

STONYFIELD FARM – THE BUSINESS MODEL FOR SOCIAL AND ENVIRONMENTAL RESPONSIBILITY: A CASE STUDY*

Vesela Veleva¹

1 Harbour Place, Suite 400
Portsmouth, NH 03801 U.S.A.
E-mail: vveleva@citizensfunds.com

¹ Citizens Advisers Inc.
1 Harbour Place, Suite 400
Portsmouth, NH 03801 U.S.A.

Abstract:

Founded in 1983 as a small family owned yogurt firm, Stonyfield Farm became a \$96.8 million company in 2002 with over 4% of the yogurt market in U.S. and the largest producer of organic yogurt nationwide. Despite its impressive growth, the company has held to its founding mission to support small family-run dairies in New England, provide a healthful, productive and enjoyable workplace for all employees, and serves as a model to show that environmentally and socially responsible businesses can also be profitable. This case study analyzes the drivers and incentives for environmental and social decision-making that have driven the company on the way to sustainability. It demonstrates that even small companies with limited resources can achieve business success while following sustainability principles.

Key-words: Sustainability drivers, organic agriculture, environmental and social responsibility, sustainability indicators

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INTRODUCTION

This article presents the case of Stonyfield Farm – a small, family owned yogurt firm, which grew to become a \$100 million company in 2003, while holding to its founding mission to support small family-run dairies in New England, provide a healthful, productive and enjoyable workplace for all employees, and protect the environment.

One of the objectives of the case study is to demonstrate that companies, which are environmentally and socially responsible in their business practices, can also be profitable. At the same time, the paper raises the question why some companies choose to go “green” or even pursue “sustainability”? Is this a response to outside pressures, an attempt to build a competitive advantage, or expression of their values “to do the right thing”? Another key objective of the paper is explore the key sustainability drivers and capabilities behind Stonyfield Farm’s success, and thus provide valuable lessons to other companies, which have chosen to pursue sustainability.

The data for this case were collected during the period 1998-2000, when the author participated in developing the company’s first mission report as part of a joint project with the Lowell Center for Sustainable Production. Additional information was collected in 2002 in an interview with the company’s Vice President of Natural Resources, Ms. Hirshberg.

The paper begins with an overview of the yogurt industry, followed by Stonyfield Farm’s story and its social mission. Next comes a discussion of the key drivers and capabilities behind socially and environmentally responsible business practices. The paper then presents some of Stonyfield Farm’s key achievements within the five mission areas. It concludes with a discussion of the corporate capabilities and factors for success, company’s future plans and how these relate to sustainability.

COMPANY BACKGROUND AND MARKET PROFILE

Industry Profile

The yogurt making business is highly competitive. It began in the United States in 1929. The Colombosian family, Armenians, who lived in Andover, Massachusetts, started Colombo and Sons creamery. Later the company was purchased by General Mills and incorporated as Colombo. In 1919 near Barcelona, Isaac Carasso came out with Danone. He brought it to the United States in 1941. In 1998 the company called Danone Group had over 15 percent of the world fresh dairy market. In 2002 its U.S. subsidiary – Dannon – had 29% of the national grocery yogurt market (see Table 1).

The annual sales of yogurt in grocery stores¹ in the U.S. for fiscal year 2002 were \$2.5 billion, and grew at a rate of 10% (see Table 1). The main companies in the sector included Yoplait, Dannon, Breyers, Stonyfield Farm, and Colombo. Over the past three years Stonyfield Farm managed to move its position from the fifth to the fourth branded² yogurt in the sector, passing by the well-known brand Colombo.

Table 1. U.S. Yogurt Grocery Sales (52 weeks ending December 29, 2002)

No.	Company	Dollar Share, %	Dollar sales	Dollar Sales % change from year ago
1	Yoplait	34.0	\$868,333,888	11.5%
2	Dannon	29.0	\$741,708,544	8.3%
3	Breyers	13.4	\$341,536,576	10.4%

4	Private Label	5.4	\$138,505,840	(12.3%)
5	Stonyfield Farm	4.1	\$103,649,064	7.6%
6	Colombo Inc.	2.7	\$68,931,880	(8.0%)
7	Yofarm Corp.	2.0	\$50,082,984	31.2%
8	La Yogurt	1.3	\$32,111,098	3.1%
9	Mountain High	1.2	\$29,693,450	5.6%
10	Axelrod	0.7	\$17,557,054	84.1%
	TOTAL	100.0	\$2,555,894,784	10%

Source: IRI (Information Resources, Inc.)

The 2002 sales of yogurt in the natural foods market³ were \$105.5 million, of which Stonyfield Farm had 38.3% (or \$40.4 million), followed by Brown Cow, Horizon, Wholesoy, and White Wave. In 2003, Stonyfield Farm acquired Brown Cow and thus further increased its share in this market.

Stonyfield Farm's business success is impressive considering how the company started two decades years ago.

