SUSTAINABLE BUSINESSES PRACTICES IN SUPPLY CHAINS: EXPERIENCES FROM SWEDISH COMPANIES

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Abstract

Businesses play a vital role in building a more sustainable society by practicing and promoting more socially and environmentally responsible practices along supply chains. The social and environmental conduct of Western companies in their respective countries is usually rather strong due to the existing strong legislation on human rights, working conditions, freedom of trade unions, etc. In developing countries however the situation is quite different. There is often no strong local legislation that promotes high environmental and social standards at work place or it is not implemented efficiently. Western companies, in their role as buyers, can become a driver for initiating and strengthening the work on sustainability issues. However, assuming the role of change facilitator is associated with many challenges and companies often need help with defining strategies and specific steps for improving sustainability of their supply chain. In this study we explore challenges faced by companies working with sustainability issues in the supply chain, based on studies of the practices of Swedish companies.

Keywords
Life cycle thinking, supply chain, corporate social responsibility, challenges, stakeholders.

Life cycle thinking and product chains

The general concern for the state of the environment sets requirements on strategies developed by companies to curb environmental and social impacts of their activities. We witness a paradigm shift in the way we perceive and deal with environmental and social problems. In the 1970s, the efforts of policy makers and businesses alike focused on addressing specific environmental issues, often related to particular type of waste or to the ecological media – air, soil or water – to which waste and pollution has been released.
Policies were thus developed to tackle air or water pollution or hazardous wastes. Another priority was to reduce specific environmental problems of production sites and the facility-oriented or point-source focused environmental policy has emerged. The limitations of these policies to address disperse emissions and environmental impacts generated beyond company gates and national boundaries have lead to incorporation of the product perspective into the environmental policy and the emergence of policies and tools that address product-related life cycle impacts. This is also an example of the concrete manifestation of life cycle thinking in product-oriented environmental policy, which demonstrates the ongoing institutionalisation of the life cycle thinking in many spheres of society (Heiskanen 2002), a phenomenon which can be noticed in regulatory and policy documents and in ethical and environmental requests of consumers who are increasingly looking for the “world behind the product” (Töpfer 2002).

It is interesting to note that life cycle thinking has transgressed that realm of focus on products and nowadays also influences the way we assess and address the environmental and social impacts of economic activities at several levels.

First of all, it is the level of organisations. The focus on product and product chain provides a certain analytical boundary for evaluating environmental and social impacts of economic activities of different organisations (Michelsen, Fet et al. 2006). It also allows seeing the impacts in the aggregate manner along supply chain in contrast to analysing them separately for each production facility, life cycle stage or an actor.

Secondly, life cycle thinking is used for assessing environmental impacts associated with lifestyles of individuals by calculating individual ecological footprints. Specific life cycle approaches, primarily based on input-output analysis, have also been developed and used to identify more sustainable consumption patterns and levels and to evaluate the effectiveness of sustainable consumption policies (Hertwich 2005).

Thirdly, life cycle thinking and chain perspective are also used for analysing impacts of countries, since there is a growing concern of environmental and social impacts being exported from industrialised to less developed economies through global product chains (Cave and Blomquist 2008).

A new dimension in the life cycle thinking and corporate responsibility is social issues associated with production sites along the life cycle, in particular when these sites are located in countries with a poor record on human and labour rights.

We note that when a problem is found in Australia with regards to animal cruelty in sheep farming, blame is not just cast on the Australian farmers, but also on Swedish fashion retailers, located several tiers downstream from the farmers in the supply chain, but linked
through the fact that they sell products that contain the wool from these farms. Another example includes Swedish ActionAid’s campaign which targeted Volvo Trucks to address problems identified in the platinum mining operations of Anglo Platinum in Africa. The diversity of issues that stakeholders are bringing to the corporate responsibility agenda today range from concerns pertaining to environmental sustainability, human rights, workers’ health and safety, community welfare and the spread of HIV/AIDS, and the link between the focal company and the issue at hand is often found by tracing the life cycle of the products the company produces and/or distributes.

