Editorial:
Sustainability: Overview and Concepts

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I am pleased to write the first Editorial for the International Journal of Innovation in Business. The journal was launched in the summer of 2012 and since then we have published three issues, and more than 10 papers. On most occasions, each issue of the journal is accompanied by a book review or case study relating to business and management topics.

The current issue is Volume 1 number 4. This issue starts with a discussion on sustainability, key definitions, background and some new research areas.

Abstract

In this paper, the author discusses the sustainability and explores some seminal definitions and the background of sustainability. Due to the globalization and severe competition, organizations are working hard to get the edge over competitors. In such volatile situations, understanding sustainability, its concepts and applications can pave the path for success. In brief, this paper provides an overview of sustainability and its concepts.

Keywords: Sustainability, Definitions of sustainability, Brundtland report, Greenhouse gas (GHG).

Introduction

Sustainability practices found their roots in the ancient cultures. Recent attention to environmental issues and sustainability can be observed in the works of many economist and philosophers. It has been suggested that we are locked in a system of 'fouling our own nest' by dumping chemical, radioactive, and heat wastes into water; noxious and dangerous fumes into the air. Sustainability can lead to potential benefits including less waste, greater productivity, and higher level of innovation (Porter and Van der Linde, 1995).

Moreover sustainability was always an emerging concern to the policy makers and in the last decade, there was an enormous amount of concern towards sustainability issues, in the Brundtland report (UN, 1987). More recently a steady increase can be seen in both public and private sector recognition of the need to conserve and protect the environment as a societal issue. Embracing environmental issues without changing current processes provides the company with a sense of social legitimacy; it usually leads to narrow, incremental solutions (Corbett and Wassenhove, 1993; Wood, 1991).

The main focus is to safeguard the interest of future generations to come. The key sustainability definitions are summarized in Table 1.

Table 1: Key sustainability definitions

Source / Author	***Key features in sustainability definition***
Brundtland Report, (UN, 1987)	Using resources to meet the needs of the present without compromising the ability of future generations to meet their own needs
Sikdar (2003)	A wise balance among economic development, environmental stewardship, and social equity
Elkington (2004)	A macro-viewpoint on supply chains and balance between the environmental, social and economic dimensions
Carter and Rogers (2008)	An integration of social, environmental, and economic issues

Sustainability as discussed above in Table 1, consists of three pillars (social, environmental and economic). The Brundtland report (UN, 1987) forms the basis of the most popular definition of sustainability and focuses on the well-being of future generation to come. The main idea of three dimension of sustainability is considered as most prevalent (Elkington, 2004 and Carter & Rogers, 2008).

