finanzgruppe (Ed.) (2004): MIND 04 – Mittelstand in Deutschland. Köln.
- Jamali, D. & Zanhour, M. et al. (2009). Peculiar Strengths and Relational Attributes of SMEs in the Context of CSR. *Journal of Business Ethics* 87:3, 355-377.
- Jenkins, H. (2009). A ‘business opportunity’ model of corporate social responsibility for small and medium-sized enterprises. *Business Ethics: A European Review* 18:1, 21-36
- Jenkins, H. (2006). Small Business Champions for Corporate Social Responsibility. *Journal of Business Ethics* 67:3, 241–256.
- Jenkins, H. (2004). A Critique of Conventional CSR Theory: An SME Perspective. *Journal of General Management* 29:4, 37-57.
- Maaß, F. & Clemens R. (2002). Corporate Citizenship: Das Unternehmen als ‘guter Bürger’. Institut für Mittelstandsforschung (Ed.). *Schriften zur Mittelstandsforschung* 94 NF, Wiesbaden.
- Matten, D.& Moon, J. (2008). "Implicit" and "Explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review* 33:2, 404-424.
- Miller D. et al. (2008). Stewardship vs. Stagnation: An Empirical Comparison of Small Family and Non-Family Businesses. *Journal of Management Studies* 45:1, 51-78.
- Mintzberg, H. (1979). Patterns in Strategy Formation. *International Studies of Management and Organization* 9:3, 67-86.
- Morsing, M. & Perrini, F. (2009). CSR in SMEs: do SMEs matter for the CSR agenda? *Business Ethics: A European Review* 18:1, 1-6.
- Murillo, D. & Lozano, J. (2006). SMEs and CSR: An Approach to CSR in their Own Words. *Journal of Business Ethics* 67:3, 227–240.
- Mutz, G. & Egbringhoff, J. (2006). Gesellschaftliche Verantwortung von Unternehmen. Die Rolle der Arbeitnehmervertretung. Berlin/München.
- Nicolai, A. & Kieser, A. (2002). Trotz eklatanter Erfolglosigkeit: Die Erfolg sfaktorenforschung weiter auf Erfolgskurs. *Die Betriebswirtschaft* 62:6,579-596.

Nielsen, A.E. & Thomsen, C. (2009) Investigating CSR communication in SMEs: a case study among Danish middle managers. *Business Ethics . A European Review* 18:1, 83-93.

Ortmann, G. (1995). Formen der Produktion - Organisation und Rekursivität. Opladen.

Palazzo, G. (2008). Des Kaisers neue Kleider? Kritische Anmerkungen zum CSR-Boom. Vortrag auf der 16. Jahrestagung des Deutschen Netzwerks Wirtschaftsethik (DNWE), Bonn 4.-5. April 2008.

Pleon Kohtes Klewes GmbH (Ed.) (2005). Unternehmen Verantwortung: der Global Stakeholder Report 2005. Bonn.

RNE - Rat für Nachhaltige Entwicklung (Ed.) (2008). Glaubwürdig – wirtschaftlich – zukunftsfähig, Eine moderne Beschaffungspolitik muss zukunftsfähig sein. Berlin.

Russo, A. & Tentati, A. (2009). Formal vs. Informal CSR Strategies: Evidence from Italian Micro, Small, Medium-sized, and Large Firms. *Journal of Business Ethics* 85:2, 339–353.

Schreyögg, G. et al. (2003). Organisatorische Pfade – Von der Pfadabhängigkeit zur Pfadkreat on? Schreyögg, G. & Sydow, J. (Eds.) (2003). *Strategische Prozesse und Pfade*. Wiesbaden, 257294.

Simon, H. (1957). A Behavioral Model of Rational Choice. *Models of Man, Social and Rational: Mathematical Essays on Rational Human Behavior in a Social Setting*. New York.

Shell International (Ed.) (2002). *People and Connections: Global Scenarios to 2020*. London. sneed Hamburg (Ed.) (2007). *Corporate Social Responsibility bei kleine und mittleren Untenehmen in der Metropolregion Hamburg*. Hamburg.

Spence, L. et al. (2003). Assessing Social Capital: Small and Medium Sized Enterprises in Gemany and the U.K. *Journal of Business Ethics* 47:1, 17-29.

Stiftung Wertvolle Zukunft (Ed.) (2006). *Ethik Monitor*. Bamberg.

Teece, D. et al. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal* 18:7, 509-533.

Tilley, F.(2000). Small firm environmental ethics: how deep do they go? *Business Ethics: A European Review* 9:1, 31-41.

UMU - Union Mittelständischer Unternehmen e.V. (Ed.) (2008). *Umfrage zu Werten und wertbezogenem Handeln im Mittelstand in Deutschland*. München.

Vives, A. (2006). Social and Environmental Responsibility in Small and Medium Enterprises in Latin America. *The Journal of Corporate Citizenship* 21, 39-50.

Walther, M. (2004). Umweltmanagementsysteme und Unternehmenskultur. München.

Weick, K. (1995). Sensemaking in Organizations. Thousand Oaks.

ZEW - Zentrum für Europäische Wirtschaftsforschung GmbH (Ed.) (2008). Wirtschaftliche undgesellschaftliche Bedeutung von Familienunternehmen. Mannheim.

PART THIRTEEN: CONSUMERS AND ETHICS

CONSUMER PERCEPTION OF FAIR TRADE: A CROSS CULTURAL STUDY

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Abstract

The term of fair trade basically explains the fair exchange of goods and money between producer and consumer without ignoring the quality and price balance. Even though the concept itself gains an importance by globalization, the basic idea is to protect local production which is generally in small quantities. The most well known fair trade products are the agro-cultural ones like coffee, cacao, banana and tea, which are usually produced in special climate habitats but consumed all over the world. The fair payment to the producers usually causes a price increase of the fair trade products compared to the market averages. In this situation, the consumer response to the product, brand and the companies' fair trade applications gains another importance. The price elasticity of the product and the consumer perception depend of many factors.

The aim of this study is to see the major knowledge and perception differences of Turkish and Austrian consumers towards fair trade products and brands. First a pre-study has been conducted, in order to understand the common fair trade brands and product groups in both countries. In the second step of the study, a questionnaire has been conducted to understand the knowledge and the consumer perceptions in both countries. Demographic factors and consumption patterns of the selected fair trade products have also been studied to define the differences.

Keywords: Fair trade, Turkish, Austria

Introduction

Increasing globalization and competition is causing social and environmental problems all over the world. Companies choose to supply from producers which enable them to lower their production costs, prefer to manufacture in Third World countries which have lower labor costs and minimum environmental and labor regulations. These practices usually generate higher profits for companies but have drastic outcomes as well.

