Sustainable Cotton Production in India:  
A Case Study in Strategic Corporate Social Responsibility

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ABSTRACT

Cotton is the world’s most widely traded agricultural commodity, but it is also one of the world’s most toxic to grow. In India, the second largest producer of cotton, Zameen Organics Pvt. Ltd. has pioneered a business model of sustainable cotton production that is based on environmental stewardship and concern for the health and equity of farmers engaged in growing cotton. Zameen’s approach to business illustrates the principles of strategic corporate social responsibility, a business approach that leverages a company’s distinctive competencies to address external issues and by which all stakeholders, not just the shareholders, are enriched.

Keywords: Strategic corporate social responsibility, sustainable business, fair trade, India.

1. Introduction

For business, social challenges can be “seen and treated as opportunities” for innovation and growth (Drucker, 1984: 62). Strategic corporate social responsibility (CSR) leverages the distinctive competencies of a business into gains for both the business and society (Porter and Kramer, 2006). The production of cotton, when grown conventionally, results in significant social and environmental ills. It depletes regional water resources, causes significant environmental and human health damage, and constrains economic growth in developing countries (Eyhorn, 2007). Zameen Organics Pvt. Ltd. (Zameen), a privately held, small farmer-owned company in western India, approaches the production of cotton as an opportunity to generate positive outcomes for all its stakeholders. It is a pioneer in sustainable cotton production and serves as an example of strategic CSR.

Cotton is one of the world’s oldest crops, and international trade in cotton can be traced back at least a thousand years (Findlay and O’Rourke, 2003). Cotton is also one of the most widely grown crops with over 80 countries involved in its cultivation (Ferrigno, 2010). Farming cotton is a very labor intensive enterprise. In developed countries, cotton is cultivated on large, industrial farms with the support of government subsidies. But, the majority of the world’s cotton is grown in developing countries where labor costs are low. Approximately 100 million farmers in these developing countries, working small plots of two to fifteen acres, provide the world with two-thirds of its cotton (Baffes, 2005).

Cotton also has the unfortunate distinction of being the world’s “most toxic crop” (Allen, 2004). It is grown on 2.5% of the world’s arable land but uses a disproportionately high level of the world’s pesticides and insecticides. In the 1990’s and at their peak usage, close to 25% of the world’s total volume of pesticides and insecticides were applied on cotton farms. As of 2008, worldwide percentages had dropped to 6.8% of all pesticides and 15.7% of all insecticides (Blecourt, Lahr, and van den Brink, 2010). Developing countries, including India, often use pesticides and insecticides that have been outlawed in other countries. For example, monocrotophos is banned in Australia and the United States, but it is still commonly applied to cotton fields in India (ICAC, 2010). Cotton farmers in developing countries are especially vulnerable to the dangers that these chemicals pose. According to the International Cotton Advisory Committee:
The likelihood of occupational exposure to pesticides in the Indian scenario is higher than in industrialized countries. In India, pesticides are largely applied by low-income people, marginal farmers, and landless workers. Associated malnutrition and infectious diseases in these populations make them more vulnerable to poisoning. In the extreme hot weather of the tropics, protective gear is not a viable solution. The most commonly used equipment for application of pesticides is a hand-carried lever-operated knapsack sprayer that is poorly maintained (ICAC, 2010: 4).

In response to the environmental and human health concerns surrounding conventionally grown cotton, sustainably grown cotton has become increasingly popular and available (Edwards, 2008). Sustainable cotton includes both fair trade and organic cotton. Fair trade initiatives foster greater social equity by focusing on the flow of goods and profit along the supply chain such that small producers, who are frequently marginalized in traditional supply chains, receive a more representative share of profits (Raynolds, 2000). Fair trade guidelines and certification are provided by several global nonprofit organizations, notably Fair Trade USA and the Fairtrade Labeling Organization (FLO) of Fairtrade International. Organic refers to the process by which the crop is cultivated and requires that the growing and refining are free of synthetic chemicals and of genetic modifications (Francis and Van Wart, 2009). Guidelines and certification for organic products are legally stipulated in both the European Union and the United States.

India is the world’s largest grower of organic cotton; in the 2009-2010 growing season, India produced 80% of the world’s organic cotton (Textile Exchange, 2011). Zameen is one of India’s producers of fair trade and organic cotton. The company’s vision states that “innovative design, social equity, and stewardship of the land go hand in hand.” Founded in 2006 with 300 farmers, Zameen had revenues of over $1 million two years later (Sharma, 2010) and had grown to over 3,000 farmers in 2011 (Perez, 2011).

