
Integrating social concerns into environmental management system to improve corporate social performance

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Abstract: This paper makes an attempt to show integration of social life cycle thinking into Environmental Management System (EMS) can improve social performance of the organisations across the product life cycle. New emphasis should be placed on integrating social issues associated with environmental problems across the product life cycle. In effect, this paper calls for redesigning the EMS through Life Cycle Social Review (LCSR) capable of addressing: (1) social issues relating to global environmental issues, (2) social issues across the product life cycle, (3) social concerns of stakeholder groups across product life cycle and (4) institutionalising diffusion of continual improvement in social performance across the production–consumption chain.

Keywords: LCSR; life cycle social review; product life cycle; EMS; environmental management system; social performance; continual performance.

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1 Introduction

The last few years, Corporate Social Responsibility (CSR) has witnessed unprecedented attention in the business sector. It has been interesting to see how many companies are accepting their social responsibility to benefit society at large. Some companies especially in European countries are beginning to see the Corporate Social Performance (CSP) of their suppliers and contractors. This implies that the CSR initiatives are now spreading across the entire value chain and not just limited to the focal organisation. Within the CSR domain, environmental management is one of the important responsibilities of the companies. Interestingly, there are many environmental problems that ultimately result in social problems viz. water contamination by arsenic in West Bengal caused health problems in neighbouring villages. In general, environmental issues are linked with social issues and both under- and over-consumption are

detrimental to sustainable development. Therefore, business can look for resolving intricately related social and environmental issues simultaneously. This is important because business is criticised for both environmental and social injustice. For example, if a company competes for a water body with local community, if we resolve the water depletion or degradation problem then the associated social issues are automatically resolved. Another example would be due to environmental pollution industries are shutdown or relocated in many parts of the India simply because local community did not like the heavy pollution in the neighbouring residential areas.

The dominant approach to managing environmental issues in most large companies has been the construction of Environmental Management System (EMS), often certified as ISO 14001, associated with a cycle of continuous improvement (Welford, 1998). For many companies this has brought about tangible benefits in terms of cost reduction, improvement in working practices and enhanced reputation and image in the marketplace. On the business and environmental front, companies have gained competitive advantage by strategically positioning their products and services in the marketplace. Similarly, companies have registered competitive advantage through character of their organisational processes (Orsatto, 2001). It is also reported in the literature that management of industrial risks through EMS have the potential to become a source competitive advantage (Berry and Rondinelli, 1998; Forest, 1998). Similarly, ISO 14001 certificates can become the basis of deciding lending and liability (Samdani et al., 1995). The three major benefits from EMS as perceived by customers as reported (Petroni, 2000) are:

- product related
- image and reputation
- assurance of compliance with regulations.

The product-related benefits are price reduction, reduction of defective products, by eliminating use of hazardous materials and environmentally unsafe processes (Gupta and Sharma, 1996) and increased use of recycled and/or recycling of materials. The image-related benefits are improved reputation with regulators/government; effective communication of environmental friendliness to customer base may improve the perceptual quality of product and operations (Strachan, 1999) and certified EMS of a large and important suppliers may have a beneficial impact of a firm's relationship with its shareholders and other investors (Buckens and Hinton, 1998; Coulson and Monks, 1999). All the above three benefits of EMS also have positive social impacts. Firstly, in case of product-related benefits, both price reduction and elimination of hazardous material definitely have positive impacts on society or at least some stakeholder groups. Image and reputation itself is a social benefit of EMS. Lastly, assurance and compliance in the marketplace helps in improving stakeholder relationships which may be deemed as social benefit.

So, far EMS is used to improve environmental performance of a firm but it is argued here that it has a potential to improve social performance of the company. This is because:

- environmental problems have social dimensions as environmental and social issues are interrelated

- improving environmental problems also impact society
- solving social problems created by own business operations will be rewarded better by consumers and stakeholder groups.

A new design of EMS is proposed in the literature (Sangle, 2005) following the criticism of EMS by researchers (Van der Vorst et al., 1999; Welford, 2003). The new design is capable of addressing the following issues:

- relating EMS with relevant significant global environmental issues
- addressing environmental issues across the product life cycle
- internalisation of stakeholders' concerns
- institutionalising continual improvement process across the product life cycle.