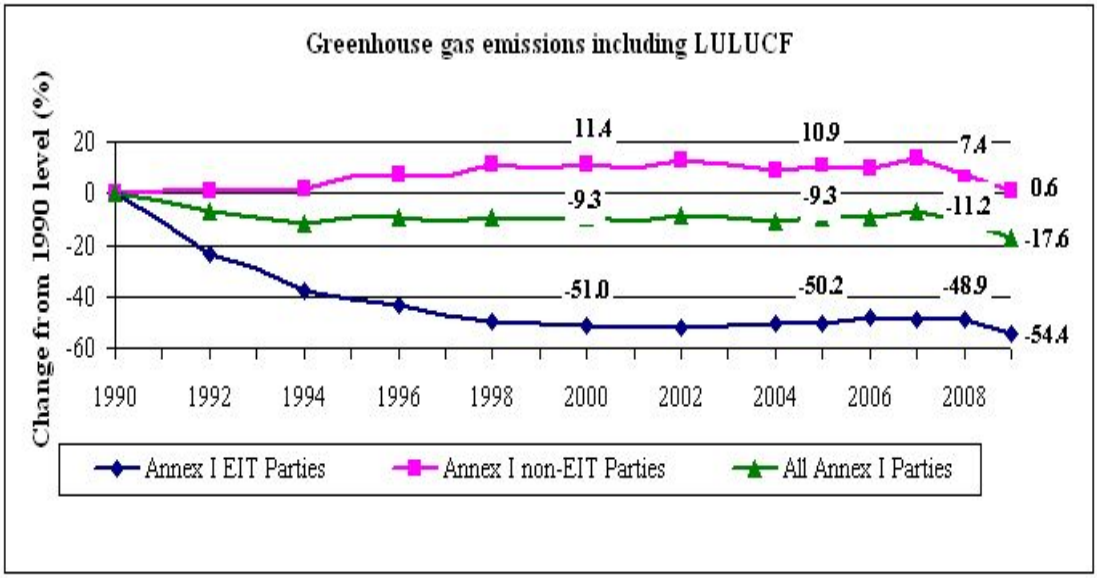
Background

After the Brundtland report in 1987, the next big treaty and protocol adapted in 1997 was the Kyoto Protocol, which is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing Greenhouse Gas (GHG) emissions. Under the treaty, industrialised countries signed up to reduce their emissions of greenhouse gases by at least 5% from 1990 levels during the period 2008- 2012 (UNFCCC, 2011).

The ultimate objective of the Climate Change Convention (UNFCCC) is to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

Figure 1, illustrates key Greenhouse gas emission trends for Annexure 1 (Industrialised) countries based on the latest UNFCCC publication.

Figure 1: Greenhouse gas emission trends



• From 1990 to 2009, total aggregate GHG emissions including LULUCF decreased by 17.6 per cent, from 17,673.8 to 14,560.5 Tg (Tetragram) CO2 equivalent. One teragram (Tg) equals one million tonnes.

• For Annexure I Parties with economies in transition (Annexure I EIT Parties), GHG emissions including LULUCF decreased by 54.4 per cent. From 2000 to 2009.

• For Annexure I non-EIT Parties, GHG emissions increased by 0.6 per cent including LULUCF from 1990 to 2009.

In figure 1, EIT means Economies in Transition and LULUCF means land use, land-use change and forestry (LULUCF) activities. These affect changes in carbon stocks between the carbon pools of the terrestrial ecosystem and between the terrestrial ecosystem and the atmosphere. The figure is for Annexure 1 parties, which include the European Union countries and countries with economies in transition.

In accordance with Climate Change Convention, and the relevant decisions of the Conference of the Parties, countries that are Part of the Convention must submit national greenhouse gas (GHG) inventories to the Climate Change secretariat. These submissions are made in accordance with the reporting requirements adopted under the Convention, such as The UNFCCC Reporting Guidelines. The concern towards environment and its affects lead to the organizations to think in advance towards sustainability and issues associated with it. Sustainability is a very broad topic and there are lots of opportunities for new research work. Operations and manufacturing have ample opportunities to study sustainability and it will be interesting to see the effect of sustainability in family owned organizations.

References

Carter, C. & Rogers, D.S. (2008) 'A framework of sustainable supply chain management: moving toward new theory', International Journal of Physical Distribution & Logistics Management, vol. 38(5), pp. 360-387.

Corbett, C.J. & Wassenhove, V. (1993) 'The Green Fee: Internalizing and Operationalizing Environmental Issues', California Management Review, vol. 36(1), pp. 116-135.

Elkington, J. (2004) The Triple Bottom Line: Does It All Add up, London: Earthscan.

Porter, M.E., and Van der Linde, C. (1995) 'Green and Competitive: Ending the Stalemate', Harvard Business Review, vol. 73(5), pp. 120-33.

Sikdar, S.K. (2003) 'Sustainable development and sustainability metrics', The American Institute of Chemical Engineers Journal, vol. 49 (8), pp. 1928-1932.

UN (1987) The Brundtland Report, (On line), Available: http://www.un.org/esa/sustd ev/ csd/csd15/media/backgrounder_brundtland.pdf (17th May 2012).

UNFCCC (2011) National greenhouse gases inventory data for the period 1990- 2009 , (On line), Available: http://unfccc.int/documentation/ documents /advanced_search/ items/ 3594. php? rec=j&priref=600006593#beg (13th May 2012).

Wood, D.J. (1991) 'Corporate Social Performance Revisited', Academy of Management Review, vol. 16(4), pp. 691-718.