

Chapter 5

Flexibility in Social Sustainability: Evidence from Indian Manufacturing Industries

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Abstract Sustainability has been the buzzword in the business environment for quite some time, because of the increasing awareness of the environmental and social aspects where the business strategies and practices may be unsustainable. Sustainability encompasses three dimensions—economic, environmental and social—though the social dimension has largely remained ignored till date. However, due to the emergence of social issues increasingly flagged by social organizations in the developing countries, the social dimension too has started gaining momentum in the recent past. The aim of this chapter is to study the socially sustainable business practices of two Indian manufacturing companies in two different sectors: one, a cement company, and the other, a pharmaceutical firm. The authors have explored the flexibility nature of the practices in these two companies. Particular attention has been paid to the drivers of such practices and the lessons that can be learned from them. The research uses a comparative case study method, whereby, the authors first identify various social sustainability dimensions through the literature review, and then compare the business practices of the two companies for social sustainability. A comparison of the socially sustainable business practices of the two companies opens up the avenues to examine the similarities and divergences in their paths to social sustainability. The findings of the research reveal that certain similarities and differences (flexibilities) do exist in the social practices of the cement and pharmaceutical companies examined for this study and help them to reach sustainability in different ways in the particular context of their sectors. The findings will be useful for the supply chain managers

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and sustainability operations managers who wish to understand the diverse patterns of social sustainability, as also how social sustainability can behave as a leading instrument for decision making.

Keywords Comparative case study • Flexibility in social practices • Social dimensions • Social sustainability • Social sustainability in supply chain • Sustainability practices

5.1 Introduction

With increasing awareness of the sustainability issues, organizations have felt compelled to incorporate sustainable practices in their supply chain, in addition to the traditional parameters such as price, quality and reliability, helping them to be more competitive in their respective markets (Bai and Sarkis 2010). The term sustainability refers to the management of the economic, environmental and social issues by an organization for its stakeholders and others (Elkington 1997). This is a comparatively less-expensive and yet powerful means of conveying to them, and the general public, what sustainability means to the organization and how much the organization cares for it. However, as argued by several scholars, social sustainability in the supply chain remains the least explored dimension of sustainability.

Nevertheless, in the backdrop of increasing awareness of the social issues—connected not just with the immediate corporate environment but also with other stakeholders who have any kind of economic and trade relations with the organization—the trend to incorporate social sustainability has started gaining momentum, as the extended stakeholders' unethical actions and patterns have an impact on the organization's image and clientele. Most such incidents are a function of the upstream supply chain, involving the suppliers and their installations. Therefore, business organizations need to be prudent enough to get their supplier base audited to avoid such negative publicity which not only affects the business, but also degrades the reputation of the organization. Some multinational companies, for example ZARA and Apple, have set about monitoring their supplier base in the developing economies through supplier development training and supplier audit practices that check for child labour, health and safety conditions, living environments and ethical criteria. Apple has even gone ahead with an 18 months' supplier training programme, emphasizing health and safety standards for the employees in the supplier locations (Apple Progress Report 2014). Because of globalization, firms' boundaries nowadays tend to be fluid, as companies are moving towards more vertical integration which is mostly offshore in nature. Therefore, it is significant for them to realize the societal issues that encompass the suppliers, in-house operations workers, downstream distributors, clients and end users.

Social issues develop over a long period of time, based on the societal norms and expectations. Hence, they are location specific and highly contextual

(Gugler and Shi 2009). Therefore, in this changing business environment, it is imperative for the corporates to understand the need for flexibility in their practices while addressing various stakeholders' expectations, so that the employees, suppliers and vendors may also be able to reciprocate them (Sushil 2014). The purpose of this research is twofold: to explore the literature on social sustainability and various social dimensions used in the supply chain of manufacturing industries located at different geographical locations; and to examine the socially sustainable practices of two manufacturing companies in two different sectors located in India. Hence, the research aims to answer the following questions:

- What are the social dimensions used in the supply chain of manufacturing industries?
- What are the social sustainability practices adopted by the two companies chosen from the two different manufacturing domains?
- How do these practices differ and how far are they flexible? Does this flexibility lead to better sustainability?