Thus, judging from the public discourse, it is possible to argue that the scope of corporate responsibility is expanding, and is increasingly becoming linked to the life cycle of products that the company produces and/or distributes. Life cycle thinking is thus manifested in the way individuals and organisations conceptualise environmental and social problems and also increasingly in the way responsibility for environmental and social issues is allocated by stakeholders and through policy measures.

Assuming responsibility for environmental and social performance in supply chain in practice means that companies need the ability to:

- Provide product specific information related to relevant social and/or environmental aspects.
- Ensure that relevant aspects are being appropriately addressed and actions taken to ensure that relevant actors involved in the product’s life cycle reduce, prevent and/or remediate negative impacts.
- Assume responsibility for the environmental or social performance of the product and its impacts and to ensure the veracity of provided information.

From a corporate perspective this means that the focal company has to obtain information regarding aspects associated with upstream tiers of suppliers in the product’s life cycle. If the current performance does not meet requirements and expectations, the focal company may have to motivate relevant actors to make changes and investments needed to comply with a set environmental/social agenda, or to replace these actors with other actors who already are in compliance. Finally, to be able to assume responsibility, for instance, for the veracity of provided information, the environmental performance of the product, or the working situation in the suppliers’ factories, the focal company has to be able to control/verify critical aspects in all relevant stages of the product’s life cycle to ensure compliance with its own Code of Conduct and with demands and expectations of the external stakeholders.
This paper discusses how Swedish companies have responded to environmental and social requirements and expectations of stakeholders with a particular focus on company practices and challenges in addressing environmental and social aspects that arise upstream in the supply chain.

The paper draws on three different studies: on a survey and two in-depth case studies, focusing on Swedish companies' initiatives to address social and environmental aspects in the supply chain. The survey study relied on interviews with 20 Swedish organisations and explored the drivers and barriers for Swedish companies to work with improving sustainability performance of their supply chains (Mont and Leire 2008). The two case studies featured two different focal companies in the textile sector. In each case study relevant initiatives initiated by the focal company for the purpose of addressing environmental and social aspects in the supply chain, were identified and subsequently interviews were performed with relevant representatives from the focal company as well as from companies in the supply chain who were targeted by these initiatives (Kogg 2009).

 Complexity of supply chains

If we accept that the product lifecycle is used as a boundary for assessing and managing environmental and social impacts of economic activities, then organisations might also face a situation where they are held responsible for impacts that may arise far beyond their typical scope of direct hierarchical control in business transactions. If that is the case companies need to ability to exercise control over environmental and social aspects that arise upstream or downstream the product chain, as well as the ability to exercise influence for the purpose of triggering positive change in the supply chain (if existing practices do not fulfil the international standards or demands of customers).

A products life cycle is often illustrated as a product chain. Each part of this chain represents not only a phase in the product’s life cycle, but also an actor controlling that particular phase. A picture of a product chain can be a useful mental model for analysing and illustrating where major environmental and social impacts occur. To provide an example, the production phase of the lifecycle of a cotton T-shirt is illustrated in the product chain depicted in Figure 1.

**FIGURE 1 THE PRODUCT CHAIN FOR A COTTON GARMENT SHOWING ONLY THE PRODUCTION PHASE**

In the case of production of a cotton t-shirt the highest environmental impacts are generally generated during cotton farming and in the wet processes of fabric dyeing and finishing.
Following the life cycle logic it would then be desirable to focus efforts for environmental improvement on these particular stages.

However, it is important to recognise that the reality of business is not organised like this. Taking the perspective of the corporate practitioner it becomes necessary to analyse the challenge of product responsibility in the context of supply chains rather than product chains. The difference is illustrated in Figure 2, which depicts a very rough and simplified illustration of the supply chain of H&M, a large retailer selling, among other things, cotton t-shirts.