Fair trade as an alternative trade practice, started to be used on a very limited scale since 1940s (Moore, 2004). Today, the volume of the fair trade goods and the size of the fair trade markets are growing every year, fair trade markets even reached the volume of million dollars (VanderHoff Boersma, 2009). But this still does not mean fair trade becomes the mainstream. As a matter of fact, some countries do not have any kind of fair trade initiations, neither as consumers nor as producers

(www.fairtrade.net). Different level of integration to fair trade can be observed. This study aims to denote different levels of fair trade awareness and willingness in Austrian and Turkish market examples.

Literature Review

The term “Fair Trade” refers the fair exchange of money and goods (like coffee, tea, cacao, banana, cotton, textile, mines etc.). Although fair trade production could be in a wide diverse field of operation from shoe producing to mining, usually the agricultural production is associated with fair trade, since they are produced with very high number of working hours and more easily distinguished by the retail customers.

Although there is a lack of well agreed definition among the organizations, NGOs dealing with fair trade and academicians, almost all of them agree on some of the basic details of fair trade. Fair trade is defined by FLO (Fair Trade Labeling Organizations International) and IFAT (International Federation for Alternative Trade as; “...a trading partnership, based on dialogue, transparency and respect, which seeks greater equity in international trade” (www.wfto.com, www.fairtrade.net). Most of the definitions emphasize “partnership” between fair trade producers and the companies, which are usually described as transparent, mutually respected, long term and sustainable relationships (Hira& Ferrie, 2006; Moore, 2004; McDonagh, 2002; Nicholls, 2002). In practice, there are examples of partnerships in the legal structure of the companies as well (Doherty&Tranchell, 2005). Fair trade is also defined as the transaction which finally aims to balance the gap between the developed and the developing economies (Strong, 1996). But it seems to be a long term objective and a very hard one to accomplish.

From the marketing point of view, fair trade is a growing potential as a niche market (Nicholls, 2002). Some of the companies take fair trade as a future perspective for sustainable economy, while others prefer to aim for higher profit margins and ignore their responsibility to their consumers as well as their suppliers. In a larger perspective, fair trade is the company’s guarantee of securing and auditing whole supply and production process and taking the full responsibility of what they deliver to their consumers (Blowfield, 2003).

Although ethical trade and fair trade concepts are two different concepts, the definitions can be confused sometimes (Tollens, 2003). Especially in markets like the UK, ethical trade refers to ensuring the working conditions (Smith& Barrientos, 2005). While the fair payment aspect of fair trade is highlighted, the substitution of the ethical trade could be understood. Although fair payment is related to most of the concerns of fair trade, fair payment and working conditions are not the only aspect of it.

Fair payment is the amount which at least covers the cost of sustainable production and living (Doherty&Tranchell, 2005). The minimum price paid for the products are established by fair trade organizations, different by the type, quality and additional features of the products (such as organic or shade grown etc.) (www.fairtrade.net).

Fair payment also covers the concept of price transparency, on time payment and not tampering with the weight of the product (Blowfield, 2003). Establishing associations for producers, providing other benefits such as building schools, or supplying fresh water could also be done to support them. These non monetary benefits also increase the quality of life in the production location.

Social aspects of the fair trade and fair payment are also important. Especially in sectors with high labor requirement (like agricultural production, or handmade production), producers usually work as a family in order to increase the workforce and family income. With the lack of auditing, child and female workforce could easily be embezzled, and in some cases this could be far beyond extra working hours or not receiving legally mentioned work benefits. Some sources even mention slavery (McDonagh, 2002), starvation wages, bonded labor, child labor abuse and intimidation of workers (Levi & Linton, 2003; Toler& Schweisguth, 2006). Without fair payment and suitable working conditions, workers could face the lack of shelter, unsanitary conditions for work and accommodation, lack of health conditions which may lead to infant mortality, epidemic diseases, and work diseases or work place accidents (Levi & Linton, 2003).

In such production conditions, while producers earn wages barely covering their survival needs, most of the families do not have the surplus to send their children to school. Beside the education expenditures, families need their children to work and earn for their living. This basically leads these people to a vicious circle that they can not find a better job, since they did not have the chance to get a better education (Toler& Schweisguth, 2006).

Earning such little money for high labor requiring jobs, also force people to seek other sources of income, or other ways to increase the profit. Especially in agricultural production, this could cause environmental damage. Most of the small scale farmers do not have their own land and even if they do, the cost of producing certain quality level products requires certain investment. Using chemical fertilizers in large amounts could increase the productivity in the short run, but in the long run this would affect the quality of the soil and production negatively. Also logging the trees in order to enlarge the plantations, over watering, using genetically engineered seeds seem to be a good way to increase the profit, but have a damaging effect on the environment as well as the product quality and sustainability (Loureriro & Lotade, 2005; Levi & Linton, 2003).

Even though the benefits are so out and obvious, fair trade practices are also criticized. By setting the minimum price for the goods, the system encourages fair trade producers to produce more and others to enter the market. But if the production shifts to fair trade, the change of the market equilibrium will not be enough to support all of the producers. Even the system eliminates the mediators; this is not enough to cover the price difference by itself. Even though the system is better than social and economical aids, it still causes some problems with market conditions and criticized by creating unfair competition (Levi & Linton, 2003; Tollens, 2003; Nicholls, 2002).

One of the most important barriers for the transaction of producers to fair trade production is labeling. Fair trade labeling is done by FLO (Fair Trade Labeling

Organizations International) and 17 national fair trade organizations. By the agreed label, logo or certificated mark, the product supplied to consumers is approved to be produced in fair trade conditions. The most difficult part is that every mediator within the system should be approved for fair trade (Tollens, 2003; www.fairtrade.net). The presence of third parties (like FLO and others) in the certificating role is not well appreciated by the big companies, which wanting to enter this niche market, but not wanting to have this auditing system all the time. Even some big companies claim to supply and produce 100% ethical and in fair trade conditions without having the certification (Hira& Ferrie, 2006). In some cases more complex certification systems are also added to fair trade certification like organic production, that makes the process much more expensive, complex and long run for the fair trade producers (Hira& Ferrie, 2006; Loureiro&Lotade, 2005; Moore, 2004; Levi & Linton, 2003).

When it comes to the consumer point of the fair trade practice, countries tend to have different implementations, standards and practices differing with the legal structure as well as the consumer profile. The main indicator seems to be the willingness to pay which is related to consumption power (Loureiro&Lotade, 2005) and the availability of products at retail points (Nicholls, 2002; Low&Davenport, 2005). It is obvious that consumers are more aware of ethical production and consumption then before, but this does not always lead them to more ethical purchasing behavior (Strong, 1997).