This paper proposes to integrate social initiatives into the above EMS proposed in the literature (Sangle, 2005) for improving social performance of the firm. The above framework is useful for addressing all the significant social issues across the production consumption chain and hence the proposed framework may be useful to evolve relevant CSR strategies. Such CSR strategies will have a better strategic fit in the minds of consumer and other stakeholder groups and are likely to respond more positively to such initiatives. The consumers are likely to reward companies whose social initiatives are perceived to be of higher strategic fit (Olsen et al., 2006). The strategic fit here is defined as the extent of convergence in corporate vision, mission and its social initiatives. If a company is resolving social issues which are seen a result of its business operations then the customers are likely to reward more as they see a better strategic fit between these social initiatives and company's overall policy. The utility of this framework is as follows. With regard to global environmental issues, international communities have different opinions and hence incorporating social concerns related to global environmental issues will be very critical for evolving CSR strategies. Additionally, since the framework is capable of identifying significant environmental issues across the production–consumption chain and hence associated social concerns of stakeholder groups can be identified easily. Further, real fillip in CSR initiative will come when the continual improvement in social performance is diffused across the production–consumption chain.

Strategic fit, motivation and timing are critical in order to trigger positive response of consumer for all social initiatives taken by any company (Olsen et al., 2006). In order to ensure better strategic fit of social initiative, I propose that company first should address all the social issues associated with the company; hence it makes sense to identify social issues associated with environmental impacts of the company.

2 Social life cycle assessment/social impacts and product life cycle

Social Life Cycle Assessment (SLCA) explores social aspects throughout the product life cycle, generally with the aim of improvement or in comparison to an alternative. Compared to environmental and economic aspects, social aspects present special problems because they can be highly diverse and are weighted very differently by different interest groups and in different countries and regions. A further point is that evaluations of these aspects are subject to swifter change over time than those of

environmental aspects. The experience gained in the development of LCA methodology indicates that a coordinated development of a SLCA methodology suitable for treating social aspects will need some time.

As the social aspects can be highly diverse and are weighted very differently in different countries and regions and by different stakeholders. The integration of stakeholder bases that indicators and judgements on a broader discussion and helps to collect data. It is important to take into account regional and international characteristics.

3 EMS based on ISO 14001

EMS designate a set of tools and techniques developed to perform a management function in organisations by developing, implementing and reviewing environmental policies. Based on initial environmental review, EMS tools have been established to evaluate and continuously improve the organisation's environmental performance. Van der Vorst et al. (1999) has highlighted the following principles on which EMS based on ISO 14001 is established:

- an EMS is *systematic* in providing the corporate management with stable system elements to increase the protection of the environment
- an EMS is *priority* driven, as the system and objectives it implements are based on those aspects and impacts considered as significant
- it is *procedural* in the systematic, objective and periodic evaluation of performance of EMS
- it is *cyclical*, as the audit enables an evaluation of achievements against objectives and imposes corrective actions in a continuous improvement process
- it is *informational*, both for management decisions (internal) and external through publicity of environmental policy
- it is also *third party* reliant as accredited independent certifiers check the validity of system and the reliability of generated data.

So an EMS is an organised strategy that enables an organisation to achieve: focused, intentional development of environmental policy, monitoring and recording of environmental performance; and identification of needs and opportunities for improvement. An EMS strives to put in place the policy tools, incentives and routines needed to make environmental improvements an integral part of company's way of doing business. EMS is an extension of Total Quality Management (TQM) and related to continuous improvement systems revolutionised modern manufacturing characterised by quality. In other words, TQM advocates that quality is much more efficiently built into product rather than through an inspection. Similarly, TQM focuses on continuous improvement by regularly working through PDCA cycle. Likewise, a properly developed EMS ensures continual improvement in the environmental performance of its operations and achieving better environmental performance helps to improve its business performance. In such an approach, wastes and emissions are considered to be non-value added by-products that are to be minimised to the extent that is possible as any form of waste is an economic waste.

3.1 *Capturing the opportunities and benefits of social life cycle*

Social life cycle view (SLCA) is a systematic way to incorporate social impacts across the product life cycle. SLCA has a potential to generate significant social benefits. In particular, it may avoid social problem shifting from:

- *One stage of product to other stages:* for example, in case of battery driven car, the social concerns associated pollution is shifted from use phase to manufacturing stage.
- *One location to other locations:* for example, social concerns that may arise due to shifting polluting activities from developed world to developing countries.
- *One concern to other concerns:* for example, such possibilities exist when a company shift environmental problem from one media lets say wastewater is solidified and dumped as solid waste then societal concerns related to wastewater is addressed but this might rise to new social concerns related to solid waste.