I begin this article with a case study of Zameen that explains the company’s approach to sustainable cotton production. Then, Zameen’s operations are analyzed through the lens of strategic CSR to illustrate the principles of sustainable business practices. Strategic CSR refers to embedding sustainability principles into a company’s mission, strategy, and operations so that both private good, i.e., profits to company owners, and public good, i.e., societal benefits, are created (Galbreath, 2006). Sustainable business practices are those that encourage equitable resource distribution throughout society and address environmental preservation and restoration (Bannerjee, 2004). The chapter concludes with recommendations for further research in the field of strategic CSR.

2. Zameen Organic Pvt. Ltd.
Zameen Organic Pvt. Ltd (Zameen) is a farmer-owned company in India that produces and markets fair trade and organic cotton. In the Hindi language, Zameen is the word for soil. Healthy soil is crucial to Zameen’s philosophy, which seeks to maximize three stocks of capital: financial wealth, social capital, and biodiversity (Reed and Reed, 2010). The fundamental logic and purpose of Zameen is to alter the current value chain for cotton and redistribute value from intermediaries to rural farm communities where cotton is grown and where the least amount of profit is usually realized. The redistribution of value at Zameen takes two forms. First, farmers are paid a fair price for their farming efforts. Second, Zameen farmers have the opportunity to buy shares in the company and earn dividends from this company stock. Zameen’s business model is to directly connect the farmers with the consumer, bypassing several steps in the traditional textile value chain. The company’s restructuring of the value chain from producer to consumer, the fact that farmers are also stockholders, and the company’s focus on a multiple bottom line are three defining characteristics of Zameen.
2.1 Founding, Structure, and Operations

Zameen was founded in 2006 by Gijs Spoor, Satish Chukkapalli, and Edapalil Mathai Koshy. A Norwegian by birth, Spoor moved to India in 2003 and worked for various fair trade entities before embarking on this venture. Chukkapalli and Koshy were born, raised, and educated in India. The former is an experienced international marketer, having worked for several years in the Indian textile industry. The latter is a rural development expert and Chairman of Agricultural and Organic Farming Group India (AOFG). Chukkapalli and Koshy provide a wealth of local knowledge about India’s complex public and private systems as well as expertise in their own fields. The three men founded Zameen with the aim of providing an alternative and better future for rural, cotton-growing farmers:

Zameen’s mission is to build profitable supply-demand partnerships between strong organizations of small farmers in India and ethical brands worldwide. Zameen’s vision is to create a different kind of market where the promise of organic farming and fairtrade can be realized. A market where farmers are known and celebrated, where innovative design, social equity and stewardship of the land go hand in hand, and where fair returns are shared by all partners of the value supply chain (Progreso Network, Undated).

Like the majority of farmers across India, individual cotton farmers tend to own very modest parcels of land, and it is a struggle to earn a decent livelihood on these small plots of land. To help meet this challenge, AOFG partners with Zameen to provide three categories of services to the company’s farmers. First, AOFG helps to organize the farmers into a multi-tiered and self-managed network, gathering their individual voices and energies into a more powerful collective (Figure 1). Farmers at the top of the network structure are responsible for communication with Zameen’s board; investment of the fair-trade premiums into community development projects such as water wells, specialized composting equipment, and a community mill house; the purchase of farmers’ equity shares in the company; and the distribution of dividends from these shares to farmers (Koekoek, Leijdens, and Reiks, 2010). The second category of services that AOFG provides to Zameen farmers encompasses training in organic farming practices. These organic farming practices not only generate a premium for cotton produced in this manner, but also reduce input costs for the farmers and increase their overall farming efficiency. The third category of AOFG services relates to organic certification. AOFG monitors the farming techniques of Zameen farmers and guides them through the multi-year organic certification process. Zameen has earned several internationally recognized certifications for its cotton, including the FAIRTRADE mark from the Fairtrade Labelling Organization International (FLO) and certification by the Global Organic Textile Standard.