5.2 Review of Literature

In this section, we group the available literature based on the evolution of social sustainability, socially sustainable practices in the supply chain and different social sustainability dimensions practiced in various countries.

5.2.1 Social Sustainability and Supply Chain

Sustainability has been defined as meeting 'the needs of current generations without compromising the ability of future generations to meet their own needs' (WCED 1987, p. 45). Until the 1990s, the term sustainability was predominately used for the economic and environmental aspects. Later, the United Nations Conference on Sustainable Development (UNCSD 1998), in its Agenda-21, emphasized social sustainability. To be more precise, social sustainability in operations and supply chain management can be narrowed down to those aspects of the products and processes that determine human safety, welfare and wellness. The way these human and social issues are managed in the supply chain ultimately affects the sustainability of a firm and its reputation.

For instance, in a recent incident in China, McDonald's largest meat supplier was on fire for supplying 'expired meat' leading to the suspension of its burger products in Shanghai, China and the US. On the other hand, in an instance of unethical practices being followed by the US hospitals, the patients were being unnecessarily billed for inessential medical procedures. This not only led the US government to impose large fines on these hospitals but also to issue a code of

conduct, named HEAT, to audit the hospitals for unethical practices. There have been several other instances that have forced the corporates to recognize the importance of social sustainability in their business practices. Thus, between December 2005 and November 2006, most of the shrimps sold at Wal-Mart stores were procured from the Thailand-based supplier Matsushita whose workers, in its manufacturing environments, were not only being paid low wages and treated like bonded labourers, but also lacked the basic living conditions such as health and hygiene, sanitation, safety and potable drinking water. This was highlighted and questioned by several NGOs and human rights activists (CBS News 2014). In another such instance, the living conditions of the workers of Tata's plantations in India were questioned by the United Nations (World Bank 2014). All these instances of unethical and unsafe practices have tarnished the image of the companies and can no longer be ignored (Roth et al. 2008).

To probe deeper into the social issues in supply chain, one needs to answer three questions: Whom are we supposed to target? What are the issues that need to be addressed? How are these issues being addressed? (Wood 1991). According to the Stakeholder theory, the people spanning across three storeys of the establishment are supposed to be managed (Freeman 1984, 2004; Frooman 1999; Walsh 2005; Heath 2006; Campbell 2007; Stieb 2009). The first storey consists of the internal operations of the firm, in which human safety, diversity, health and such other issues are addressed. The second storey encompasses the inter-firm level where strong economic ties exist such as the suppliers, distributors and consumers. Finally, the third storey comprises the external stakeholders, including the community, NGOs and regulators.

In terms of the issues to be addressed, the initial research has explored the supplier labour practices, social homogeneity, equitable income and access to goods and services (Emmelhainz and Adams 1999; Sachs 1999). Many authors have explained how the social sustainability issues in the supply chain can be addressed. One such view advocates "socially responsible organizational buying" in the supply chain. According to Drumwright (1996), socially responsible organizational buying takes place because of a skilful policy entrepreneur and the organizational setting in which the company operates (Maignan et al. 2002; Carter et al. 1999). Krause (1999) argues that social sustainability can be addressed through socially sustainable supplier development. He further explains how socially responsible suppliers can be acquired. On the other side, some writers suggest that fair trade practices in the supply chain lead to sustainability (Strong 1997a, b). Many authors have identified various other means of addressing social sustainability such as through purchasing social responsibility (PSR) and logistical social responsibility (LSR) (Carter and Jennings 2000; Carter and Easton 2011). There have been many other studies focusing on how social sustainability can be effectively implemented in corporate roles. Notably, Clarkson (1995), Strong (1997a, b), McWilliams and Siegel (2001), Ehr Gott et al. (2011) have proposed various parameters, including customer requirements, stakeholder requirements, employee requirements, skilful policy entrepreneurs and the influence of the economic status of the company on sustainability adoption. Further, the importance of ethical

supplier development and its impact on the overall corporate social responsibility has been demonstrated (Lu et al. 2012). Ehr Gott et al. (2011) explain how socially sustainable supplier selection can be incorporated into the emerging economies. All these scholars and researchers have emphasized various means for addressing social sustainability in business practices in the supply chain. In the succeeding segment, we would attempt to find out some of the best socially sustainable practices adopted by some global supply chains and their relationship with the business.