Product life cycle view may leverage other business goals such as product differentiator, cost reduction, risk management and redefining markets. For example, product differentiation creates fair trade products or employ processes that offer greater social benefit or seen as more socially just. Such efforts may raise business costs, but they have the potential to command higher prices to capture additional market share or both.

Besides, social life cycle view can also help designer improve product costs and time-to-market by evaluating social attributes of their products. Time-to-market can be improved by eliminating hazardous materials that would normally require time to obtain necessary legal permits and social license. Beyond the business decision making, social life cycle view promises to guide business decision making towards a more socially responsive production–consumption chain.

3.2 *Broadening the decision-making horizon through integration of social life cycle and EMS*

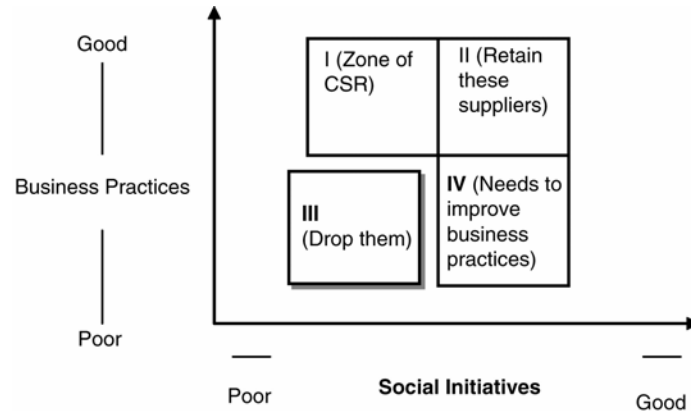
Today, social concerns go beyond merely focusing on individual projects or social impacts within individual company boundaries. They, instead, highlight the systemic need to focus more on aspects of global sustainability and the need to provide new – often multidisciplinary – information for decision making. Often, we are now expecting tools to perform beyond their original purposes, that is, to inform us in making broad sustainability decisions rather than simply providing data on specific, individual environmental or social impacts.

While EMS has evolved with specific applications in mind and specific applications of social LCA is also gaining importance. Together, they provide a framework for assessment and management of socio-environmental impacts and for the provision of information needed in response to increasing social concerns and environmental awareness. The question often posed is whether the tools we have are sufficient or whether there is a need for new tools or approaches specifically designed to address both environmental and social sustainability. This question is itself too simplistic since it implies mutual exclusivity, whereas in reality there is a need for both existing tools used in a new context and new tools per se.

Internalisation of social life cycle view in an EMS can reveal how different economic actors in the entire value chain are critical for better social performance of the focal organisation. Thus, one can draw a framework to make the production–consumption chain more socially responsive with the help of suppliers, distributors, consumers and other actors in the production system. This approach can help organisation to derive both supply and demand side socially responsive strategies for the organisation. For example, strategic decisions on social initiatives along the supply chain can be drawn. Let us say, if an organisation has large number of suppliers then does the organisation should have one common strategy for all suppliers or should it have different strategies for different clusters of suppliers depending on their social and general business performance. Obviously, dealing with individual cluster is desirable and is explained in the following paragraph.

In Figure 1, suppliers coming in quadrant I are those whose business practices are good but are poor in terms of social initiatives therefore, obviously they become candidates who need to improve their social performance perhaps with some support from focal organisation. Similarly, suppliers coming in quadrant IV are having good social performance but poor business practices; hence they need support from focal organisation to uplift their business performance. Supplier in quadrant III are not doing well in both business and social front, hence focal organisation might like to stop doing business with them. Finally, suppliers in quadrant II are really good in terms of social and business performance, hence focal organisation should make effort to retain these suppliers.

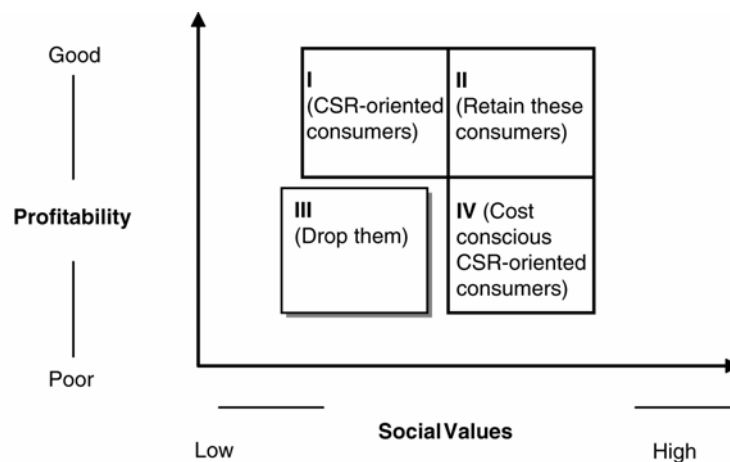
Figure 1 Social initiatives of suppliers