To be able to understand the consumer perspective of Austrian and Turkish fair trade markets, market structures will be more closely examined. This study is aimed to see the differences and understand the different levels of consumer and market adaptation to fair trade.

Research Methodology

The objective of the study is to understand the consumer knowledge level and perception about fair trade in two different markets: Austria and Turkey. The reason of the selection of these countries is that they show very different stages of fair trade adaptation and data accessibility. For this purpose a multi-step research was planned. It is also aimed to clarify the market environment consumer profile and reasons of consumers for buying fair trade products by this multi-step research.

First, by monitoring the market in both of the countries (in selected cities of Graz (Austria) and Istanbul (Turkey)) it was aimed to understand the fair trade market structure. To be able to understand the market conditions and structures of Austria and Turkey, official websites of FLO and other fair trade organizations, consumer networks and retail stores have been studied. Retail stores and special stores were visited to see the range of the fair trade products, and features of these products like price, product origin, quality and packaging.

In the second step, in order to understand the knowledge level, awareness or fair trade practices and perception towards fair trade, 24 face-to-face interviews were conducted in both of the countries (Graz (12) and Istanbul (12)) through April and

May 2009. The semi-structured interviews took between 10-25 minutes. Product category, brands, the price difference consumers would tolerate to pay for fair trade products, general perception and their special observations and opinions were asked through the interviews.

In the last step of the research, regarding the information collected from the interviews; research was designed focusing on the knowledge level of the consumers, and their perception about fair trade. An internet questionnaire was formed and translated into German and Turkish. A pre-study was conducted to see if the concepts were translated right, and some adjustments were done before the primary study. Mail groups from Graz and Istanbul were informed, and the questionnaire was conducted for two weeks in July 2009.

The research was limited with people who claim that they know the meaning of fair trade and at least once bought fair trade products. Knowledge levels and perceptions towards fair trade were asked in two scales. Demographics and fair trade consumption frequency of the respondents were also asked.

Results

To be able to understand the general structure of the markets, both the Austrian and Turkish markets were examined. Austria uses Transfair fair trade certification since the early 1980s. The labeling initiative was founded in 1993 by 30 member organizations (Krier, 2007). On the world fair trade web site, there are three companies from Austria as fair trade partners, and more others license to implement fair trade (www.wfto.com). By 2007, 84% of Austrians were familiar with the fair-trade logo, which is 63% more compared to the recent year. The estimated fair trade market size of Austria in the year of 2007 was 52.8 million Euros (Krier, 2007). It is possible to find, fair trade code, fair trade logo in Transfair website (<http://www.fairtrade.at>). On this website, fair trade products and brands are available in 11 different categories, including flower, cacao, coffee etc. Retail stores, fair trade florists, fair trade restaurant or cafes could be searched by state and city.

In addition to that, Austrian consumers have an increasing interest in organic, genetically natural products. Austria is one of the leading, organic agricultural producers in Europe and also has the policy to support local production. Fair trade fairs and weeks are supported by NGOs, government and local administrations (Krier, 2007). Austrian consumers are highly informed, and involved with the source of the product, especially when it comes to products like coffee.

On the other hand, Turkey is not a member of FLO and does not have any official fair trade logo. Turkey can not be found in any of the fair trade organizations' partners list, neither as consumer nor as producer. In the retail system fair trade products can be found in small specialized shops and they are usually also organic products. Widely known and preferred super markets do not have fair trade products in any category.

The first step of the research was face-to-face interviews in both countries. Decoded and organized interview results can be summarized as follows. Turkish respondents were not that knowledgeable about fair trade. Only 3 of them could give a proper definition of fair trade. Most recalled product categories were coffee and chocolate, while only one of them could give a brand name, which was Starbucks (Starbucks company claims to supply and produce 100% responsibly and ethical, but its products do not have fair trade certification (Hira& Ferrie, 2006). Starbucks have marketing communication activities in Turkish market referring to fair trade applications). Only five respondents declare that they have bought fair trade or organic products. The concept of fair trade is highly confused with organic products, and understood limited to agricultural production. All of them think they are too expensive and very hard to find. Max. price difference they would like to pay is 5-10%, 8 of the respondents denote that they do not believe that the price difference in fair trade products is for the producers and that is some kind of a marketing claim of the company, which they can not verify. All of the respondents prefer local production, because they find them fresher, cheaper and more suitable for their taste.

Austrian respondents all know the definition of fair trade, not only by fair pay perspective but also, environmental, social and economic perspectives. They recall product categories of coffee, chocolate, banana, tea, cotton and textile (shoes etc.). The first fair trade brand they recalled was “Zotter Schokoladen” (all twelve of the respondents) and they all can identify the fair trade logo. They declare that they are willing to pay 30-50% more for fair trade, organic or genetically natural products, according to their income. 7 of the respondents think, buying fair trade products is their obligation towards the Third World countries, since they have a better way of living compared to them. 10 of the respondents declare that they would not think of purchasing fair trade product, unless they see it in the shop, and compare the price with other products and find it reasonable. When it comes to fresh agricultural products, 11 of the respondents prefer local production, because they find them fresher and more suitable for their taste.

Although these interviews could not represent the whole Austrian population, they were very useful to understand the structural benefits and administrative support to promote fair trade products. Availability of product in regular retail stores, gives consumers the chance to compare and consume the fair trade products. In most of the cases price difference was found to be tolerable by the consumers, as a result the fair trade market is growing in most of the product categories (Krier, 2007).

Consumer awareness and willingness to pay for fair trade product gives the momentum to the fair trade market in Austria. But to be able to understand the level of awareness of Austrian respondents, it would be useful to take a better look at the brand they all recall, Zotter Schokoladen.

Zotter Schokoladen-Zotter Chocolate:

Zotter Company is a “chocolate” company founded by Josef Zotter and his friends in Bergl, Austria in 1999. But Josef Zotter’s relation with chocolate started way before this date. With the investment of 18.5 million Euros, in

2007, Zotter moved to its new factory in Bergl. Currently the Zotter Company has 100 employees; most of them are local women of Bergl.

Zotter Company is one of a kind. Zotter is one of the few chocolate producers in Europe, to start the production with cacao beans, and proud to claim that they are the only company processing organic (bio) and fair trade cacao in Europe as well. Every year Zotter Factory processes 450 tons of cocoa from different countries like; Nicaragua, the Dominican Republic, Ecuador, Costa Rica, Panama, Peru and Brazil. Other suppliers are Paraguay (sugar) and Tyrol-Austria (milk), which are also organic. Zotter is a contracting partner of Fairtrade since 2004. The company explains to its consumers that the fair trade initiation is necessary, with the statement; *“as cocoa processing company we carry the responsibility for the living and working conditions of the cocoa farmers in Third World countries”* (<http://www.zotter.at>). They are not just explaining about their aim, but also give information about their projects in Latin America and about fair trade concept itself.

