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This is the author version of article published as:

Miller, Evonne and Buys, Laurie and Rich, B. (2006) Defining the social dimension of triple bottom line for the Australian dairy industry: Challenges, priorities and opportunities. In Ho, Christine, Eds. *Proceedings 2006 Australasian Business and Behavioural Sciences Association International Conference*, Adelaide.

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Defining the social dimension of triple bottom line for the Australian Dairy Industry: Challenges, Priorities and Opportunities

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Abstract

Understanding the social impact the dairy industry has on employees and local communities is part of Dairy Australia's commitment to the Triple Bottom Line (TBL) framework, which emphasises that businesses have social, environmental and economic impacts and responsibilities. This social impact assessment project, currently underway, aims to identify and quantify the social value of the dairy industry, whilst proactively identifying areas for improvements. Through an online survey for employees and a random postal survey of 15,000 dairy community residents, the project investigates how Australians perceive the Dairy Industry, as well as their wellbeing, quality of life, community involvement and work experiences. This paper provides an overview of the study, outlining why developing quantifiable indicators for the social dimension of TBL that are designed to be as rigorous as current financial reporting is a business priority. Examples of how the findings will contribute to the identification and management of issues, measures of industry sustainability and future strategy are discussed.

Key words: social dimension of triple bottom line reporting, corporate social responsibility, sustainability reporting, quantitative indicators

Defining the social dimension of triple bottom line for the Australian Dairy Industry

This paper provides an overview of a research project funded by Dairy Australia to develop a method for assessing social impact that can be used as a component in triple bottom line (TBL) reporting, which in turn may be used in public or regulatory reporting. This project will provide a preliminary social impact report for the Australian dairy industry, as well as raising awareness of the social impact and value of the industry and developing the basis for solutions to improve industry environmental and social impacts. This paper outlines the background to TBL becoming a business obligation and the necessity for a quantitative approach to measuring the social dimension, focussing on why social TBL can be defined as “social wellbeing”, the identification of quantitative pre-existing measures and conceptualising social in terms of internal (employee) and external (community) impact. Finally, the potential application of the findings to the industry, in terms of identification and management of issues, measures of industry sustainability, community engagement and future strategy, are discussed

The impetus for this project comes from changes in the role and responsibilities of industry and businesses. In the 1950's, businesses focused on making a profit, with those who provided employees with a regular paycheck described as “good” employers. In the new millennium, however, the advent TBL reporting means that large businesses are increasingly judged on their economic, environmental and social impact (Elkington, 1998). There are at least three inter-related reasons for why industry and the business community has embraced the TBL challenge of assessing, monitoring and enhancing their economic, environmental and social impacts, First, societal expectations and public opinion illustrate the value of implementing environmental and social initiatives. For example, the Millennium Poll on Corporate Social Responsibility, which surveyed representative samples of 1,000 citizens in each of 23 countries, found that corporate social responsibility is a global expectation. Participants believed that, as well as making a profit, businesses should make a difference in society; 20% reported that they had spoken many times in the past year with friends or family about companies' social behaviour (Birch, 2002). Second, with success on environmental and social dimensions linked to business success and profits (Hedberg & von Malmborg, 2003; Tschopp, 2003; Willard, 2002) there is a financial incentive for adhering to TBL principles. Indeed, the Millennium poll found that, in the past year, 40% of the 25,000 participants had “thought about punishing a specific company perceived as not socially responsible”. Third, to some extent, TBL is advisory for larger corporations, with Tschopp (2003) arguing that organisations currently releasing social reports do so for two reasons: because investors demand it and/or to receive recognition for their good actions.