5.2.2 Socially Sustainable Practices and Problem Definition

Social sustainability of the business practices of a firm can be found out by looking at how it interacts with people spanning across all three stages of the supply chain, in terms of addressing their safety, health, hygiene, wages, labour rights, etc. leading to the firm's sustainability (Mani et al. 2014a, b). Many developed countries enforce socially sustainable practices through law. However, in developing economies, such enforcement has so far not gained momentum (Mani et al. 2015a, b). However, companies are increasingly deemed responsible for the suppliers' actions related to social and environmental practices (Lu et al. 2012). Therefore, organizations need to be prudent enough to embrace the responsibility and address the issues through voluntary action. It would be an interesting exercise to examine these actions, as they vary from company to company.

Many researchers have delved into these subjects at length and brought out some interesting facts on sustainability. For examples, Koplín et al. (2007) have discussed how socially sustainable practices can be integrated with the manufacturing supply chain, through the case study research. Further, Ciliberti et al. (2008) have grouped all socially sustainable practices in selected Italian companies, using logistics social responsibility (LSR) taxonomy. Some of the global supply chains such as IKEA and BAe, have incorporated socially sustainable practices into both internal and external environments, including the suppliers (Andersen and Skjoett-Larsen 2009; Gopalakrishnan et al. 2012). Similarly, Apple is committed to socially sustainable practices across its supply chain. As part of its commitment, Apple regularly carries out supplier audits (Apple's Suppliers Responsibility Progress Report 2013).

However, these practices vary from country to country because of the different social parameters involved. The social parameters evolve in a society over a period of time, based on geographical location, culture and values. Not surprisingly, research on social sustainability in developing countries like India is still scant, even though there is an urgent need to ensure social sustainability in these countries as they are considered to be attractive destinations for global supply chains due to their cost advantage. Nonetheless, sufficient research has been carried out in other locations and can serve as the starting point for this research. For example, a research on two Spanish companies from two different industries has

revealed several similarities as well as differences in their socially sustainable practices because of their different approaches to sustainability (Cambra-Fierro and Ruiz-Benítez 2011). In this research, we intend to explore the best practices of two different manufacturing companies belonging to two different industries and find out whether there are any differences in their practices, as also how these practices lead to social sustainability.

5.3 Methodology

As the research was exploratory in nature, the qualitative approach was deemed to be the most appropriate (Eisenhardt 1989). The research process comprised two main phases. In the first phase, all the social dimensions used by various researchers under different domains in different countries were identified and analyzed. This analysis also included the identification of the main social sustainability dimensions used until now, in the supply chain function. The method adopted in this phase was primarily a review of the literature on the subject, i.e. secondary sources. Subsequently, two Indian companies were selected from two different manufacturing industries, i.e. cement and pharmaceuticals, because of their importance in the Indian economy. The comparative case study method was applied to identify different socially sustainable practices adopted by these two companies.

According to a report by Indian Brand Equity Foundation (IBEF 2013), the entire Indian manufacturing sector has been split into four different groups as per the usage, and these include basic goods, capital goods, intermediate goods and consumer commodities. Thus, both the companies differed fundamentally in their domains, and yet converged on one point, i.e. the use of chemicals in their production process. Hence, it was an interesting exercise to explore the similarities and differences in their sustainability practices.

The research uses the sustainability reports of the two companies made available on their websites, followed by key informant interviews to get a deeper insight into the aspects not adequately dealt with in the reports. The companies have been analyzed on the basis of some key parameters given in the next section. These are the parameters adopted by earlier researchers and found helpful in analyzing the sustainability of different industries through the case study method (Cambra-Fierro and Ruiz-Benítez 2011; Fayet and Vermeulen 2012). Moreover, the outcome of the key informant interviews was corroborated with the sustainability reports and other reports published by the two companies to ensure the reliability of information.