![Figure 2](image_url)

**Figure 2** A ROUGH ILLUSTRATION OF THE COMPLEXITY OF THE H&M SUPPLY CHAIN IN 2004. (KOGG, 2009, P. 153) [PLEASE NOTE THAT THIS IMAGE ONLY INCLUDES THE COTTON ALTERNATIVE IN THE FIBRE PRODUCING STAGES OF THE SUPPLY CHAIN.]

While the terms supply chain and product chain sometimes are used interchangeably, one important distinction is that the starting point for discussion from the supply chain perspective is not the product, as in the product chain perspective, but a company. The significance of this change of perspective becomes apparent when we compare Figure 1 and Figure 2.

This picture only begins to give an idea of the complexity of a full-scale supply chain, but it serves to illustrate some of the complexities present in many supply chains. One of the complexities lies in the sheer number of actors, who are involved in a typical supply chain,
which in turn influence the challenge of exerting pressure, policing, monitoring and facilitating change in the supply chain.

The complexity of supply chains is also present on other levels not possible to show in a static figure. There is the element of change and dynamism due to the fact that:

- within each chain there are several flows that need to be managed on an operational level: physical, fiscal and information flows, as well as flows of contracts and other types of inter-organisational relations;
- individual suppliers are added and dropped subject to the evolving needs in the supply chain;
- changes within companies that are part of the supply chain take place, such as a change in ownership or management structure;
- there are numerous dyadic relations between buyers and sellers along the chain; which may be very diverse within the same supply chain, ranging from highly integrated to arm’s length, and from collaborative to adversarial in their nature.

In addition to the complexity of the chains themselves, there is a difference in the context where supply chains operate. For example, many supply chains cross national boundaries and products might be produced in a country with one set of environmental and social regulations and commonly accepted norms, but sold in a country with a completely different set of norms and regulations. Thus, many companies working with improving environmental and social performance of their supply chains have to take into consideration the complex, dynamic and heterogeneous context in which they operate.

**Identified drivers for sustainability work in supply chains**

Pressure from and expectation of key stakeholders was identified as the most important external driver both in the literature and in the interviews with Swedish companies. The most interesting was the fact that media and NGOs who act as opinion formers for the public are taking the lead in stimulating socially and environmentally responsible practices in supply chain. It seems that the importance of influence of primary and secondary stakeholders on organisations and their CSR work is slightly changing. Media and NGOs are typically defined as the so-called secondary stakeholders - groups of people who are not essential for survival of an organisation (Clarkson 1995: p. 107). Research and Swedish practice demonstrates that it is these two groups of stakeholders who exert significant pressure on organisations and may cause the long-lasting negative impact on the organisation’s reputation. This finding is in line with the literature findings on the changing role of secondary stakeholders, especially NGOs and the media (Whitehouse 2006). In this light, it becomes more and more
important for organisations to have a continuous monitoring of stakeholder expectations, of changing focal issues and to recognise in time when action needs to be taken.

Identified challenges for sustainability work in supply chains

Perhaps the most important barrier for many companies to initiate sustainability work in their supply chains is the problem that it is practically impossible to ensure that 100% of all suppliers and sub-suppliers of different tiers follow up the focal company’s Code of Conduct or environmental and social policy. Since no company can assure that at any particular moment no supplier in its entire supply chain is using child labour or has poor working conditions or is emitting harmful substances, it is therefore very difficult for anybody to justify the engagement with sustainability issues in supply chain. On the other hand, of course, if knowledge of environmental or social violations becomes public, companies that have been working with these issues appear in a better light, than those who have not worked with these issues at all. However, no company is protected against such violations and potential negative publicity.