Yet, whilst embracing the philosophy of TBL and CSR is becoming viewed as standard business practice, issues of documenting, reporting, and monitoring organisational progress on environmental and social issues have been neglected. The fact that TBL and CSR prompted businesses to think, discuss and consider environmental and social impacts was, until recently, considered sufficient. Currently,

however, attention has focused on defining, measuring and monitoring the most neglected element of TBL, the social component (McKenzie, 2004). As the quote from Blowfield (1999) illustrates, the social element has been neglected simply because it is much more difficult to conceptualise, quantify and measure social impacts than the economic and environmental dimensions:

The reason environmental standards developed before social ones was not just that there was greater consumer pressure, but because there appeared to be a greater consensus on environmental issues. While social responsibility meant delving into the often murky waters of cultural and ethical relativism, human versus economic rights, and social justice, there was a feeling that environmental responsibility could employ universal principles defined by 'hard science' (Blowfield, 1999, p.1)

The lack of a universal measure for an organisation's social impact, combined with inherent difficulties in understanding and defining what is social, has meant that organisations are currently able to emphasise the elements and aspects of "social" which best suit them (Henderson, 2001). Indeed, a detailed report on Triple Bottom Line Measurement and Reporting in Australia by the Allen Consulting Group recently concluded that, "in practice, companies indicate that there is no 'right way' to identify, measure and report on non-financial inputs or outcomes. Moreover, businesses prefer approaches that grow out of their own priorities and commercial logic" (Suggett & Goodsir, 2002, viii). The most obvious problem, however, with businesses self-selecting social indicators is that there comparisons cannot be made within or across organisations and industries. If businesses do not measure social issues in a consistent, frequent or objective manner, there can be no external or comparative judgments about progress, and hence, no accountability. In fact, because the social dimension is currently a qualitative and internal judgment, the current consensus is that current social reporting is little more than effective marketing, public relations and positioning exercises (Gray & Milne, 2004; Tschopp, 2003). Specifically, Gray and Milne (2004) believe that the "practices of, social and environmental reporting continue to owe more to rhetoric and ignorance to practice and transparency" (p.76), whilst Tschopp (2003) states that "without regulated reporting, standards and guidelines, they represent little more than a positioning strategy" (p.11).

Despite the development of several international frameworks which establish global standards and guidelines, precisely what social impacts are and how they should be measured is debatable. The Global Reporting Initiative (GRI), established in 1997 through the United Nations Environment Program to develop and disseminate globally applicable, comparable and credible Sustainability Reporting Guidelines (Global Reporting Initiative, 2002), is perhaps the most well-known framework. The GRI defines the social dimension as "an organisation's impacts on the social systems within which it operates" (p.51) and identifies four core social performance indicators; Labour Practices (five subcategories; Employment, Labour/Management Relations, Health & Safety, Training & Education, Diversity & Opportunity), Human Rights (six subcategories, Strategy & Management, Non-Discrimination, Freedom of Association, Collective Bargaining, Child Labour, Forced & Compulsory Labour), Safety (three subcategories, community, bribery & corruption, political contributions), Product Responsibility (three subcategories, Customer Health & Safety, Products & Services, Respect for Privacy). As the subcategories titles illustrate, however, the GRI is developed primarily for organisations doing business in the developing world; with its focus on child labour, minimum wages and respecting human rights, the reality is

that the GRI is not particularly relevant for organisations or industry operating within Australia or other industrialised nations.

Further compounding efforts to make the social dimension of TBL comparable is the flexibility for measuring each sub-category; the GRI purposely allows flexibility to integrate a range of reporting options and encourages businesses to develop their own measures of these social impacts. Unfortunately, from our perspective, the very flexibility of the GRI guidelines ensures that the social dimension remains relegated to the “too hard basket” and ensures it is viewed by many as little more than a public relations exercise or effective marketing (Gray & Milne, 2004; Tschopp, 2003). To date, although Labuschagne et al., (2005) have recently identified four main categories (internal human resources, external population, stakeholder participation and macro-social performance) that manufacturing organisations should utilise to measure their social sustainability, there is no universal standard or questionnaire for the social dimension of TBL. The main challenge with social indicators is that they are more difficult to identify, conceptualise and quantify than economic and environmental indicators, with a current consensus that “identifying and documenting social impacts appears to be enough of a challenge, let alone establishing a means of adequately measuring and verifying performance reports” (The Allen Consulting Group, 2002). Unfortunately, the debate and disagreement over what is “social” – and how, if at all, organisations can measure it – ensures that, unfortunately, the current situation is often as follows:

At best, a commitment to 3BL requires merely that the firm report a number of data points of its own choosing that are potentially relevant to different stakeholder groups – typically in the form of a glossy 3BL report full of platitudinous text and soft-focus photos of happy people and colourful flora...In short, because of its inherent emptiness and vagueness, the 3BL paradigm makes it as easy as possible for a cynical firm to appear to be committed to social responsibility and ecological sustainability. Being vague about this commitment hardly seems risky when the principal propagators of the idea are themselves just as vague (Norman & MacDonald, 2004, pp.256-257)

Defining the Social Impact of the Australian Dairy Industry

Whilst there are generally accepted principles for social impact research in the business context, a clearly defined method for the determination of social impacts and its integration with the other two TBL dimensions (economic and environmental) is not currently available. What is required, therefore, is a social impact instrument that is as rigorous as current financial reporting methods. This paper outlines the development of a method designed to quantify and assess the social sustainability, impact and value of the Australian Dairy Industry to regional and rural communities, focussing on the relevance and implications of such knowledge.

As with all agricultural based industries, the dairy industry is under constant scrutiny with regard to its environmental impact. Often policy and legislative decisions are made in order to reduce the environmental impact of the industry, with little regard for the consequent social and economic impacts. Yet, whilst considerable effort has been applied to quantify the economic and environmental impact dimensions of the industry, particularly through the Environmental Life Cycle Assessment project (Australian Agriculture and Natural Resources Online, 2002) the social impact dimension of the industry largely remains an unknown. What is required is a method of analysis that will form the basis for decision-making that takes social, economic

and environmental impacts into account. To date, however, while there is an awareness of the importance of a balance between the social, environmental and economic (Triple Bottom Line - TBL) outcomes of development, the instruments for analysis and reporting are often non-existent and inadequate. Thus, the challenge was to develop an approach to assessing social impacts that is rigorous as the existing economic and environmental indicators utilised by this progressive primary production Australian industry.

The Australian dairy industry has a unique history, with its genesis back in 1788 when seven head of cattle arrived with the first fleet. A shaky beginning as the cattle escaped into the bush and were not rediscovered until 1795 during which time the herd had increased to 40 head (Australian Dairy Industry Association, 2003) The first dairy settlements started in New South Wales in the Illawarra region during the 1820's. In 1836 dairying commenced in Victoria with 155 head of cattle. By 1861 the industry had grown considerably with cattle numbers rising to 200,000. Similarly, dairying in Tasmania and South Australia developed around the same time as Victoria (ADIA, 2003) Dairying took a much longer time to develop in Queensland as its agricultural focus was on sugar cane production. However, lower sugar prices in the 1890's caused farmers to consider other alternatives. For Western Australia, no significant dairy industry presence existed until around 1920 when the soldier settlement program following World War I was implemented (ADIA, 2003). Technological developments in the 1880's and 1890's saw the industry grow and enter a new era. Amongst these developments, and probably the most important was the introduction of refrigeration allowing butter to be shipped to England. A second important development was the introduction of exotic pasture species which allowed increased stocking rates and milk production (Australian Bureau of Statistics (ABS), 2004)

By the turn of the century nearly all dairy products (the main ones being butter, cheese and bacon) were produced in factories of which a large proportion were owned and operated by farmer co-operatives (ABS, 2004). Prior to England entering the European Economic Community (EEC) in 1973-74, dairy farms were typically small with milking herds less than 70. However, once England joined the EEC the small farms were no longer viable and left the industry (ABS, 2004). This trend to attain a viable scale of economy has continued with 19,020 dairy farm businesses existing in 1983-84 decreasing to 11,069 in 2003-04 (Department of Agriculture Fisheries and Forestry (DAFF), 2005) Today, the Australian dairy industry is concentrated along the eastern, south-eastern and south-western areas of Australia and in the Murray-Darling Valley. The highest concentration of the industry is in Victoria, having over 60 percent of all dairy farming enterprises (DAFF, 2005). In 2003-04 Australia's dairy cow numbers were 2,036,000 producing 10,075 ML of which 8,114 ML were used in manufacturing (ABARE, 2004; 2005; ABS, 1990)