5.3.1 Key Parameters Considered for Analysis

- General information about the company and the company’s inception and existence
- The supply chain structure, including the locations of the collaborators, distributors and customers, and the society in which it functions
- The company’s understanding of social sustainability
- The company’s global value system and strategy for sustainability.
- The way the company adopts various social practices and their influence on the business and network performance (Table 5.1)

5.4 Analysis and Discussion

Social sustainability in the supply chain is all about how a company addresses the social issues in the upstream and downstream supply chains, i.e. how a company addresses the social issues in its own plant and precincts and how it addresses the immediate stakeholders including the society, people and consumers. Finally, it is about the way the social issues are dealt with in the supplier positions. This gives a clear view of how social sustainability can be approached (Wood 1991; Freeman 1984, 2004). We explore the socially sustainable practices adopted by the two Indian manufacturing companies mentioned in the preceding section. We also attempt to ascertain the flexibility in these practices from industry to industry and examine how this flexibility helps attain better social sustainability.

Table 5.1 Details related to the value chain of both the companies

S. No.	Parameters	Cement company	Pharmaceuticals company
1	Inception	1980	1984
2	Presence	Over 35 years	Over 35 years
3	Supplier locations	Middle East and India	All over the world
4	Plant location	12 in India, 2 in UAE, 1 each in Bahrain and Bangladesh	India, Brazil, Mexico, South Africa, China, Venezuela, Srilanka, Myanmar
5	Distributors and customers	India, middle east	India, US, UK, Mexico, South Africa, China, Venezuela, Srilanka, Myanmar
6	Employees	12,247 employees	15,000 employees across Brazil, Mexico, South Africa, China, Venezuela, Srilanka, Myanmar, Vietnam
7	Financials: turn over	3.79 billion (USD)	2 billion (USD)

Source Compiled from social sustainability reports published online from respective companies

5.4.1 Socially Sustainable Practices in Cement Industry

5.4.1.1 Cement Industry: Background

Cement industry plays a significant role in building a country's infrastructure. The cement industry in India is the second largest in the globe. It is expected to grow positively in the coming years, with the demand set to increase at an annual compound growth rate of over 8 % during 2013–2016. High infrastructure investments and housing growth over the past many years have been the drivers of the growth of this industry. According to the data released by the Department of Industrial Policy and Promotion (DIPP), cement and gypsum products attracted foreign direct investment (FDI) of US 2.24 billion dollars in 2014. Moreover, according to a Confederation of Indian Industry (CII) report titled *Cement Vision 2025: Scaling New Heights*, India needs to double its cement manufacturing capacity by 2025. As highlighted by the report, an additional capacity of 330–380 MT could be needed by 2025. This translates into an investment of about 50 billion US dollars. Hence, it is really essential for the cement manufacturers to find innovative ways to carve out a quick share in this development and continue to be sustainable in the long run.

5.4.1.2 Company Know How

The chosen company is one of the top three players in the Indian cement market. With the revenues crossing over 3.79 billion US dollars and an installed capacity of 53 metric tons per year, it employs 12,247 workers. It is a subsidiary of a 40 billion US dollar corporation anchored by an extraordinarily large workforce of 133,000 employees belonging to 33 nationalities. The group's operations are based in India, Bangladesh, the United Arab Emirates, Sri Lanka and Bahrain. Naturally, its product value chain is also spread across several continents. The company's shareholding pattern is 63 % by the promoters and the remaining by various other investors including the FIIs, corporate houses, banks and the public.

5.4.1.3 Sustainable Practices

Sustainability is built into the core value system and strategy of the company as reflected in the words of its Chairman:

[...] our efforts to solidly consolidate our pole position in the cement business continue unabated, synergizing growth with responsibility [...].