One of the challenges for companies to initiate or advance work on sustainability aspects partially associated with the challenge mentioned above is lack of top management understanding of the type of activities this work entails and seeing the business case for the company. For example, top managers might support incorporation of social and environmental issues into the Code of Conduct and may consider it sufficient to ask suppliers for confirming information. Top management may however lack understanding that suppliers need to be audited and inspected, and even that long-term relations with suppliers might need to be established. This leads to that, in some large Swedish companies there is a certain level of inertia to embark on the new journey.

Lack of resources for auditing of all types of suppliers including strategic and non-strategic was mentioned by ABB, ITT and many other companies as another kind of a challenge. For example, ITT has 50-100 main suppliers (by volume) and up to 500 smaller direct suppliers; IKEA has 1300 main suppliers. This reflects well the number of suppliers in other companies as well. Lack of resources is then translated into lacking education and training of auditors and lack of competent local personnel who can assist with audits of suppliers and who can implement the necessary changes according to requirements of the focal organisation at the suppliers’ sites.

Another challenge mentioned by some Swedish companies is the challenge of collecting sufficient information based on which supplier criteria can be developed. “Formulating what information is needed is very difficult, because it is a 'moving target' with continuously
developing new products and continuous expansion of our knowledge about effects and impacts of various materials. Suppliers often do not know themselves about possible negative environmental and social impacts and turn to our company for help” (Mont and Leire 2008: 48).

Lack of practical tools and updated information is a challenge often mentioned by focal companies that are in the initial stage of their engagement with environmental and social work with suppliers. However, “the situation is changing and new ideas are sending the signal to markets that environmental and social criteria will be coming into the competition equation more and more in the future”. It seems to be easier to develop environmental criteria for suppliers because they concern the product, while social aspects often relate to the company performance and not to a specific product, and are therefore more sensitive. Moreover, a lack of time is certainly an issue both for the development of tailored to company needs training kits and supplier requirements, but even for identifying specific environmental and social aspects and incorporating them into the work with suppliers. Even more time-consuming are supplier audits, and inspections and supplier development in a long-term relationship.

Another challenge is different cultures of working and the low level of environmental and social standards and expectations countries of supply. Companies report as challenging the need to find arguments for sustainability work and for findings ways of addressing environmental and social problems in supply chain in the absence of a general regulatory framework for these issues in the countries of supply. Sometimes, even suppliers’ workers themselves become a barrier for sustainability improvements, especially since the imposition of stricter social and environmental criteria with regard to working conditions and EHS may lead to increased product prices, and consequent lower level of orders and thus lower wages. In addition, environmental and social criteria may sometimes lead to increased workload for employees, while the payment for the work could stay the same. There are also many seasonal workers in India and China, who prefer to work long hours during several months of the year and then return home for their main occupation e.g. agriculture. These workers therefore tend to oppose shorter working hours.

According to SKF, “there are many barriers for companies to verify information presented by suppliers, even during audits. For example, many workers do not have ID cards in India, which makes it difficult for auditors to check the age of employees. The figures on salaries and other documentation may be false and there are many cases of double booking. In order
to make information collection more reliable and to truly evaluate the suppliers, the announced audits are more and more replaced by unannounced visits."

On the other hand, much of the cheating happens as the outcome of the increasing demands from multiple customers, including short-time orders and increasing speed of deliveries. To satisfy the requirements of customers regarding environmental and social performance and keep up the business suppliers are now urging focal organisations to find resources to pay for improved working and environmental situation and other issues, as well as to change own practices of focal companies to reduce the pressure on suppliers to deliver “at any cost”.

Supplier audits are not only time consuming and costly for focal organisations, but also for audited companies. Suppliers often lack understanding of social and environmental aspects or find the Codes of Conduct to be a nuisance, especially since they may not be reflected in or enforced by local laws (Welford and Frost 2006). Studies report that some supplier factories have hosted more than 50 audits per year. In addition, suppliers have to comply with Codes of Conduct, host auditors and improve EHS and workplace practices in their factories while dealing with, on the one hand, rising wages, and material and energy costs and, on the other hand, with customers constantly forcing down prices they pay for the products. This conflict between what suppliers are expected to do within the continuously decreasing margins also affects the way and extent the Codes of Conduct are followed (Welford and Frost 2006). Besides that, this situation leads to that suppliers often keep several sets of accounting books to fit the requirements of numerous Codes of Conduct.