Thus, investigating and documenting the current social impact and value of the Australian dairy industry in regional and rural communities is an essential element of business development and community engagement for several reasons. First, completing the survey will prompt residents to think about impact/value of industry to their community, enhances their relationship with local community by inviting honest feedback and allows organisations to identify and track residents' opinions about the industry. Second, from a public relations perspective, this allows organisations to

proactively understand and address perceived contribution, strengths and weaknesses, whilst enhancing the community's knowledge about industry value, brand name and reputation. Moreover, by providing insight and information about how best to improve the image and social acceptability of the industry, the survey will help identify strategies to improve participation, engagement and communication with stakeholders. For larger organisations in particular, the ability to develop a database that measures, monitors and evaluates the social contribution of their organisations will allow them to comment on their "social" contribution and impact. Potentially, such findings could be used to quantify their social worth to their country, with organisations providing social information that could potentially counter policy changes or contribute to policy development.

Proposed Method

Unfortunately, as mentioned earlier, whilst current global sustainability frameworks provide a valuable framework, they offer little practical guidance in terms of developing specific quantifiable social impact indicators for organisations or industries operating in industrialised countries. With the social impact or people dimension broadly defined as social wellbeing (Elkington, 1998), and corporate social responsibility similarly defined as "business' commitment to contribute to sustainable economic development, working with employees, their families, the local community, and society at large to improve their quality of life" (World Business Council for Sustainable Development, 2002) the conceptualisation of social impact as "wellbeing" dominated the development of our generic and quantitatively based social impact assessment tool.

The first priority was how to conceptualise the different areas or dimensions where organisations might impact on the social or wellbeing aspect. Crucially, there has been a "paradigm shift of businesses taking responsibility for their social impacts on external communities" (Labuschagne et al., 2005, p.382) with the National Resources Institute (NRI) at the University of Greenwich suggesting that responsible businesses should hold themselves accountable to the three broad areas where they can have a positive impact: the workplace, communities and the national economy. Specifically, these include;

Workplace: providing good employment conditions for workers, and good standards of health care, housing and education for workers' families

Communities: investing in local communities; contributing to their human, financial, physical and social capital; building positive community-business relations

National economies: helping economic growth; increasing government revenues and access to foreign exchange; technology transfer; infrastructure development; financial investment; development of human capital (NRI, 2003, p.8)

Thus, in this context, to emphasise the dual responsibilities organisations have not only to employees but to the local community, we conceptualised organisations as having two levels of social impact, termed internal (i.e., employee & suppliers) and external (i.e., community & customers).

A second priority was to utilise pre-existing quantitative measures, thereby facilitating accountability and comparability. Looking at how economic and environmental impact and success are monitored for guidance, it is clear that a key principle is comparison, benchmarking and tracking over time. Yet, while these are very basic principles of company or industry reporting practices, they seem to have been ignored in measuring and assessing social impacts. It seems that people are more

concerned with developing the perfect model, rather than progressing practice to a meaningful and comparative standard. We believe that a fear of criticism, and disciplinary mindsets, have restricted the progress towards developing generic, valid and comparable social indicators that can be easily and widely applied by companies and industries. Thus, although the model we are proposing may be viewed as simplistic, and may require improvement and refinement over time, it is designed to encourage feedback, debate and discussion regarding what aspects of social impacts can be quantified and should be measured.