Similarly, one can take strategic decision based on clusters of customers and derive appropriate sustainability strategies to improve social performance in the downstream also. In Figure 2, quadrant I have profitable customers but with indifferent attitude towards the social initiatives of the company, that is, their purchasing decisions are not influenced by social impacts of the product and services they consume. Therefore, organisation may have to educate these customers and needs to spread awareness regarding social impacts of the products they buy. Similarly, consumers coming in quadrant IV are appreciative of social initiative of the company but are not willing to pay more for fair trade products. It is feared that majority of consumers at least in developing countries may be in this quadrant; hence organisation will have to deliver product and its

benefits at a competitive price. Consumers in quadrant III are neither very profitable nor they are responsive to social initiatives of the company and it may be very difficult for organisation to make them profitable and inspire them to take socially informed decision making, hence organisation may not like to have such consumers. Finally, customers in quadrant II are profitable and are responsive to social initiatives of the company; hence organisation should make effort to retain these consumers.

Figure 2 Social values of consumers



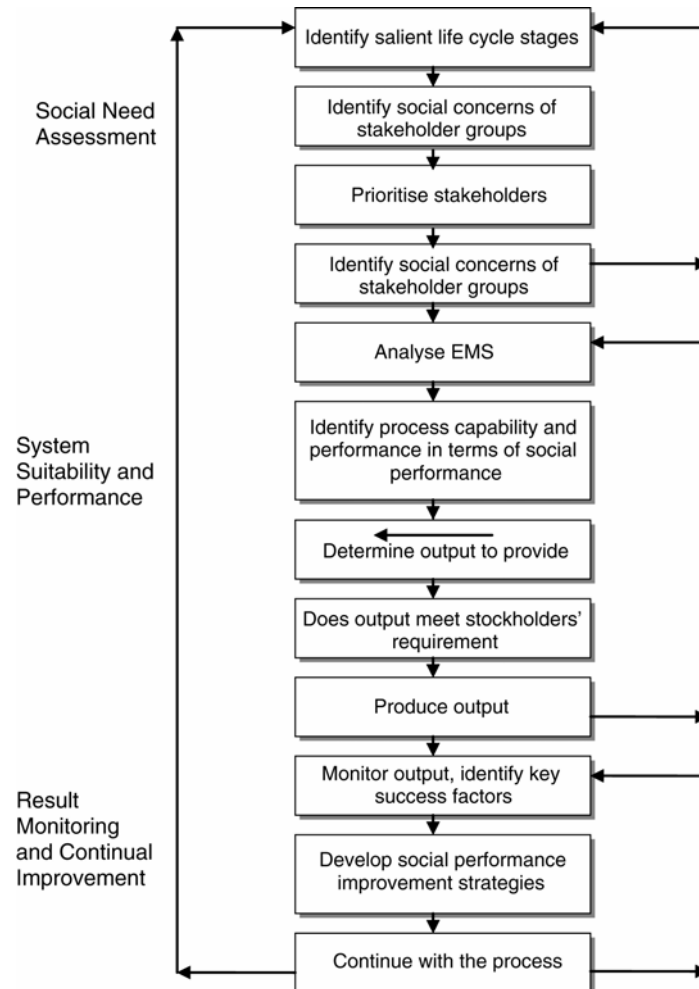
The stakeholder management literature can be traced back to the pioneering work of Freeman (1984), who articulated a 'stakeholder model' to replace 'managerial model' of the firm. Traditional stakeholder management literature (Brenner, 1993; Brenner and Cochran, 1991) has focused on classification of stakeholders viz. primary and secondary and further on stakeholder approach to obtain overview of threats and opportunity (Madsen and Ulhoi, 2001) offered by stakeholders within the factory four walls. However, additional emphasis should be placed on stakeholder groups present along the product life cycle (Sangle, 2005; Sangle and Babu Ram, 2006). Since product has social impacts throughout its life cycle stages and stakeholder groups are present at all the product life cycle stages. The focus of this approach is to identify stakeholders and their concerns at each stage of product to enable company address concerns of all stakeholder groups. Further, social life cycle view is of potentially great importance, as this will help company to manage competing and conflicting interests of stakeholder groups.