Zotter is not just famous with their fair trade and bio (organic) chocolates. In a country such as Austria, Zotter has a justified reputation about their design and innovativeness (Glitzner, 2007). Andreas H. Grätze is Josef Zotter's partner from the foundation, and he was specialized about the designs, and packaging, receiving several design rewards. Innovative products are also one of the strongest parts of Zotter, but one of the distinguished specialties is to inform consumers about the origin of the cacao used in the product. Products such as coffee, origin is very important but it is not a very common informative action when it comes to chocolate industry (Toler, 2006). By informing consumers about the origin, the company adds a differentiated identity to the product.

With chocolate theater in the factory, and factory tours, Zotter not only shows its production conditions, which has been awarded as sustainable, but it also gets a chance to show the value creation for Third World countries that it is supplied from. Probably, these are the reasons why Zotter was the first name recalled in Graz when the words fair trade were spelled.

On the last step, an internet based questionnaire was conducted. When the questionnaire results are examined, it is seen that, there were 407 respondents from Austria and 203 from Turkey (572 to 407 (71%) and 461 to 203 (44%)). Even the populations of the two countries are not easily represented by these samples, to be able to compare the sample in such statistical analyses; random 203 respondents were chosen among Austrians. Perception scale results of random 203 and 407 Austrian respondents were compared by t-test, to make sure these random 203 are not significantly different from the sample of 407.

Table 1- Knowledge measurement statements

	True	False	Don't know
Fair trade is paying suppliers at least the min. production expenses			
Fair trade increase the quality of the production			
Fair Trade certification guarantees that there were no child worker abuse through the production process			
Fair trade products are more expensive because there are less fair trade production			
Fair trade products are only raw materials for further production			
Fair trade products are produced 100% natural, without any chemical fertilizer			
Fair trade products can be agricultural products only			
Through the fair trade production people only work 8 hours a day			
When we are buying fair trade products the extra money we are paying is donated by the company to some projects in Third World countries			
Fair trade products are products produced from fair trade raw materials, but it does not have any control about the other production process			
Fair trade products are produced for the final consumers, there is no semi finished version of fair trade production			
Fair trade products are always bio (organic) products			
Fair trade logo is same in every country			
Fair trade production can only be done in Asia, Africa and Latin America			
Fair trade products are not first quality products, but priced as first quality			
To be able to put fair trade logo on the product, producer should fulfill supplying and producing requirements			
Fair trade production locations have a better working safety regulations			
Fair trade products have shorter shelf life			
A product could be labeled as fair trade if only it is first quality			
Fair trade producers are small scale producers that is the reason there are limited fair trade product in the markets			
Companies producing fair trade products are non-profit organizations			
Fair trade production is not limited with agricultural production			
Fair trade producers could be partners of the companies they are supplying for			
Fair trade producers should have a certain education, and fair trade certificate verifies that they had fair trade education			
Fair trade products should be packed differently and stored			

separately from normal products			
There is not a minimum payment in fair trade, producers sell for the best price			
Fair trade is usually a long run partnership between producers and buyer companies			
On time payment is a requirement of air trade			
Production environment is audited by fair trade organization to make sure the production process does not harm, forests, water resources, animal population etc.			
Fair trade label costs high, that is the reason fair trade products are expensive			

The gender mode of Austria respondents is Female (105 respondent, 52%), the age group is between 30-35 years old (23%), marital status is single (62%), with education level of high school graduate (32%) and income between 1001 and 1500 Euros/month (23%). The gender mode of Turkish respondents is Female (140 respondent, 69%), the age group is between 36-41 years old (18%), marital status is single (56%), with education level of university graduate (35%) and income between 1501 and 2000 Euros/month (23%). The income and education level of Turkish respondents seem to be higher, which is not the country average, but the limiting question of buying fair trade products may affect the sample characteristics. The average fair trade product consumption of Austrian respondents is 7.3 (standard deviation 3.2) and Turkish respondents is 1.3 (standard deviation 0.7).

In order to measure the knowledge level of the respondents, 30 sentences were formed and asked to be answered as “true”, “false” or “I do not know”. The sentences include working conditions, definitions, economic and quality aspect of fair trade, environment issues etc. In order to eliminate the internet search option and disable the respondents to reset their answers, five sentences were shown on the web page for two minutes only. Table 1 shows the knowledge measurement statements, some of the statements were formed negatively.

The results of the knowledge measurement are based on the correct answers given by the respondents. Austrian respondents’ mean of right answer is 18.3 out of 30 questions. The right answer rate is higher (6.5) about environmental audit. Less right answer were given about working hours (only 78 respondents) and working environment safety (83 respondents). Turkish respondents have the mean of 7.2 out of 30 questions. The mean of the right answer is higher (7.8) about working conditions and child labor. Less right answers were given about the origin of the fair trade production (only 8 respondents) and environmental audit (10 respondents) In the second part of the questionnaire fair trade perception of the consumers aimed to be measured in four main headlines;

- Economical aspect of fair trade: fair payment, cost-price balance, perception about companies’ and producers’ gain from fair trade,
- Laboring: child labor, working hours and conditions, living conditions and social structure in production locations,
- Environmental aspect: definitions like shade grown, forests and environmental protection, animal protection, over watering and chemical usage in agricultural production,

- Quality aspect: quality of the products and fair trade and organic labeling.

Because the main understanding stands in the agricultural production, headlines were designed as the agricultural fair trade production was studied. 35 statements were formed in five point Likert scale (1 totally disagree- 5 totally agree) in order to understand the perceptions about fair trade.

To be able to see the perception differences of Austrian and Turkish respondents, independent sample t-test was conducted. Out of 35 statements only 9 statements were significantly different for these two groups. Other statements show high positive perception for both of the countries.