Developing this framework and questionnaire was a reflexive process, focused on balancing the need to incorporate key social impacts with the need to compare with existing data in order to establish benchmarks through which to make assessments. The process of identifying and prioritising key social categories and subsequent indicators relevant to organisations in the developed world is complex. As mentioned earlier, a key concern with current indicators is that they tend to exist in isolation from each other, making comparisons and benchmarking an extremely difficult task. Indeed, while comparison, benchmarking and tracking over time are very basic principles of company or industry reporting practices for economic and environmental impact and success, they seem to have been ignored in measuring and assessing social impacts. Thus, the use of other validated internationally accepted measures, although they may not have been developed specifically for the purpose of social TBL assessment, was deliberate as it provides a more valid and practical approach to the social dimension of TBL at this point in time. Crucially, these social indicators are able to be integrated into a TBL report, identifying key social issues in a quantifiable and comparable manner. The proposed framework and questionnaire quantifies the social impact of organisations or industry as comprising of five key elements of social wellbeing:

1. Demographic Profile

Basic individual and household demographic information, including age, gender, ethnicity, education, marital and parental status, income, home ownership status and geographical location.

2. Individual Wellbeing (World Health Organisation Quality of Life scale)

The World Health Organisation's 26 item Quality of Life-BREF (QOL-BREF) scale will measure individual wellbeing. An internationally validated measure of quality of life, the QOL-BREF, focuses on four key domains: physical (e.g., how much do you need any medical treatment to function in your daily life?), psychological (e.g., how often do you have negative feelings such as blue mood, despair, anxiety, depression), social relationships (e.g., how satisfied are you with the support you get from your friends) and environment (e.g., how satisfied are you with your access to health services).

3. Community Wellbeing (Social Capital scale);

Onyx and Bullen's (2001) 36 item social capital scale will measure community wellbeing. This scale has eight distinct elements or subscales; Participation in Local Community (e.g., taken part in a community project), Proactivity in a Social Context (e.g., free to speak out), Feelings of Trust & Safety (e.g., invite stranger in if car breaks down), Neighbourhood Connections (e.g., favour for sick neighbour), Family & Friends (e.g., go outside local area to visit friends and family), Tolerance of

Diversity (e.g., stranger accepted), Value of Life (e.g., feel valued by society) and Work Connections (e.g., part of a team at work).

4. Employment Experiences (Quality of Work Life of Australian Employees Index)

45 items will measure work experiences and expectations. Based on ABS items, 12 questions will assess basic work information, such as industry, occupation, workforce status, normal days and time of work, number of hours worked each week, and number of full-time employees. The 16 item Quality of Work Life of Australian Employees Index, created by Considine and Callus (2002), will assess the quality of working life focussing on general job satisfaction (e.g., promotion prospects, health and safety, the amount of pressure and work-life balance) and experiences at work (e.g., how interesting work is, experiences of harassment, trust in management). Thirteen dichotomous (yes/no) questions will assess differences in conditions, procedures and policies provided by employers, such as home-based work, flexible start and finish times, family-friendly policies, as well as different employee characteristics and experiences (e.g., union membership, work related illnesses or injuries, claims for worker compensation, paid and unpaid overtime). Finally, two open-ended questions will ask employees to identify the one thing they like and dislike most about their job and workplace.

5. Organisational or Industry Impact (based on Reputation Index)

45 items will measure industry perceptions and impact. First, to assess personal connection to the industry over the last five years, respondents will indicate whether they personally, a family member or friend/acquaintance had worked in the industry, and if so, in what role (employee, farmer or service supplier). If they are currently employees, they will be asked to indicate where. 38 variables, grouped in seven key categories, will assess perceptions of the industry;

- general knowledge and interest (three items);
- general industry perceptions (five items);
- industry and local economy (five items);
- factory and employment (five items);
- environment, amenity and responsibility (five items);
- the community (ten items);
- them personally (five items).

12 questions assess specific environmental impacts of the industry, as participants indicated how satisfied they were with how the industry manages and mitigates each impact (e.g., noise, air quality/dust; odour, water use). Two questions will assess the economic impact and contribution of the industry to the community, as participants indicate the percentage of businesses in their community reliant on the industry for their survival and whether they, or their employer, provide services, materials or products to the industry. If so, they will be asked to indicate the type of business or service provided, the most recent contact and frequency of business. One question will assess the extent to which residents want the industry in the community. Finally, two open-ended questions will ask residents to think of the positive and negative aspects of the industry, and how it impacts on their community and them personally.