According to one of the directors of the company, “social and environmental practices, far from mere compliance, have been an integral part of the group's philosophy since its inception. The company has been investing continuously in them. These investments are an issue of a natural sense of responsibility towards the well-being of the company. The central focus areas are conserving natural

resources, energy, water, emission reduction, safety and social responsibility—all of which are vital to secure a sustainable cement business. Sustainability can be seen penetrating down in the organizational structure”.

Further:

[...] the march of technology and industry must be matched with a social and spiritual evolution. At the company, our unswerving focus on incorporating our values and applying the concept of trusteeship in our business decisions will deliver growth that is beneficial to all [...].

The company is a member of Cement Sustainability Initiative (CSI) of the World Business Council for Sustainable Development (WBCSD), a worldwide organization for sustainable growth. This affiliation assists the company to realize the environmental and societal impact of its manufacturing operations. Through this association, the company has initiated many actions towards building a sustainable tomorrow. The company measures the key performance indicators of sustainability such as CO₂ emissions per ton of the fuel and raw material used, as well as health and safety measures. The total health and safety parameters are measured on the basis of the number of fatalities (directly employed), number of fatalities (indirectly employed), number of fatalities (third parties) and lost time injuries (LTI) per million man hours. All these parameters in the company show a significant decrease over a period of time. For example, in 2013, the LTI stood at 0.79 which is considerably lower than 3 years before, when it was 0.95. It being cement industry, most of the sustainability initiatives are built around the environmental aspects. These issues are NO₂, SO₂ and dust emissions, and their impact on the environment per tonnage. As part of responsible social development, 92 % of the company sites with quarries have a rehabilitation policy as well as community engagement plans in place, and biodiversity issues are addressed at 12 sites. A sustainability management system such as ISO 14001 or OHSAS 18001, has been implemented in 12 plants. The company has earned many accolades in the environmental and social sustainability measures. The awards for the social measures include the Golden Category Award for Outstanding Achievement in Health and Safety, Greentech Global Safety award, Unnatha Suraksha Puraskara from the Govt of Karnataka, India, Asian CSR Award and ASSOCHAM CSR Excellence Award for commendable social performance. The company is in conformity with the G3.1 Global Reporting Initiative (GRI) A + category norms. The company believes that the stakeholder involvement through various actions would contribute to the long-term sustainability of the firm. As its Chief Financial Officer (CFO) says:

[...] stakeholder engagement is a critical aspect of sustainability. Being able to assimilate various perspectives can help develop more inclusive, effective business strategy. At the company, constructive dialogue helps achieve harmony between development and accountability [...].

The company is working towards achieving the ambition of a sustainable future by collaborating with the stakeholders to formulate a relationship based on shared values. This creates a favourable atmosphere in the direction of transparency,

collaboration, facility inspection, business review meetings, timely payments to suppliers, etc. According to one of the company's suppliers:

[...] the transparency and integrity that the company displays in dealing with us is exemplary. It is their values that carry them forward and we hope that we continue to supply them as we consider them to be ideal customers [...].

The customers are also engaged in product information sharing, product campaigns, satisfaction surveys and grievance redressal mechanisms for product pricing, product safety, product quality and product information accessibility. At the company, safety mechanisms form the core focus area and are given the utmost importance. The company invests in enhanced working conditions of the employees while proactively engaging in natural actions, in order to allay any problems or situations that they may face at work. The Chief Manufacturing Officer of the company says:

[...] Safety is an integral, non-negotiable cog of our value system. We build safety in our work environment by balancing policy issuance, creating awareness, and incentivising and rewarding safe behaviour. Only a safe today can ensure a sustainable tomorrow [...].

In all the plants, child and bonded labour is prohibited, and a 360 degree security arrangement with high vigil is in place to check the entry of a child or bonded labourer in the company premises. The employees' well being is of crucial importance to the company, which has put in place a telemedicinal facilities programme to assist the employees to get admitted to the specialist and super specialist hospitals in the townships. The women employees are given paid maternity leave. Says an employee union member:

[...] the advantage of working here is that everyone from the supervisor to the senior management is very safety and health conscious. We are made aware of the ISO certifications and regulations to keep our environment pollution free. The management is likewise receptive to discussing problems rather than pressuring them on us [...].