Table 2- Perception differences

	Mean Difference	Sig.
Fair trade products are over-priced	-0.90	0.00
I do not think the price difference that I am paying for fair trade products are 100% directed to fair trade producers	-1.05	0.00
Fair trade is just a marketing communication activity, I do not think it really make a chance for producers	-0.84	0.00
Companies claim that they are doing fair trade but I can not know how they really operate over those countries	-0.99	0.00
Fair trade products are in better quality	0.16	0.04
Big companies should buy fair trade products to use at wok place, that's more than an individual can buy	0.20	0.01
Fair trade practices should be presented and thought better to society	0.33	0.00
Western countries are responsible for the economic and social injustice in Third World countries, so they should support fair trade in these countries	0.25	0.00
I feel responsible for under developed societies and feel obligated to support fair trade	1.33	0.00

Turkish consumers are significantly more price sensitive. They do think the price difference is too high at these products, and have less confidence in companies about whether or not they give the economic benefit to the supplier they are paying. They do not find these companies transparent enough. Turkish consumers also think industrial consumption is important and fair Austrian consumers think, fair trade production should be supported, especially by the western society. Fair trade products perceived as higher quality. Austrian consumers believe fair trade products should more widely consumed by industrial consumers, because they have higher consumption power. Austrian Consumers think more publicity and education should be given to society about fair trade and its effects on suppliers.

Conclusion

This study aimed to gain an understanding about two different markets' fair trade practices. Austria is a more developed economy comparing to Turkey with less population (www.worldbank.org). Income per capita is higher than Turkey, and this reflect to the consumption power of the citizens.

The Turkish market is not very familiar with the fair trade concept and products. Turkey is not an official member of any fair trade organization and does not have a proved fair trade logo. Consumers usually confused fair trade with organic, while most of the fair trade products are also organic. The consumers are not familiar with the product alternatives and have a very low trial rate. The knowledge level is very low, even the most well-known things about fair trade are not known. Even the perception of fair trade found to be relatively high; this does not lead to the purchasing behavior because of economic and social reasons.

One of the most important reasons for this mistrial is lack of fair trade products in the widely performing retail chains. The price level is relatively high compared to European countries and also perceived very high by Turkish consumers. Trust for the fair trade companies is very low. Turkish consumers are not sure about the economic surplus is transferred to the fair trade suppliers.

On the other hand, Austria is not unfamiliar with fair trade. Organic, genetically free, shade grown products are known and consumed. Austrian consumers are more aware of the social and environmental issues and more concerned about these problems even they might happen in another country. They feel responsible for the Third World Countries, and feel obligated to support them. Consumers believe the industrial consumption would help to improve fair trade, since the consumption volume per customer is high compared to retailing sector.

Retailers have a big impact on Austrian consumers. They are willing to buy fair trade products if they can see them on the shelf and compare with other products. The positive impact of the retailing sector over fair trade could be observed in Austrian market.

For further research, it is recommended to work on samples with better understanding about fair trade. Knowledge level, perceptions and consumption willingness should be measured separately in different demographic and life style segments. Political views of consumer could also be included in the further researches.

Understanding of fair trade could be studied not only as consumer point of view but also producer point of view, in countries such as Turkey and Austria since they both have a strong agricultural production. It can also be possible to see the differences of perception between agricultural fair trade and the other types of fair trade production.

References

- Blowfield, Mick. (2003). Ethical supply chain in the cocoa, coffee and tea industries. *GMI (Greener Management International)* 43, 15-24
- Doherty, Bob.& Tranchell, Sophi. (2005). New thinking in international trade? A case study of the Day Chocolate Company. *Sustainable Development* 13, 166-176.
- Glitzner, Michael (2007). *Innovation in the context of Zotter Schokoladen Manufaktur GmbH*. Published Seminar Paper. Grin Pub. Germany. www.grin.com
- Hira, Anil. & Ferrie Kared. (2006). Fair trade: three key challenges for reaching the mainstream. *Journal of Business Ethics* 63, 107-118.
- Krier, Jean-Marie (2007). *Fair trade 2007: New facts and figures from an ongoing success story. A report on fair trade in 33 consumer countries*. DAWS-Dutch Association of Worldshops, Netherlands
- Levi, Margaret.& Linton, April.(2003). Fair trade: a cup at a time? *Politics & Society* 31:3, 407-432.
- Loureiro, Maria L.& Lotde, Justus. (2005). Do fair trade and eco-labels in coffee wake up the consumer conscience? *Ecological Economics* 53, 129-138.
- Low, William. & Davenport, Eileen. (2005). Postcards from the edge: maintaining the alternative character of fair trade. *Sustainable Development* 13, 143-153.
- McDonagh, Pierre. (2002). Communicative campaigns to effect anti-slavery and fair trade: The cases of Rugmark and Cafedirect. *European Journal of Marketing* 36:5/6, 642-666.
- Moore, Geoff. (2004).The fair trade movement: parameters, issue and future research. *Journal of Business Ethics* 53, 73-86.
- Nicholls, Alexander J. (2002). Strategic options in fair trade retailing. *International Journal of Retail & Distribution Management* 30:1, 6-17.
- Smith, Sally& Barrientos, Stephanie. (2005). Fair trade and ethical trade: are there moves towards convergence. *Sustainable Development* 13, 190-198.
- Strong, Carolyn. (1996). Features contributing to the growth of ethical consumerism-a preliminary investigation. *Marketing Intelligence & Planning* 14:5, 5-13.
- Strong, Carolyn. (1997). The problems of translating fair trade principles into consumer purchase behaviour. *Marketing Intelligence & Planning* 15:1, 32-37.
- Toler, Deborah.& Schweisguth, Mellisa A.(2006). *While chocolate lovers smile, child cocoa workers cry: Abusive child labor in the cocoa industry: how*

corporations and international financial institutions are causing in, and how fair trade can solve it. Global Exchange e-book. [Online]. [Referred to 15.05.2009]. Available: www.globalexchange.org

Tollens, Eric. (2003). Fair trade: an illusion? Katholieke Universiteit Leuven working papers no: 84. [Online]. [Referred to 07.04.2009]. Available: <http://www.agr.kuleuven.ac.be/aee/clo/wp/tollens2003e.pdf>

VanderHoff Boersma, Francisco. (2009). The urgency and necessity of a different type of market: the perspective of producers organized within the fair trade market. *Journal of Business Ethics* 86, 51-61.

www.fairtrade.net

<http://www.fairtrade.at>

www.wfto.com

www.worldbank.org

www.zotter.at

GAMBLING, SMOKING AND DRINKING: WHAT THE VICTIMS EXPECT FROM THE RETAILERS

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Abstract

Corporate social responsibility and the expectations of stakeholders is well researched. Fewer scholars have considered those industries which might be regarded as damaging or unethical. Some stakeholders may have been included in such studies, but those who are damaged by the products - the victims and their families and friends - have not been surveyed. This is an attempt to redress the balance. This paper considers the dangers faced by heavy users of tobacco, alcohol and gambling. A short analysis of the CSR statements made by the large UK firms in these sectors and the expectations of other stakeholders firms is followed by a series of interviews with heavy users and addicts to discover their attitudes towards the providers and what these firms should do to eliminate the problems they have faced. The results suggest that their expectations are very low.