Participant Recruitment

The first key target population of this research is residents of dairy communities in Australia, defined as all communities where there currently is an operating dairy factory (n=78). From those, in conjunction with Dairy Australia, 15 communities

were purposively selected in order to have a range of small, medium and large communities, and communities with various degrees of “dairy-dependence”. In addition, two communities where factories had recently closed were selected to represent “ex-dairy communities”. Residents (n=15,000) who live within a 5 kilometre radius of their local dairy factory will be randomly selected to receive the mail survey. The postal survey uses a modification of Dillman’s (2000) tailored design technique, utilising four contact points to maximise response rate and participation; an introductory postcard, survey, reminder postcard, second copy of survey. In addition, upon return of the survey, community residents will be offered the chance to enter a prize draw and win \$5000 in gift vouchers.

The second key target population of this research is dairy factory employees. All factories will be invited to participate in the project, with employees encouraged to complete the survey online, both at home or at work on a computer centrally located in communal areas. As an incentive, employees will be offered the chance to enter a prize draw and win \$5000 in gift vouchers.

Relevance and Potential Applications

First and foremost, this research will outline the overall social impact, wellbeing and perceived value of the industry, with comparisons made to national statistics where possible, as well as comparisons between industry employees and non-employees residing in the same community. By allowing organisations to easily assess their social impact, from the perspective of both employees and the community, this survey allows the industry to measure the experiences of employees, as well as the opinions and expectations of local residents.

Identification and Management of Issues

The value of this survey is that it facilitates communication about and the measurement of social impacts, enabling organisations to clearly demonstrate corporate social responsibility by proactively identifying and addressing social issues. Importantly, this signals commitment to employees, enhances communication and relationship, and is an opportunity for organisations to identify and address issues or concerns. Crucially, once developed, it can be expanded to address other issues pertaining to the social impacts of organisations, with the current dimensions representing a good initial basis for a social impact assessment. For example, the demographics category very simply defines issues relevant to the organisation, focusing on identifying issues surrounding the organisational makeup. For large organisations, knowing that the majority of their workforce has children might positively influence their decision to provide childcare facilities or educational scholarships, decisions which will impact on the attraction and retention of staff and their reputation in the community. The individual wellbeing section, where the WHO-QOL BREF measures psychological, physical, social and environmental wellbeing, allows organisations to identify dimensions on which their employees or communities may need support. The community wellbeing section, where eight different dimensions of social capital are measured (Onyx & Bullen, 2001), allows organisations to quantify the participation and contribution of their employees to the community. The fourth section, employment, systematically addresses work satisfaction and experiences, allowing organisations to proactively identify and address any issues. The fifth section, industry impact, is essentially a performance

evaluation for organisations, allowing them to measure the degree of goodwill towards them in the community and by employees.

Industry Sustainability & Future Strategy

Ideally, we envision that organisations would use this survey to measure both the opinions of employees and non-employees to generate a full profile of their social impact. Then, they can explicitly compare the wellbeing of employees and non-employees. For organisations that survey local community residents, by monitoring community's attitudes, beliefs and perceptions, they are able to help ensure their own sustainability. Feedback from the community provides insight and information to improve image and social acceptability of the industry, allowing the industry to monitor communication and social aspects. Moreover, completing the survey prompts residents to think about impact/value of industry to their community, enhances their relationship with local community by inviting honest feedback and allows organisations to identify and track residents' opinions about the industry. If, for example, industry knowledge was low among community residents, a focus could be educating residents about the economic importance of the dairy industry, in terms of support for local businesses and services and providing stable employment. Similarly, if residents raise concerns about any specific environmental impacts, such as dust, noise or waste, then the industry can take steps to address and mitigate potential issues.