4 Framework for redefining EMS through integration of social life cycle

This section delineates a framework for redefining the development of EMS. A three phase model to integrate social life cycle thinking into EMS is shown in Figure 3.

The redesigning of EMS has following three steps:

- 1 social need assessment
- 2 system development and performance
- 3 result monitoring and continual improvement.

Figure 3 A three phase model to integrate social life cycle thinking into EMS

Source: Adopted from Sangle and Babu Ram (2006).

4.1 Social need assessment

Here, a Life Cycle Social Review (LCSR), which is a life cycle wide walk through social audit of the organisation intending to develop EMS. The LCSR will include all the social issues associated with environmental problems at all life cycle stages of products that the organisation manufactures. Further, it needs to identify salient stakeholder groups at each life cycle stage of product. This step will involve:

- 1 identification of salient life cycle stages of product
- 2 identification of salient stakeholders and elicitation of their social concerns at above identified product life cycle stages
- 3 identification of applicable social norms, code of practice and regulations across the above life cycle stages of product

- 4 identification of CSR opportunities across the above life cycle stages of product
- 5 identification of opportunities for continual improvement in terms of social performance across the above life cycle stages of product.

Identification of stakeholders along product life cycle of products and eliciting their social concerns and expectations are two salient tasks in this step. Assessment of stakeholders' expectations involves establishment of communicative linkage with the stakeholders to identify both implicit and explicit ones.

The salient elements of assessment process are detailed further.

4.1.1 Identification of salient life cycle stages of product

Determining which life cycle stage to be included or considered can be a daunting task. In principle, all the stages of product in question should be considered; however, some stages can be omitted if the social impacts/aspects are not significant. After identifying the salient stages of product for the evaluation of stakeholder satisfaction, the next step is to seek stakeholders' prioritisation of salient stages, that is, to know preferences in terms of social concerns of all stakeholders. Past experience in Product Sustainability Assessment (PSAT) shows that major product-related social aspects are largely of three types:

- particularly, severe positive or negative effects at the level of resource extraction, upstream chains, production or trade that can be attributed directly to the product: examples are destruction of systems that support human livelihoods, child labour, wages below subsistence level, etc.
- utility aspects and impacts upon consumers
- indirect effects of product use upon society, such as changes in society caused by cars or mobile phones (comparable to the discussion on rebound effects in environmental LCA).

Nonetheless, other incidences can be found even if they are not as obvious as human rights infringement. However, in a perspective of continuous improvement of the corporation activities and policies, they are as relevant to study. The overall conditions of production throughout the chain must be object of assessment.

4.1.2 Identification of key stakeholders

Determining who the social stakeholders are for an organisation is a critical for evaluation of stakeholder satisfaction. Stakeholders may be formal, readily identifiable groups or they may be people who have been inadvertently pulled into an issue – such as parents of children at a school located in the neighbourhood of a contaminated site. Failure to identify or include groups or persons that have an interest in an issue can have grave consequences. Thus, identification of stakeholders and gaining insights into their attitudes and agenda is an important task in the development of EMS. Organisations can have its set of criteria to prioritise stakeholders or preferences.

4.1.3 Identification of societal expectations of stakeholders

One of the most important questions that must be answered about social concerns of stakeholders is what are the explicit and implicit expectations of stakeholders with regard to the social performance of the organisation? Understanding the social needs hold the

key for a successful evaluation of societal expectations of diversified stakeholders and is challenging. To understand the stakeholder' expectations, one may need to provide adequate information and knowledge to them on social issues in the region and their severity, feasibility and cost of control, effect on health and ecosystem restoration costs, etc., without introducing bias and influence. A feasible way to map social expectations is a questionnaire survey.

4.2 System development and performance

4.2.1 Social policy

As it is known ethical and social policy is the expression of intention of a company towards the society. Considering the LCSR and the findings of social need assessment, the social policy can be framed on the following four points:

- commitment to passing the company benefits to the society
- commitment to ethics with laws of land and expected societal norms across the product life cycle
- harnessing opportunities for continual improvement at social front across the life cycle
- commitment to meet the societal expectations of all stakeholders at all stages of product life cycle.

4.2.2 Identification of social improvement programmes

Once the societal expectations are known/prioritised, the organisation needs to select programmes that can meet the societal concerns of each stakeholder group. The improvement programmes are identified through a comprehensive audit and are based on the societal objectives and targets of the corporation. However, these may not be related to the stakeholders' satisfaction. The extension of TQM principles of conforming to customer satisfaction to social sector ensures that it improves stakeholder satisfaction and subsequently improves this continuously through total employee involvement. Hence, the basis to select a set of social initiatives should be to improve total social stakeholder satisfaction in an economic manner.