The company is at its vanguard, developing facilities for the society's well being such as schools, healthcare, sanitation, rural roads and vocational training for the unemployed youth of Tamil Nadu, India, for a better, sustainable tomorrow.

Thus, the company, through its various activities, addresses the safety and health concerns of the employees and the society, ensures the prohibition of child and bonded labour, as well as carries out local supplier development, employee education and training, for the safety of the consumer.

5.4.2 Pharmaceutical Industry

5.4.2.1 Background

India is one of the top five emerging pharmaceuticals markets, estimated to grow at a compound annual rate (CAGR) of 13 % during 2013–16. It is poised to rise to 55 billion US dollars by 2020. Increased income, ageing population, easy

access to health care facilities and greater consciousness of personal wellness and hygiene are the factors expected to drive the growth of the pharmaceuticals industry in India. FDI up to 100 % is permitted in the pharmaceutical industry under the automatic route, for Greenfield investments. The Government of India has taken many initiatives to encourage the pharmaceutical companies for the domestic market as well as exports, as the majority of the population of India lives in the rural areas and requires affordable health care through generic route.

5.4.2.2 The Company Know How

The chosen company is an integrated global pharmaceutical company dedicated to offer healthcare solutions through its core business in three different verticals, i.e. pharmaceutical services and active ingredients (PSAI), global generics and proprietary products. The company started its operations in India in 1984, though it has been doing business for over 35 years with operations spread across the USA, Russia and CIS, Germany, the United Kingdom (UK), Venezuela, South Africa and Romania, with revenues exceeding 2.0 billion US dollars. The company's suppliers and customers are located in 20 different states.

5.4.2.3 Sustainable Practices

The core values of the company include integrity, transparency, safety, quality, productivity, sustainability, respect for the individual and collaboration and teamwork. This is the foremost non-Japanese pharmaceutical company to be listed on the New York Stock Exchange (NYSE) and the first Asian company to be Sarbanes-Oxley compliant. This gives us an understanding of the company's commitment towards sustainability and the society's well-being. It practices the Code of Business Conduct and Ethics (COBE) from the top level in its hierarchy to the lowest level, including the directors and employees, regardless of level and position.

Sustainable practices are integrated with the company's core business operations at two levels: one, at the corporate level, where the policies and strategies are set and funds allocated; and the other at the business unit level, which generates revenues and where the impact on the community and environment is most immediate. The company also believes in stakeholder engagement at various fronts for a sustainable future.

Over the years, the company has come to realize that it is time to shift its sustainability gear from the strategic to operational, and make sustainability parameters an integral part of the daily, weekly and monthly targets. The company's manufacturing operations have emerged as the first destination to start the journey of 'operationalizing sustainability' as they will have a material impact on the economic, environmental and social performance. The company's core team has identified nine pillars of sustainability, all of which assist in translating sustainability

into measurable actions. These include accessibility, productivity, quality, people, safety, environment, community, engineering excellence and continuous improvement. The bulk of its sustainability activities revolve around water and energy conservation, greenhouse gas emission and waste management activities because of it being a pharmaceutical company. The company has achieved substantial results in water and energy conservation, waste management and greenhouse gas emissions targets.