If surveying local residents is not feasible, however, we have purposively used pre-existing measures so that organisations can compare how their employees score on each dimension with the average "Australian" (or "American" etc). Thus, if employees score low on one dimension, organisations can implement interventions or provide access services to help. For example, if on the WHO-QOL employees scored lower on the "psychological" wellbeing subscale than their national counterparts, organisations could support the introduction of "mental health days" or offer counselling services. Then, next year, when they re-do the survey, they would hopefully record an increase on that dimension. Thus, the social actions (or inactions) of an organisation have clear consequences that can be tracked and monitored over time. The value of this approach, compared to current initiatives, is that it is evidence-based, facilitating both accountability and comparability. Organisations can clearly demonstrate corporate social responsibility by proactively identifying and addressing social issues. Importantly, this social TBL assessment signals commitment to employees, enhances communication and relationship, and is an opportunity for organisations to proactively identify, address and mitigate key issues or concerns.

In conclusion, this social impact assessment framework and survey demonstrates that it is possible and desirable to quantify the social dimension of TBL. First, with society increasingly demanding that organisations and industries identify their social impact and address any issues, taking a proactive approach to the social dimension of TBL is an intelligent, forward-thinking and pragmatic option. As well as facilitating communication about social impacts, ensuring the industry is able to pre-empt and address any community concerns, the actual process of conducting a social TBL may actually raise awareness about the value of the industry to the local community. Moreover, the development of a quantitative scale facilitates comparisons and accountability across industries and organisations, ensuring that the social dimension of TBL is not described and dismissed as a vague concept that owes "more to rhetoric

and ignorance to practice and transparency” (Gray & Milne, 2004, p.76). Second, the outcomes, recommendations and trends from each of the five key elements of social impact, specifically demographics, individual wellbeing, social wellbeing, employment and industry impact, will potentially inform and guide policy, community engagement strategies and the shape of future initiatives. Identifying and quantifying the social impacts of an organisation or industry is a challenging task, yet, there is a growing recognition and societal expectation of social responsibility and accountability. Importantly, as the quote below from Rio Tinto illustrates, there is increasingly acknowledgement that financial donations to charities or causes do not fully reflect or capture the social dimension of TBL;

...if companies behave irresponsibly in environmental or social terms, than no amount of good-cause giving will tilt their overall contribution to society back from the negative to the positive. A pirate throwing a few doubloons to a beggar may claim to be a philanthropist, but that hardly makes him a responsible businessman (Holme & Watts, 2000, p.32)

The social framework and questionnaire presented here defines and develops a method that quantifies the social dimension of TBL, providing a tool for social reporting which utilises pre-existing and validated measures appropriate for organisations operating in the industrialised world. Most importantly, the quantification of social impacts facilitates comparability and accountability, allowing organisations to set social targets, develop and implement initiatives, and monitor and report on progress. Thus, through facilitating accountability and transparency, the development of quantifiable indicators for the social dimension of TBL that are designed to be as rigorous as current financial reporting, enhances the credibility and value of the social dimension. As social indicators are the most neglected element of TBL, and at an early developmental stage (McKenzie, 2004), the framework and questionnaire presented here, whilst it may require improvement and refinement over time, is a crucial first step towards developing generic, valid and comparable social indicators that can be widely applied by companies and industry to assess their social impact.

Acknowledgments

The social impact assessment study was funded by Dairy Australia. Any opinions, findings, conclusions or recommendations expressed are those of the authors and do not necessarily reflect the views of Dairy Australia.

References

- Australian Agriculture and Natural Resources Online. (2002). *1. Evaluation of the environmental performance of the Australian dairy processing industry using life cycle assessment (UNS029)*. Retrieved 15 March, 2002, from <http://www.aanro.net/dbtw-wpd/exec/dbtwpub.dll>
- Australian Bureau of Agriculture and Resource Economics (ABARE). (2004). *Australian Commodity Statistics*. Canberra: ABARE.
- Australian Bureau of Agriculture and Resource Economics (ABARE). (2005). *Australian Commodities 12 (4)*. Canberra: ABARE.
- Australian Bureau of Statistics (ABS). (1990). *Year Book Australia 1990*. Canberra: ABS.
- Australian Bureau of Statistics (ABS). (2004). *The Australian Dairy Industry - Year Book Australia 2004*. Canberra: Australian Bureau of Statistics.