What is original/value of paper

Key words: Tobacco, Alcohol, Gambling, Addiction, Corporate Social Responsibility

Introduction

Much of what we do can be harmful if taken to excess. This includes what we eat and drink, as well as our leisure and work activities. Self-preservation and common sense restrain most of us, but some products are addictive, and the vulnerable sections of the community may need some protection from these. Coussins noted that 'the majority of people who drink alcohol enjoy it without causing harm to themselves or others' (Portman Group), but others may become alcoholics. Volberg (2001 p.1) pointed out that, 'for most people gambling is an enjoyable, if occasional, experience'. However, the same author added a rider to this: 'for a few, it may lead to debilitating problems that harm the people close to them and the community'. As Gupta and Derevensky (1998 p. 18) put it, 'the need to understand what differentiates this small subset of individuals is what feeds addiction theorists and fuels research'. This paper does not attempt to discover the reasons for addiction. Nor does it seek to discover what society believes should be done. Instead, it considers specific group of stakeholders, the heavy users of alcohol and gambling as well as reformed addicts to

try to learn from them, whom they hold responsible and how their conditions could be prevented. Smokers are included in the study, not only because of the addiction of nicotine, but also because the impact of anti-smoking campaigns may assist the research.

Corporate Social Responsibility Expectations from the Alcohol, Tobacco and Gambling Industries

Radebauh and Gray (2002 p. 119) have defined CSR as ‘accountability to society as a whole with respect to matters of public interest such as community welfare, public safety and the environment’. McWilliams and Siegel (2001 p. 117) believe that CSR represents ‘actions that appear to further some social good, beyond the interests of the firm and that which is required by law’. Guthrie and Parker (1989) concluded that an organisation needs to disseminate enough CSR information so that it is judged a good citizen. If this was not reason enough, there are other factors that can influence firms. Key and Popkin (1998) maintain that the moral and ethical concerns of stakeholder groups can lead to regulation. Lantos (1999 p. 224) has noted that ‘morally upright behaviour can help fend off government regulation’.

Where products could be regarded as ethically dubious, or socially undesirable or problematical, there is a greater expectation of responsible behaviour. Compliance with the law may be insufficient. Van Dijken (2007 p. 146) ‘some industries’ core business activities seem incompatible with social welfare’. In such circumstances, there may well be an expectation that the firms will try harder to appear responsible, to compensate for the products in which they deal.

For example, Carroll (1991) expected that the alcohol industry should accept responsibility for problems such as alcoholism and drunk driving. Rundle-Thiele's study of alcohol in Australia (2008) has suggested that the appropriate level of responsibility would be to ensure that adults were adequately informed about the dangers of the product. Bramner and Pavelin (2004 p. 88) studied voluntary social disclosures by large UK companies and found that ‘the tobacco and alcoholic drinks industries are associated with highly visible social issues. They are thought to produce large social externalities (e.g. crime and health) and are subject to strong regulatory regimes (competition, safety and taxation)’. Thus, it may be assumed that they would take preventative measures to ensure that no further legislation affects them.

Methodology

Having established that someone must accept responsibility for those who become addicted to products which are sold quite legally, this study then intends to consider some of the possible ways in which such addictions could have been prevented. However, the people who know best are those heading towards or recognise their dependency, and especially those who have done something to rectify their position. This means that such people have to be identified and then interviewed. This is easy with smokers, but more difficult with heavy drinkers and gamblers, and in these cases

assistance was given by licensees, betting shop and casino managers. To meet and talk with former addicts was even more complicated, but again assistance was offered by those in the trade and individual members of Alcoholics Anonymous. This does mean that the sample may not be representative all addicts, and this opens the door to further research if this pilot study is considered worthwhile. The questions centre around whether or not they perceive their situation to be a problem, and what, if anything, they believe could have been done to discourage their activities. Clearly, simple question and answer techniques would be inappropriate, and so each individual interviewed must be treated separately and the questions developed according to their responses.

Cowton (1998) has discussed the difficulty of obtaining the truth on occasions in interviews. As Dalton and Metzger (1992 p. 207) have explained 'virtually every empirical enquiry of issues relevant to applied business ethics involves the asking of questions that are sensitive, embarrassing, threatening, stigmatizing or incriminating'. This means that the respondents had to be willing to speak openly, in the interests of academic research. Almost always the answers seemed to be honest, but there may well have been occasions when exaggeration or bashfulness prevailed. Such comments have been omitted when they were recognised.

Tobacco

Hastings and Aitken (1995 p. 6) have pointed out that 'within the confines of doubt that will always exist in social scientific research, it has now been accepted that tobacco advertising does influence children's smoking behaviour', and advertising was prohibited. Work undertaken by Sargent et al (2000) and MacFadyen et al (2001) helped influence the Tobacco Advertising and Promotion Act 2002.

As far as the tobacco companies are concerned, the best customer is the young customer, as he or she will have a life-time of smoking ahead of them. Dijk et al. (2007) in their study in the Netherlands showed that children smoke to be 'cool' and because they are curious about the habit. Once they have started, as Wolburg (2008 p. 73) has noted, 'the best smoking cessation efforts in the world will not change the addictive nature of the product'. Wiium and Wold (2006), in their study in Norway, discovered that the home environment is a great influence on smoking behaviour in children. This would suggest that the best way to prevent children from starting to smoke is to educate them from an early age, especially within their family circles. Further legislation remains a distinct possibility.

It is relatively easy to find smokers. Some are known to us personally, and others can be found outside buildings, particularly public houses and places of work. A simple enquiry will produce reformed smokers. Thus, a good sample was available. In this study, fifty smokers of various ages and both sexes were surveyed. They all claimed to use about twenty cigarettes a day. All were aware of the health problems associated with smoking, but none expressed any concern. None were interested in stopping. All agreed that they had initially been attracted by the fact that cigarettes appeared grown up, and many had watched their parents smoke. Over half of the

sample did not approve of children starting the habit, but none thought that any preventative measures would be successful.

Twenty-five people who had stopped smoking were also interviewed. All claimed that they were delighted at their success, and felt that everyone should stop. All of them agreed that they had started smoking in order to appear more adult, though as one said 'I started smoking to look old, and now I have stopped so that I can live to be old' and another said 'I started smoking to look like a man, and I stopped to prove that I was one'. They all felt that the campaigns against smoking were having a great deal of success, especially the ban on smoking in public places, and there was a consensus that the more the media depicted smoking in a bad light, the greater the effect it would have on the younger generation.