Figure 1. The Organizational Structure of Zameen Farmers: A Multi-Tiered and Self-Managed Network.
Zameen has simplified and shortened the traditional textile value chain to provide farmers with a greater share of the profits on finished cotton goods. The company has done this by eliminating several intermediaries contracting out some of the value-adding steps, such as ginning, between the cotton farmer and the retail customer, or by performing these steps themselves. Marketing representatives employed by the company sell Zameen’s cotton directly to ethical garment brands in Europe and, more recently, in North America and India. The brands pay the mills for the finished products, and the mills pay a commission to Zameen (Mitchell, 2010). After securing contracts for the finished goods, Zameen works with the brands, such as Pants to Poverty, babyblack, and Feng Ho, to promote the value of fair-trade and organic cotton to the end consumer. Zameen and the brands work together to create a direct link between the start and end of the value chain through, for example, videos on the brands’ websites and hang tags on their clothing that feature stories of individual Zameen farmers. This direct link between farmers and consumers helps to provide consumers with the rationale for the premium price on fair trade and organic cotton products. These premiums are channeled directly back to Zameen farmers.

2.2 Zameen’s Multiple Bottom Lines

Describing Zameen’s multiple bottom line, Spoor explains that “we have four P’s: People, Planet, Profit, Purpose” (Reed and Reed, 2010). He notes that, “The [current] situation of the company is not a straightforward success story,” (Spoor, 2011), but the company has made progress on all four of its bottom lines. With regard to people, Zameen is committed to women’s empowerment and to fully integrating female farmers into the company. In a country where women have struggled for the right to own property and to realize the financial and personal benefits of property ownership, women farmers are encouraged and supported to be active participants in Zameen’s farmer network and to hold positions of authority. Sarala Potee, a woman farmer from Andhra Pradesh, rose from a leadership position in her farmer group to serving as president of the Producer Executive Body (Zameen, 2009).

The issue of child labor and welfare is also a priority at Zameen. Zameen farmers do not, and cannot by contractual agreement, use child labor. Additionally, some of the fair-trade and organic premiums that the farmers receive are dedicated to increasing educational opportunities for children in their villages. The procurement of cotton seeds has been both a challenge and an opportunity in this regard as the commercial seed companies; even those that produce organic seed, all employ child labor (Zameen, 2011). Zameen has begun cultivating its own seed, increasing its value chain one more step, to ensure that its cotton does not involve child labor. Additionally, the textile mills and garment brands that Zameen deals with must certify that they do not use child labor.

The reduction of suicides among farmers is another metric related to Zameen’s focus on people. The costs for chemical fertilizers, pesticides, and insecticides required with conventional farming are high and must be purchased at the start of the growing season, prior to receiving proceeds from selling the harvest. Indian farmers often need loans, at rates of up to 60% per annum, to enable them to purchase these chemicals at the start of the growing season. Conventional cotton is also much more dependent on regular rainfall than organically grown varieties, and the vagaries of the Indian weather and monsoons frequently result in low crop production on conventional farms. Often, farmers do not generate sufficient income from a year’s crop to repay the loans. If a farmer’s crop is meager for two or more successive years, the low income coupled with the high interest rate causes many farmers to choose suicide as a means of escaping a massive debt burden (Iyer, 2009).

The Indian government, through its National Crime Records Bureau, has tracked these suicides, both numbers and cause of death, since the phenomenon was first observed in the late 1990’s. Each year, over 100,000 farmers commit suicide in India, and the number has been steadily rising (NCRB, 2010a). Not only are the high numbers of suicides a cause for concern, but the means by which the suicides are committed are gruesome. In 2009, consuming poison – and insecticides in particular, the very chemicals the farmers purchased to improve their farming livelihoods – was the most widely reported
means of suicide (NCRB, 2010b). Andhra Pradesh and Maharashtra, the two states in which Zameen farmers operate, have historically reported some of the highest suicide rates in the country. Switching to organic farming practices eliminates the need to purchase expensive chemical inputs and, thus, reduces the need to borrow money each year. The yield of organically grown cotton compares favorably to conventional cotton, especially in years with low rainfall. While a direct connection would require more data to substantiate, Zameen reports that none of its farmers have committed suicide (Textile Exchange, Undated).