- Australian Dairy Industry Association. (2003). *A Brief History of Dairy Processing in Australia*. Hawthorn, Victoria.
- Birch, D. (2002). Social Economic and Environmental Capital; Corporate Citizenship in a New Economy. *Alternative Law Journal*, 27(1), 3-6.
- Blowfield, M. (1999). *Coherence and Divergence: The advantages and disadvantages of separating social and environmental issues in developing standards and codes of practice for agriculture*: Natural Resources and Ethical Trade Programme.
- Considine, G., & Callus, R. (2002). *The Quality of Work Life of Australian Employees - the development of an index*. Retrieved 14 March, 2004, from <http://www.acirrt.com/research/papers.htm>
- Department of Agriculture Fisheries and Forestry (DAFF). (2005). *Australian Agriculture and Food Sector Stocktake*. Canberra: Department of Agriculture Fisheries and Forestry.
- Dillman, D. A. (2000). *Mail and Internet surveys : the tailored design method*. Chichester: Wiley.
- Elkington, J. (1998). *Cannibals with Forks: the triple bottom line of 21st century business*. Gabriola Island: New Society Publishers.
- Global Reporting Initiative. (2002). *Sustainability Reporting Guidelines - 2002*. Retrieved 15 March, 2006, from http://www.globalreporting.org/guidelines/2002/GRI_guidelines_print.pdf
- Gray, R., & Milne, M. (2004). Towards Reporting on the Triple Bottom Line: Mirages, Methods and Myths. In A. Henriques & J. Richardson (Eds.), *The Triple Bottom Line, Does It all Add Up?: Assessing the Sustainability of Business and CSR* (pp. 70-80). London: Earthscan Publications Ltd.
- Hedberg, C.-J., & von Malmborg, F. (2003). The Global Reporting Initiative and corporate sustainability reporting in Swedish Companies. *Corporate Social Responsibility and Environmental Management*, 10(3), 153-164.
- Henderson, D. (2001). *Misguided Virtue - False Notions of Corporate Social Responsibility*. Wellington: New Zealand Business Roundtable.
- Holme, R., & Watts, P. (2000). *Corporate social responsibility: making good business sense*. Tockwith: World Business Council for Sustainable Development.
- Labuschagne, C., Brent, A. C., & van Erck, R. P. G. (2005). Assessing the sustainability performances of industries. *Journal of Cleaner Production*, 13, 373-385.
- McKenzie, S. (2004). *Social Sustainability: Towards some definitions*. Magill: Hawke Research Institute, University of South Australia.
- Norman, W., & MacDonald, C. (2004). Getting to the Bottom of "Triple Bottom Line". *Business Ethics Quarterly*, 14(2), 243-262.
- Onyx, J., & Bullen, P. (2001). The different faces of social capital in NSW Australia. In P. Dekker & E. M. Uslaner (Eds.), *Social Capital and Participation in Everyday Life* (pp. 45-58). London: Routledge.
- Suggett, D., & Goodsir, B. (2002). *Triple Bottom Line Measurement and Reporting in Australia - Making it Tangible*. Sydney: The Allen Consulting Group.
- The Allen Consulting Group. (2002). *Triple Bottom Line Measurement and Reporting in Australia: Making it Tangible - Snapshot*. Retrieved 15 March, 2006, from <http://www.deh.gov.au/settlements/industry/finance/publications/triple-bottom/chapter3.html>

- The University of Greenwich Natural Resources Institute. (2003). *Responsible Business and Sustainable Livelihoods - an overview*. Retrieved 12 March, 2006, from <http://www.nri.org/NRET/respbiz.pdf>
- Tschopp, D. (2003). It's Time for Triple Bottom Line Reporting. *The CPA Journal*, 73(12), 12-15.
- Willard, B. (2002). *The sustainability advantage: Seven business case benefits of a triple bottom line*. Gabriola, B.C.: New Society Publishers.
- World Business Council for Sustainable Development. (2002). *Corporate Social Responsibility: The WBCSD's journey*. Conches-Geneva: WBCSD.