Finally, five people who had become seriously ill as the result of smoking were interviewed. All agreed that they had been aware of the health hazards of smoking, and all had started because it was fashionable and made them appear older. All wanted to warn future generations not to start, and also wanted more publicity on the dangers, more effective education and continued media campaigns. All five apportioned much of the blame onto the tobacco companies, but agreed that they could not be held fully accountable. Two blamed the government, for accepting the revenues from tobacco for many years, without doing anything serious to dissuade the public from smoking.

Alcohol

The Director of Alcohol Concern (2003), Eric Appleby, has observed that 'there is something about the British way of drinking that is resulting in people developing serious health problems younger than ever before... We need to think carefully about placing much greater emphasis on education and prevention if we are to get to grips with this damaging trend. This needs to go hand in hand with practical steps to look at the way alcohol advertising effectively promotes binge drinking – and it's only right that the drink trade should pay something towards this, given the miserly sums currently being spent.... We desperately need a co-ordinated national strategy on alcohol misuse'.

Over a quarter of a century before, Smith (1981) advocated education as the best method of avoiding alcohol abuse, but he experienced serious concerns about how this should be done. As most people do drink responsibly, he was concerned about the message, and felt that mentioning the quantities of alcohol that should be consumed was both complicated and controversial. He would have preferred individual education, but realised that would require many educators who are properly trained and knowledgeable. Any message would have to be moderate, for, as Ritson observed, (1982 p.327) 'dire warnings are seldom heeded'.

Saffer and Dave (2006 p. 617) a US study showed that 'reduction of alcohol advertising can produce a modest decline in adolescent alcohol consumption'. A study of alcohol warning labels in the USA and Canada by Greenfield et al (1999 p.

261) suggested that they had some impact, especially to 'offset an overall trend towards lower public concern about health risks of alcohol'.

Paton et al (1981 p. 1319) noted that 'estimates of the number of alcoholics are unsatisfactory because of lack of a suitable definition, difficulties of establishing danger levels of alcohol intake, and, above all, the formidable problems of carrying out surveys'. The Office of National Statistics (2001) has stated that 50 units of alcohol a week for men and 35 for women should be regarded as 'very heavy drinking'.

Ten men who consumed twice this quantity were used for research purposes. Each continued to work, and none found any problems with their intake. All confessed that, very occasionally, they had been unable to go to work because of their drinking. However, all denied that they had a problem. They drank because they enjoyed so doing, and saw no reason to stop, or even to reduce the quantity they took. All were aware of the medical problems which could occur to them, but all rejected the possibility. As one said 'it is my life style choice'.

Five men who no longer worked were also interviewed. Each was regarded as medically unfit for work as the result of their drinking. None of these felt guilty, and none regarded themselves as alcoholics, but rather people 'who liked a good drink'.

Thus, the survey of heavy drinkers and alcoholics who continued to consume provided no worthwhile information regarding the allocation of responsibility. Four men and one woman who were recovering alcoholics were also interviewed. None had taken a drink for over a year, and two had given up alcohol over ten years ago. Each gave an honest and daunting account of their days of drink, with each, quite independently, maintaining that they were well aware of their dependency but chose to deny it. They, too, would have regarded themselves as heavy drinkers, or people who enjoyed a drink, but they convinced themselves and others that they were in control. Each described how they lost control of their lives, but eventually something happened that made them realise that the only solution was to give up drinking. Four did this by starting to attend Alcoholics Anonymous, and the other, with help from the family, also succeeded. None of these had any ideas about how they could have received been discouraged from drinking.

They all maintained that they had been told by family and friends, and all simply ignored what they were told. The only way in which they stopped was by realising themselves that it was necessary. This group was concerned about others, and all were prepared to offer personal help to anyone who needed advice about drinking or encouragement to stop. None blamed the alcohol manufacturers or retailers for the state to which they had been reduced, and none felt that punitive increases in the price of alcoholic drinks would have deterred them from their actions. They felt that it was something inside them - one described it as a devil, insisting that another drink would be a good idea when all common sense dictated otherwise, but the devil always won - that caused the excessive drinking. Thus, all arrived at the idea that education, not just on the problems of drink, but how to address them, might, and just might assist some people. They agreed that much more research on the causes of alcoholism and the ways in which it could be addressed was by far the most helpful way forward. The prohibition of alcohol advertising and health warnings on bottles

were dismissed, with each person explaining that so long as the media displayed pubs at the centre of programmes, drinking was glamourised.

Thus, heavy drinkers had little to offer, as they did not believe that they had a problem. Only the reformed alcoholics realised that their previous lifestyles were damaging, and for them, the cause of their drinking remained a mystery, and thus the solutions remained hidden. Education was a possibility, but only a remote one. They felt that research into the causes of the disease was the most likely way to find any solutions.

Gambling

Problem gambling involves participation to such a degree that it compromises, disrupts or damages family, personal or recreational pursuits (Leisieur and Rosenthal, 1991). It is a small section of the younger generation who are most likely to develop a gambling problem. 'There is substantial amount of research indicating that the onset of gambling addiction occurs during adolescence or teenage period' (Yafee and Brodsky, 1997 p. 315). Gupta and Derevensky (1998 p. 18) have noted that 'most youth participate in gambling activities without serious consequences or the development of dependency, yet some feel the need to gamble excessively; assigning it priority above all else'. Ladoucer et al (2004) confirm this. They discovered that forty per cent of adolescents participate in regular gambling, with rates of problem gambling four times greater than that found in the adult population. Only one in seven recognised the problem, and none sought help. Ferland et al (2002) discovered that the use of a video improved the knowledge of adolescents significantly and corrected misconceptions. Hodgins et al (2002) found that one third of problem gamblers quit as the result of a specific event involving a crisis, often citing negative emotions and financial concerns as the reasons.

Finding a suitable sample proved difficult. Few people admit to heavy gambling, and even fewer confess to an addiction or former addiction. Thus, the first sample included a professional gambler, a casino manager and six managers of betting shops. The professional gambler admitted that he was prepared to wager large amounts of money on a regular basis, for, as he said, 'that is my job'. He claimed to have seen many problem gamblers in his life. They were, to him, people who were losing but did not know when to stop. He felt that this was important. When he lost a set amount, he would leave the table and wait for the cards to turn in his favour. All of those in this sample felt that many problem gamblers simply denied that they had a problem, and no amount of discussion would make them see that they were unsuccessful. They all believed that there was nothing that could be done to help them, except that eventually they might see the error of their ways.

Gambling shop managers in several northern cities identified regular gamblers within their establishments. Fifty agreed to participate in structured interview. All agreed that they liked to bet, but none felt that they did so to excess. Just over half felt that young people should be allowed to participate in gambling without any form of discouragement. The remainder complained that advertisements, particularly those on the television, made betting appear excessively attractive and should be reduced

or banned altogether. Only one of those involved in the interviews believed that there should be education in schools to make demonstrate the negative aspects of gambling.