Planet is the second element of Zameen’s bottom line. To date, Zameen’s farmers cultivate more than 21,000 acres of farmland, 25% of which has been fully converted to organic farmland (Mitchell, 2010). This has resulted in healthier soil, water, and air. Additionally, as farmers cultivate their own seeds and practice interplanting of crops, their efforts positively impact biodiversity of both plant and animal communities. For Spoor, who is a proponent of systems thinking, our economic systems are nested within our social systems, which are nested with the larger ecological system (Reed and Reed, 2010). The focus on a healthy natural environment contributes, in direct and circuitous ways, to Zameen’s economic success by, for example, developing more fertile soil and safer drinking water for farmers. In line with Zameen’s efforts to compensate farmers for the environmental benefits they create through organic farming, the company is also considering a program for selling carbon credits.

Economic success, or the profit bottom line, is reflected at Zameen in several measures. One measure is the company’s ability to attract financial investment. In 2009, two social venture funds invested in Zameen. Aavishkar India Micro Venture Capital Fund invested 10 million rupees ($200,000), and the Rabobank Foundation awarded a grant in a similar amount to AOFG for its work with Zameen. Zameen also secured a loan from YES Bank for 60 million rupees ($1.2 million) in 2009. In 2008-2009, Zameen reported that they broke even financially with revenues of over $1.5 million and gross income over $200,000 (Mitchell, 2010). For Zameen’s farmers, the reduced input costs associated with organic farming and the efficient farming practices gained through AOFG training have resulted in higher incomes. Zameen reports that some of their farmers have been able to triple their annual farming incomes (Zameen, 2009). Additionally, farmers benefit financially from stock dividends, and their communities benefit financially from the fair-trade premiums they receive.

The final bottom line that Zameen concerns itself with is purpose. The company is dedicated to altering the cotton value chain in order to improve the lives of its farmers. Farmers are empowered through training in organic and efficient farming techniques, self-governance, and stock ownership in the company. When Zameen was founded in 2006, they worked with a few hundred farmers. In 2011, they were working with 3,800 farmers. For thousands of small, rural farmers who grow cotton in India, Zameen provides the opportunity for a decent income, healthy working conditions, educational opportunities for their children, and enhanced community services. Zameen is one of the few sustainable cotton companies in India that makes equity ownership in the company an option for its farmers and has set aside 51% of its shares for this purpose. As shareholders, farmers not only receive dividend payments, they also have voting rights and a voice in developing company strategy. Spoor explains that Zameen has “opened up the definition of our business model to an entirely new group of stakeholders, and so the power of deciding the structure is currently in the hands of an entirely new constituency.” Zameen, in Spoor’s words, is “bridging the divide between business and development” (Reed and Reed, 2012:122).

3. Strategic Corporate Social Responsibility
Zameen’s philosophy and operations can be viewed through the lens of strategic CSR. Strategic corporate social responsibility involves for-profit companies distributing value to both shareholders and stakeholders and is an alternative view of CSR. Corporate social responsibility (CSR) refers to the idea that businesses are not isolated entities but operate in – contribute to and draw upon – the natural environment and society at large. As such, society has legitimate expectations regarding the behavior of businesses (Davis, 1973; Wood 1991). Early representations of CSR described four
domains in which business could responsibly interact with society: through the business’s economic, legal, ethical, and discretionary activities (Carroll, 1979 and 1991). At the highest level of this model, discretionary CSR refers to actions a company takes to promote social well-being that are beyond the actions society would expect of a moral company.

Researchers have long debated the merits of these upper levels of CSR based on the premise that financial and social outcomes come at the expense of one another and that gains for stakeholders result in losses to shareholders (Orlitzky, Schmidt, and Rynes, 2003). Burke and Logsdon (1996) argue, though, that envisioning a trade-off between financial and social outcomes is a false dichotomy if CSR is managed strategically. They seek to dispel the notion that CSR involves a “zero-sum trade-off” (Burke and Logsdon, 1996: 495) and differentiate between strategic and nonstrategic CSR. The former creates value for both the firm and society, and the latter creates value for society but not for firm. More recently, researchers define strategic CSR as CSR that is integrated into a company’s mission and operations rather than being an ancillary or peripheral activity (Galbreath, 2006).