Another problem for suppliers is that they typically have a number of different Codes of Conduct to adhere too, which might include contradictory requirements, e.g. regarding the working hours and overtime (Welford and Frost 2006) or environmental standards and levels.

The situation differs among sectors. For example, in the garment sector there are still many different social Codes of Conduct in use despite a quite a long history of working with social and environmental issues. In electronics sector a unified Code of Conduct is promoted and this helps suppliers to fulfil their requirements in an efficient manner.

Lessons from the field

When working with suppliers, organisations can adopt various strategies – ranging from terminating the contract to helping the supplier fulfil specific requirements, to establishing long-term relations with suppliers. These strategies can also be seen as ranging from reactive responses – eliminating a troublesome supplier from the chain towards seeing value in developing supplier competencies and capabilities in a long run.
Sanctioning suppliers is also part of the system for improving social and environmental performance in supply chains. If suppliers are failing to satisfy criteria specified in purchasing contract or in the Code of Conduct, the focal organisation has to have clear routines and well-defined sanctions. Some organisations decline a contract; others may give the supplier some time to address the identified problem – typically 3 months. Other organisations may shift the supplier from the list of main suppliers to reserve list until the time the problems are dealt with. And finally some organisations feel the responsibility for collaborating with suppliers on solving the problems.

Development of long-term relations with suppliers can be seen as the development of strategic assets that the focal company can capitalise on in the years to come. In practical terms this may include common development of social and environmental targets, regular surveys of supplier and focal company practices, and periodical reporting on indicators. To assist with monitoring the progress, organisations may choose to engage other stakeholders who can assist with monitoring supplier performance, e.g. NGOs or universities in the countries of suppliers.

Some organisations see long-term monitoring as supplier development and distinguish between reactive efforts to improve the performance of laggard suppliers and strategic efforts to improve capabilities in the supplier case and to enhance the competitive advantage of companies in the supply chain. Research demonstrates that a strategic approach was found to significantly increase the involvement of the focal organisation in suppliers’ processes, and “required greater dedication of resources, personnel and communication” (Krause, Handfield et al. 1998; Mont and Leire 2008). The focal organisation has to build capacity to instigate change in supply chain through follow-up activities aimed at supplier development.

In order to establish long-term relations and collaboration, education and training programmes for suppliers might play an important role in gaining trust and suppliers’ support in disseminating more socially and environmentally sustainable practices into suppliers’ factories (Maignan, Hillebrand et al. 2002). One example comes from SKF that organised Suppliers’ Day in Sweden, China and India. The goal was to present to suppliers all activities of SKF that are relevant for them, discuss what SKF standards and strategies imply for suppliers and how future collaboration may take place. After the Suppliers’ Day in India, at which approximately 50 managers from suppliers were present, almost all suppliers developed their own Code of Conduct and started implementing the action plan, thereby demonstrating a high level of commitment and understanding of the importance of social and
environmental issues for SKF. After this, SKF audited them and accepted their activities as good.

_Empowering workers of suppliers_ by informing about their rights is seen as one important tool to improve social and environmental performance in supply chain by some Swedish companies. One company mentioned an example of “an NGO in Bangladesh that comes to workplace and performs theatre plays that deal with issues of relevance to labour and human rights”.

It is also essential to _encourage and award suppliers_ for good work with environmental and social issues and for conformance with Code of Conduct. So far, it seems that not many organisations have realised the potential of the encouragement (Mont and Leire 2008). There are however several companies that share the belief that _encouraging suppliers’ effort_ is important. One company is considering developing an award system for suppliers to encourage their work on social and environmental issues.