Conclusions

The purpose of this study was to investigate the attitudes of heavy users and addicts of certain products that may be regarded as unethical because of their potentially destructive nature. The results are interesting and potentially helpful. Those who were heavy users of tobacco and alcohol could see nothing wrong with their activities, and could make no helpful suggestions about how the vulnerable could be assisted, presumably because to do so would mean that they had to accept the error of their own ways. Of the gamblers, only a minority felt that a reduction in advertising would be a way of discouraging the young, and only one gambler recommended education as a preventative measure. On the other hand, the reformed addicts had a totally different view. They recognised the damage which could be done by the products which they had used to excess, and wished to prevent others from making the same mistakes. Thus, they advocated education of the younger generation, so that they could become more aware of the dangers that they could face. If anyone should now know how best to deter addicts, then it is the addicts themselves. Clearly more research needs to be undertaken with such groups, but other academic research already supports this view. Action is needed. The question appears to be the source of the finance to support what would be an expensive scheme. If the industries wish to appear responsible, then they should be anxious to contribute. If governments are sincere in their claims of wishing to protect society, they also should be anxious to offer their support.

References

- Alcohol Concern (2003). Website: Welcome [Online]. [Referred to 20.4.05]. Available: www.alcoholconcern.org.uk/servlets/wrapper/aboutus.jsb
- Bramner, S. and Pavelin, S. (2004). 'Voluntary social disclosures by large UK companies' *Business Ethics: A European Review* 13:2/3, 86-99.
- Carroll, A.B. (1991). 'The pyramid of corporate social responsibility: towards the moral management of organizational shareholders' *Business Horizons* 34:4, 39-48.
- Cowton, C.J. (1998). 'The use of secondary data in business ethics research' *Journal of Business Ethics* 17:4, 423-434.
- Dalton, D.R. and Metzger, M.B. (1992). 'Towards candor, cooperation and privacy in applied business ethics research: the randomized response technique (RRT)' *Business Ethics Quarterly* 2:2, 207-221.
- Dijk, F., De Nooijer, J., Heinrich, E. and De Vries, H. (2007). 'Adolescents' view on smoking, quitting and health education' *Health Education* 107:2, 114-125.
- Ferland, F., Ladouceur, R. and Vitaro, F. (2002). 'Prevention of problem gambling: modifying misconceptions and increasing knowledge' *Journal of Gambling Studies* 18:1, 19-29.
- Greenfield, T.K., Graves, K.L. and Kaskutas, L.A. (1999). 'Long-term effects of alcohol warning labels: findings from a comparison of the United States and Ontario, Canada' *Psychology and Marketing* 16:3, 261-282.
- Gupta, R. and Derevensky, J.L. (1998). 'An empirical examination of Jacobs' general theory of Addictions: do adolescent gamblers fit the theory?' *Journal of Gambling Studies* 14:1, 17-49.
- Guthrie, J. and Parker, L.D. (1989). 'Corporate Social Reporting: a rebuttal of legitimacy theory' *Accounting and Business Research* 19:76, 343-352.
- Hastings, G.B. and Aitken, P.P. (1995). 'Tobacco advertising and children's smoking: a review of the evidence' *European Journal of Marketing* 29:11, 6-17.
- Hodgins, D., Makarchuk, K., el-Guebaly, N. and Peden, N. (2002). 'Why problem gamblers quit gambling: a comparison of methods and samples' *Addiction Research and Theory* 10:2, 203-218.
- Key, S. and Popkin, S.J. (1998). 'Integrating ethics into the strategic management process: doing well by doing good' *Management Decision* 36:5, 331-8.
- Ladouceur, R., Blaszczynski, A. and Pelletier, A. (2004). 'Why adolescent problem gamblers do not seek treatment' *Journal of Child and Adolescent Substance Abuse* 13:4, 1-12.

Lantos, G.P. (1999). 'Motivating moral corporate behavior' *Journal of Consumer Marketing* 16:3, 222-233.

Lesieur, H.R. and Rosenthal, M.D. (1991). 'Pathological gambling: A review of the literature' *Journal of Gambling Studies* 7:1, 5-40.

MacFadyen, L., Hastings, G.B. and MacKintosh, A.M. (2001). 'Cross-sectional study of young people's awareness of and involvement with tobacco marketing' *British Medical Journal* 322, 513-517.

McWilliams, A. and Siegel, D. (2001). 'Corporate Social Responsibility: a theory of the firm perspective' *Academy of Management Review* 26:1, 117-132.

Office of National Statistics (2001). *Living in Britain: Results from the 1996 General Household Survey*. London: HMSO.

Paton, A., Potter, J.F. and Saunders, J.B. (1981). 'ABC of alcohol' *British Medical Journal* 283, 1319-1319.

Portman Group Website Promoting Sensible Drinking [Online]. [Referred to 23.05.09]. Available: www.portman-group.org.uk.

Radebauh, L.H. and Gray, S.J. (2002). *International Accounting and Multinational Enterprises*. New York: John Wiley and Sons.

Ritson, B. (1982). 'Helping the problem drinker' *British Medical Journal* 284, 327-329.

Rundle-Thiele, S. (2008). 'Raising the bar: from corporate social responsibility to corporate social performance' *Journal of Consumer Marketing* 25:4, 245-253.

Saffer, H. and Dave, D. (2006). 'Alcohol advertising and alcohol consumption by adolescents' *Health Economics* 15, 617-637.

Sargent, J.D., Dalton, M., Beach, M., Bernhardt, M., Heatherton, T. and Stevens, M. (2000). 'Effect of cigarette promotions on smoking uptake among adolescents' *Preventative Medicine* 30, 320-327.

Smith, R. (1981). 'Preventing alcohol problems: a job for Canute?' *British Medical Journal* 283, 972-975.

Van Dijken, F. (2007). 'Corporate social responsibility: market regulation and the evidence' *Managerial Law* 49:4, 141-184.

Volberg, R.A. (1997). 'The future of gambling in the United Kingdom. Increasing access creates more problem gamblers' *British Medical Journal* 320:7249, 1556.

Wolburg, J.M. (2008). 'Smoking cessation: why do smokers fail' *Journal of Consumer Marketing* 25:2, 72-73.

Wiiium, N. and Wold, B. (2006). 'Family and school influences on adolescent smoking behaviour' *Health Education* 106:6, 465-479.

Yaffee, R.A. and Brodsky, V.J. (1997). 'Recommendations for research and public policy in gambling studies' *Journal of Gambling Studies* 13:4, 309-316.