Porter and Kramer (2006) provide a framework for understanding how CSR can be integrated into a company’s strategy. This framework is based on Porter’s (1985) early work explicating value chains. A value chain is a tool for identifying where and how value, in the specific form of financial profit, is added to a product as that product is developed from raw materials into the final goods that consumers purchase. Rieple and Singh note that the value chain is “an accommodating model” in that it can be “applied” at the firm or industry level (2010: 2294). The value chain for the entire cotton goods industry encompasses farming, ginning, dyeing, knitting, manufacturing, and retailing (Rieple & Singh, 2010). Zameen’s value chain includes the initial industry activities of farming and ginning, but the company has also innovated a means of connecting the final industry activity to the first. Porter (1985) emphasized the value chain within a single firm, partitioning value creating activities within a company into two segments. Primary activities are specific to each product a firm generates, activities that actually touch the product. Secondary activities are firm-level activities that support primary activities. Porter and Kramer (2006) explain how this value chain model can be used to map a company’s social impact. They propose that each profit-creating activity is also an opportunity for creation of social value, depending on how that activity is planned and implemented.

Porter’s value chain model can be applied to Zameen to show how the company strategically integrates CSR. Figure 2 provides an illustration of our analysis. Among the primary value-creating activities, Zameen engages in sustainable and organic farming practices, chooses to sell only to ethical brands, and partners with these brands to connect the retail customers back to the farmers. At the level of secondary activities, Zameen supports equity ownership by its farmers, partners with AOFG for farmer training and self-governance, provides opportunities for women, prohibits child labor, and pays both a fair price and organic premiums to its farmers. Through these primary and secondary value chain activities, which lead to the company’s financial bottom line, the company also creates value for its farmers, the communities in which it operates, and the natural environment.
Figure 2. Mapping strategic CSR at Zameen using Porter’s (1985) value chain model. (Porter’s activity categories are in bold; Zameen’s specific activities are in italics.)

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<tr>
<th>Firm Infrastructure</th>
<th>Human Resources Management</th>
<th>Technology Development</th>
<th>Procurement</th>
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<tr>
<td>Equity ownership by farmers</td>
<td>Partnership with AFOG to develop farmer organization; opportunities for women; no child labor</td>
<td>Partnership with AFOG to train farmers in more effective farming practices</td>
<td>Guaranteed fair-trade price for cotton; payment of organic premiums</td>
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<th>Inbound Logistics</th>
<th>Operations</th>
<th>Outbound Logistics</th>
<th>Marketing &amp; Sales</th>
<th>After-Sales Service</th>
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<tr>
<td>(Not applicable)</td>
<td>Engaging in sustainable farming practices</td>
<td>(Not applicable)</td>
<td>Choosing to sell only to ethical retail brands</td>
<td>Partnering with brands to share Zameen’s story with retail customers</td>
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Zameen recognizes that both ends of the value chain must be involved in the move towards sustainable cotton. Indeed, consumer demand for sustainably grown cotton is on the rise. Retail sales of fair trade cotton products and organic cotton products grew 94% and 63%, respectively, in 2008 over the previous year (Pay, 2009). At the opposite end of the value chain, there is a greater call for producing companies to become more focused on sustainable operations (Kolk and Van Tulder, 2010). Zameen’s value chain illustrates both sustainable business practices, through its attention to environmentally sound production, and strategic CSR, in its efforts to leverage the company’s capabilities to enrich all stakeholders, including shareholders.

4. Conclusion

Strategic CSR is an approach to business that frames societal and environmental problems as opportunities for enrichment of business shareholders and all other stakeholders. Porter and Kramer (2006) describe how the various elements of a company’s value chain can be operated to leverage capabilities in the pursuit of several bottom line objectives. Zameen, a privately held, small farmer-owned company in western India, approaches the production of cotton as an opportunity to generate positive outcomes for all its stakeholders. This case study illustrates the principles of strategic CSR and sustainable business practices through an analysis of the company’s value chain. Through its mission and operations, Zameen informs our understanding of how cotton can be grown sustainably by focusing on social equity and environmental attention.

Future scholars could extend this research by examining how widespread strategic CSR is and the effect of these practices on commerce and business growth. Since a premise of strategic CSR is that all stakeholders – shareholders as well as society and the natural environment – can be mutually enriched, the lens of strategic CSR can be applied to the longstanding debate as to whether or not CSR positively impacts a firm’s financial bottom line (Orlitzky, Schmidt and Rynes, 2003). Practitioners especially would benefit by additional research that addresses the important issues of how to develop and manage a company that embraces strategic CSR as its approach for creating value. This would be in the spirit of work by Heuer (2010) on organizational culture and sustainability and by de Wit and Schouten (2010) on integrating CSR into the activities of firms in the extractive industry.
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