Another important step for creating strategic asset of the supply chain is to engage actors and stakeholders who have influence on the context in which the supply chain functions. For example, Indiska started collaboration with export organisations of suppliers and with competitors to stimulate and demand Indian authorities to implement environmental and social, as well as labour law legislation in various regions.

An extremely important step in creating long-term collaborative relations with suppliers is for the focal organisation to be able to _adjust own internal practices_ to make sure that they do not instigate supplier non-conformance and to ensure that there is fair conditions for suppliers to work in a socially and environmentally responsible manner. Nowadays it is often heard that short product development cycles and the increasing speed of new products flow to the marketplace create unbearable working conditions for workers, e.g. in textile industry (Ethical Corporation 2010). Clothes and fashion retailers no longer talk about “what is hot for the season”, but what is the new collection for the next fortnight. This puts enormous pressure on suppliers who face shorter and shorter lead times and sometimes have to saw new cloth on the ships that are delivering supplies to Europe (Welford and Frost 2006). Thus, the responsibility for poor social practices is not the sole responsibility of suppliers, but is shaped and triggered by focal organisations themselves.

**Conclusions**

Responding to the mounting pressure from different stakeholders, companies are slowly engaging in sustainability work in their supply chains. The results are however far from being satisfactory, both in terms of the progress on developing practices and in securing the actual outcomes. Results from the Swedish studies shows that, there are still few companies that
address environmental or social issues in their supply chain. Secondly, even companies that have developed elaborate procedures and structures for greening their supply chains have difficulties to secure consistent and reliable results in terms of reduced environmental impacts and improved social performance in supply chains.

It is clear that the management of environmental and social aspects upstream in the supply chain represents considerable challenges, on many different levels, for corporate practitioners seeking to induce improvements and assume responsibility. In the past it has been suggested that an integrative approach to supply chain management is desirable in this context. The potential advantages of inter-organisational collaboration and integration include more effective governance but also other sources of inter-organisational competitive advantage such as relation-specific assets, knowledge-sharing and the presence of complementary resources and/or capabilities (Dyer and Singh 1998). As it is generally argued that the process of building a collaborative relationship between buyer and sellers requires time and resources, such a development also often prescribes a reduction in the number of suppliers.

From an environmental perspective, a reduced supply base, where actors collaborate and thus have a better insight into each other’s operations, carries many potential advantages. For example the ability to better control what goes on in the supply chain with respect to environmental and social impacts, and the ability of using a better insight into each other’s operations, as a base for environmental product and process innovations.

For a number of years integration and consolidation was also a general recommendation in the supply chain management literature. More recently, many authors have however started to question the ‘lean approach’ to supply chain management as a universal solution. There has instead been a revival of the idea of portfolio thinking in purchasing and supply management, arguing that the buying company will do best to develop different supplier interfaces, or types of relationships, with different categories of suppliers. (New and Ramsey 1997; Szandtner, Gershowitz et al. 1997; Araujo, Dubois et al. 1999; Cox, Sanderson et al. 2001). Empirical evidence also confirm that companies still do employ a vide variety of approaches to sourcing and procurement, involving different levels of integration (Frohlich and Westbrook 2001; Simatupang, Sandroto et al. 2004). It also shows that that few companies are engaged with extensive supply chain integration that covers several tiers of the supply chain. In fact both case studies and survey upon which this paper is based, as well as studies by other authors (Fawcett and Magnan 2002), indicates that there are probably many companies do not have a clear idea of what their supply chain looks like beyond the first or second tier.
We cannot make the assumption that companies will generally move towards a reduced supply base and a partnership approach to supplier relationships. Rather practitioners need effective tools and methods to manage environmental and social aspects in their supply chain under different sets of supply chain structures and different sets of general sourcing and supply management strategies. It appears that there is still a need for better and more practice knowledge regarding to how to do this effectively and efficiently.

References