The company has demonstrated positive action and consistent engagement to build and reinforce the trust between the company and the community. Many initiatives have been taken at the national and local level through the company's Charity and Philanthropic Foundation, a non-governmental organization (NGO) that has touched many lives through medical camps, employee volunteering, supporting education and disaster relief, etc. Many patient care initiatives such as Sparsh, for making cancer treatment accessible for the underprivileged; EGFR first, for the diagnosis support for non-small cell lung cancer (NSCLC); Smart women, for special campaign for early detection of breast cancer; Disha, accessibility of 'reditux' for lymphoma patients; Ashayein, for counselling for the CKD; eye camps, blood donation camps and general check up camps are the activities carried out for the society in which the company operates. The Charity Foundation (CF) has been playing the role of a successful change agent in the social sector, by identifying new opportunities to serve the society. The company has identified two core areas, i.e. sustainable livelihood and education, to nurture large-scale sustainable changes. The livelihood initiatives include Livelihood Advancement Business School (LABS) for enhancing the skill sets of the youth, Farmers Livelihood Advancement Business School (F-Labs) for economical and eco-friendly farming and Skilling Rural India(SRI) programme for skilling the rural youth through vocational training. The educational initiatives include 'Pudami', under which a total of 27 schools have been established for the underprivileged in the most backward districts of AP, India; a co-education school; an education resource centre, early childhood care and education centre and a juvenile home for girls in Hyderabad. The company has also instituted Dr. Foundation for Health (DRFHE) for health education with the primary objective of improving patient care, thereby complementing and adding value to the existing system. As part of the DRFHE's initiative to bring about changes in the existing organizations, several programmes have been launched such as 'Abhilasha', a nurses' training programme; 'Sarathi', training programme for doctors' assistants; 'Sanjeevani', training for pharmacists and 'Aakriti', a programme for dentists.

The company is committed to the safety and well-being of its employees. It has launched a transformational change programme for the safety of the employees, named Parivartan. Further, as part of the safety transformation measures, 3000 safety field audits have been conducted under the risk containment phase, with 13,500 observations out of which 90 % have been closed or mitigated. The company's sustainable people management initiatives include promoting diversity, providing opportunities to differently abled people and training and recreation for the employees.

The company also strives to plant sustainable practices into the organizations that supply raw materials to it, contract-manufacturers who produce for it and authorized business partners who dispose of its waste effluents. There are three aspects of the extended sustainability to the suppliers, i.e. engaging the business partner to create a collective knowledge pool which raises the sustainability and strengthens partnerships; cascading the supplier code of behaviour and sharing best safety practices of 'Parivartan'; and implementing the mandatory supplier induction programmes for all new vendors to sensitize them about the business process and culture. Many sustainable initiatives in logistics, including shifting vendors close to the site, thereby cutting down lead time and logistics costs, implementation of ventilated trucks to keep desired temperature for domestic transports thereby minimizing the role of AC trucks and implementation of Tyvek cargo covers in collaboration with Dupont airlines to avoid temperature excursions during transit have been highly helpful in promoting sustainability.

The company pays utmost attention to product responsibility, since every day these products create a world of difference in people's lives. So, the company practices bioethics in product development.

The above analysis shows various flexible activities taken by both the companies for their stakeholders. This, in turn, has opened up different approaches that lead them to sustainability. These different practices adopted by the two companies have shown great flexibility at various fronts.

5.5 Learnings from the Two Cases

Both the companies have adopted different practices which they find suitable for their own domains. These flexible practices lead them to different approaches to sustainability. The discussions indicate the different approaches in all five stages of the value chain in both the industries. It has been found that the majority of the social dimensions, including sustainable sourcing, ethics, health and safety, education, child and bonded labour, women empowerment, sanitation and recreation are being practiced by both the companies. However, the activities under these dimensions are different and flexible in nature. For example, as part of the ethical dimension in distribution, the cement company practices product quality, pricing and facility inspection, whereas the pharmaceutical company has adopted measures such as 'pharmacovigilance', pharmacopeia adherence and bioethics in product development (product responsibility). Through these flexible activities, the two companies operating out of two different domains have found their own approaches to sustainability.

5.6 Final Comments

In this part, we present the implications for the sustainability of business cycles as well as the key implications for the supply chain management derived from the case study carried out above, apart from exploring the scope for future inquiry.