The evaluation of alternative social initiatives involves the considerations of legal, social, image, competition, market forces, economical and environmental factors.

4.2.3 Monitoring the results and continual improvement

The third phase of monitoring results and striving continual improvement is preceded by output-and-requirement resolution and provision of output. Since measurements are vital, establishment of the key factors to reflect the system suitability or fitness mechanism satisfy the stakeholders' needs, is essential.

When measurement is driven by stakeholder needs, tremendous opportunities for improving CSP may be found. Too often, measurements have been established to provide well-intended compliance references but without regard to satisfactorily fulfilling the needs of the stakeholders. For example, obtaining the permit to discharge

into river reveals nothing about whether the local community was satisfied. The most cost-effective measurement should reorganise to ensure satisfaction of stakeholders' expectations in the beginning to minimise liability in the future.

Measuring against own performance and striving to improve on it will provide a meaningful reward. In fact, studying competitors may attain even greater achievement. Often linkages can be formed where measurement data are exchanged, not for the sake of simply comparing numbers to numbers, but more importantly, to identify those who may not be performing better than you. Once identified, the challenge is to determine why or how their system suitability mechanism is different. From this analysis, improvement strategies in meeting the needs of stakeholders could be formulated.

It is important to keep the organisational focus on the stakeholder satisfaction process – needs assessment, delivery of needs, issues and resolution, measurement and continued improvement.

5 Discussion

Both within the life cycle initiative and beyond, there are moves towards the parallel or integrated analysis of social aspects and towards sustainability analysis across entire product cycles (e.g. Product Sustainability Analysis (PROSA), Socio-Eco-Efficiency-Analysis (SEE)/BASF, PSAT/Procter & Gamble, Sustainability Compass, etc.). Furthermore, there is an intense debate on the integration of social aspects in reporting and in the rating of companies (sustainability rating, Global Reporting Initiative (GRI), global compact, planned ISO standard on CSR, etc.). While the performance of an environmental LCA has been set out in detail by ISO standard 14040, for social assessment and other similar approaches there is no comparable standard or internationally recognised code of practice.

Because the scope of an EMS is now linked to firm's social policy, its objective and targets, the firm may have difficulty in implementing and benefiting from social life cycle, if those policies, objective and targets do not support or encourage the use of social life cycle concepts. Given the historic distinctions and separation of social initiatives management and social life cycle management it is not surprising that relationships, communications and effective management can be problematic. Generally, social initiatives of firms may not necessarily address the societal concerns of stakeholders groups thus objectives may not address social life cycle and societal concerns of stakeholders at other product life cycle stages. Social life cycle on the other hand relates to social issues across the entire life cycle stages of product and may not be organisationally accessible to the focal organisation.

A management system viz. EMS can and should provide the organisational underpinnings and framework for managing all stakeholders across product life cycle. To a firm intending to reduce social impacts across the value chain, social life cycle is the only tool that provides most promising opportunities for nipping non-value-added social initiatives from the entire product system. Truly, social life cycle may provide effective opportunities to identify and improve social performance across entire product system. Still rare is the EMS that extends its reach far enough upstream and downstream to understand and embrace opportunities for achieving social objectives. To make this happen, it is essential that firm's social policy create a business framework that accommodates and encourages social life cycle view.

6 Conclusions

EMS despite its popularity amongst the many companies that are now engage in environmental management activities has do not address social impacts caused by negative environmental impacts in the globalised world. In particular, systems that emphasise control within organisation may not be effective when that organisation outsource its production activities. This paper has suggested how:

- 1 EMS can be redesigned to capture social life cycle.
- 2 EMS can play an important role not only is greening efforts but also in improving social responsiveness across the product life cycle. This is important particularly for firms manufacturing product having significant environmental and social impacts at use and disposal stage.

Thus, EMS has potential to improve social performance along the entire production–consumption chain.

This paper also suggests that existing EMS can be further strengthened by internalising social concerns of stakeholder groups present across the entire product life cycle stages, thus leading to better satisfaction amongst them. However, the suggested framework presupposes that improvement in the social performance depends heavily on stakeholder pressure. In particular, if the improvements are not expected to bring financial benefits in short term and if they are not legally mandated. This also implies that social issues along the product life cycle can perhaps be best handled by collective efforts by all the actors involved in the chain, and it would be interesting to see how EMS can help in developing such a network which needs to be investigated in future.

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