5.6.1 *Main Implications for Business Cycle*

Based on our case analysis and opinions, there are two aspects of interest that people need to consider about sustainability and future management decisions. One relates to enforcing the supplier sustainability practices in a way that helps the company and its management to have a strategic edge. The second, on the other hand, is about how the company engages all its stakeholders, including the society, through various sustainable initiatives, to create a positive climate for business. Nevertheless, these patterns are difficult to replicate as they involve time and money. On the other hand, the suppliers' alignment and collaboration efforts can also bring in sufficient positive changes in the sustainable practices. In sum, it may be observed that investing in education at different levels enhances the adoption of sustainable patterns and increases the benefits derived from such exercises. For instance, education to the employees, market and society and the consumer create a positive impact and give a competitive advantage. Moreover, when we compare both the cases, it is clear that the managers' education also plays a critical role in embracing sustainable practices and helps much in the long term. These results are in line with Sushil (2010) who says that the enterprise and stakeholder interactions would result in a star model of performance. In this framework, he emphasizes that the performance of enterprises is related to the performance of the key stakeholders, which would result in the creation of a sustainable enterprise.

5.7 Conclusion and Key Implications for SCM

Based on this research, we could identify several social dimensions specifically related to the Indian context such as equity, wages, safety, health, hygiene, ethics, child labour and bonded labour across all the stages of supply chain. Another aspect of interest is the identification of these social activities and their relationship with the manufacturing supply chain. The emergence of many social dimensions in the manufacturing supply chain has given new insights and perspectives to the supply chain managers, to lead their companies towards sustainability in manufacturing. Though the practices adopted by these companies vary in terms of 'name', 'time of execution' and 'to whom it is meant for', all these can be grouped under social dimensions. For instance, sustainable sourcing, local sourcing

methods and enforcement of supplier certifications for social and environmental practices can be grouped under procurement. Similarly, the activities related to the health and safety of the employees and suppliers can be grouped under the safety dimension, and these practices can bring about positive changes in the organization, making it more responsible. The product responsibility activities include the ways of rolling out quality and high performance products that can change the customer perceptions and act as a catalyst for them to repose their faith in the products and the brand. Therefore, sustainability practices can be spread along the supply chain to make all the firms involved in it more efficient. All the actors may benefit from the competitive advantages emerging out of such practices. Also, the relationships between the supply chain linkages and their handling may be essential for the successful management of sustainable practices (Mani et al. 2014a, b). It is also imperative for an organization to consider the adoption of sustainable practices as a long-term strategy. Socially sustainable practices adopted by the suppliers not only increase their efficiency, but also ensure an unstopped flow of the products and materials which, in turn, increases the performance of the supply chain in terms of reduction in the lead time, reliability and cost efficiency. This is in line with the research by Carter and Jennings (2002), which asserts that the social sustainability practices enhance the learning and confidence, which results in cost efficiency. Many educational initiatives and training programmes for the entire medical fraternity as well as awareness campaigns for the consumers, for instance, have increased the company's brand perception in the downstream supply chain. It would be pertinent to refer to the observations made on the companies' brand perception, which assert that the customers' perceptions of the firms' reputation can act as the source of strategic asset and competitive advantage (Aaker 1996; Ghemawat 1986; Weigelt and Camerer 1988). Various socially responsible practices by these companies have helped them achieve a positive perception of the firm and its products. In terms of ethical practices at the supplier locations, improved product quality leads to sustainability and it can also save the company from unwanted recalls. It would again be relevant to refer to a similar research on ethics and its impact on corporate performance conducted by Lu et al. (2012) in china. This research acquaints the supply chain managers with the different aspects of social sustainability and measures, adopted by two different companies and their impact on supply chain performance. With this research, we could conclude that many sustainable practices which are more flexible in nature with slight variations in the structure and execution, can lead to the social sustainability of the organization. Further, this research suggests that social dimensions vary from country to country based on social systems and values, and similarities and differences do exist in the way different manufactures address them.

Since this research considered only two case studies, there are still a number of gaps to be filled with further research. There is also a need to study cases from other industries and carry out inter-industry comparative analysis that might bring in new insights related to flexibility in the sustainable practices of industries. This research focused only on two Indian companies and, therefore, the results obtained cannot be generalized. It would be interesting to study other global

supply chains operating out of the emerging markets and their sustainable practices and challenges. This research primarily focused on the forward supply chain, and therefore, further research can explore the reverse supply chain and its social sustainability.

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