Stonyfield Farm's History, Products, and Market

The founder of Stonyfield Farm, Samuel Kaymen, had only modest aspirations and never intended his company to capture a market share when he first began making yogurt. In fact, he entered the yogurt making business unintentionally. In 1978 he was running the Rural Education Center in Wilton, New Hampshire, to "teach organic agriculture and care of earth." Kaymen started making yogurt because "the funding for the school dried up." At that time he was making small amounts of yogurt for the family needs. A few years later, in 1983, Kaymen decided to found a yogurt company - Stonyfield Farm - with Gary Hirshberg as CEO.

Before becoming Stonyfield Farm's CEO, Hirshberg was director of the ecological research group New Alchemy Institute in Falmouth, Cape Cod. Disappointed by the limited power of NGOs (non-governmental organizations) to affect changes, he seized a different approach - the one of a businessman. Business interfaces with millions of consumers daily, which is an enormous opportunity to reach a large audience. In addition, business has the resources, the global reach, and the responsibility to move the world toward greater sustainability. Therefore, Hirshberg was determined to find a way to harness the power of corporate America to advance his cause (Gray 1998).

In 1989, after six years of struggling to survive, Stonyfield Farm began to grow and moved to a new plant in Londonderry, NH, to provide more capacity for its expansion. Since then, the company had achieved an annual growth of 25 to 30 percent. Its sales in 1996 were \$31.5 million, in 1999 - \$53 million, and in 2002 - \$96.8 million, compared to \$2.5 million in 1990. The percentage growth would likely slow down over time but Stonyfield Farm would still remain one of the fastest growing companies in the sector (see Table 1), achieving its goal of \$100 million a year in 2003. In 2002 the company employed 180 people and had one production facility in Londonderry, NH, which was recently expanded to meet the increasing production needs.

With over 4% share of the yogurt market in U.S., Stonyfield Farm distributes its production to all 50 states. Sixty-seven percent of its 2002 sales were certified organic - up from 30% only three years ago (Greiner 2000). This made Stonyfield Farm the largest producer of organic yogurt in the country. In 2002 its product line included over 80 different products, such as (Stonyfield Farm 2002):

- YoBaby Organic Whole Milk Yogurt for Babies and Toddlers
- YoSqueeze Organic Portable Lowfat Yogurt
- Organic Whole Milk Yogurt
- O'Soy Organic Cultured Soy
- Organic Drinkable Lowfat Yogurt
- Organic Super Premium Ice Cream
- Organic Frozen Yogurt (Nonfat and Low Fat)

The company uses only natural ingredients in its products. No artificial colors, sweeteners, preservatives or thickeners are used. Its entire yogurt contains six live, active cultures, and in 2002 it was the only brand in the U.S. with L. Reuteri, which was scientifically proven to boost immune system defenses and enhance the body's resistance to gastrointestinal disease. Recently Stonyfield Farm began to add inulin to its products – a natural dietary fiber and prebiotic that has been clinically shown to increase calcium absorption up to 20%.

Following its founding mission to support small family farms, Stonyfield Farm receives milk from local coops. St. Albans Cooperative Creamery in St. Albans, Vermont, supplies the company with conventional milk. The organic milk is provided by CROPP, a coop based in Wisconsin, which includes dairy farms in Vermont and Maine. No milk comes from New Hampshire, since it is not a dairy state and had only 160 dairy farms in 2002, none of which organic (for comparison, Vermont had 1433 dairy farms in 2002) (Veleva 2002). According to Stonyfield Farm's requirements, participating farmers do not treat the cows with the synthetic bovine growth hormone (rBGH).

STONYFIELD FARM'S MISSION AND SUSTAINABILITY

Stonyfield Farm rarely uses the word "sustainability". However, its mission and accomplishments are examples of social, economic and environmental responsibility.

According to the CEO Gary Hirshberg, the model business should have environmentally sound business practices. It must be a place where employees enjoy working and feel personally fulfilled. In the case of yogurt making, it would produce high quality all natural products made with ingredients grown with sustainable agricultural practices that are environmentally sound, and return a fair price to the farmers. Perhaps most importantly, the business would be profitable and provide an exceptional return on investment. Otherwise, it would not be a viable model (Stonyfield Farm 2000).

In developing the original business plan for the company in 1984 Gary Hirshberg crafted Stonyfield Farm's mission and its five key components: quality, environmental responsibility, profitability/return on investment, employee well-being, and support of family farms (see Figure 1). For most of its first decade the company was focused on staying in business and making a quality product. In the second decade much more work was devoted to trying to fulfill the founding mission and, in doing so, be a model for others (Stonyfield Farm 2000).

Figure 1. Stonyfield Farm's Mission Statement

Stonyfield Farm - Mission Statement	
1.	To provide the very highest quality, best-tasting, all natural and certified organic products.
2.	To educate consumers and producers about the value of protecting the environment and of supporting family farmers and sustainable farming methods.
3.	To serve as a model that environmentally and socially responsible businesses can also be profitable.
4.	To provide a healthful, productive and enjoyable work place for all employees, with opportunities to gain new skills and advance personal career goals.
5.	To recognize our obligations to stockholders and lenders by providing an excellent return on their investment.

In 1998, the Lowell Center for Sustainable Production⁴ approached Stonyfield Farm with an offer to work with the company to develop a set of sustainability indicators. Stonyfield Farm responded willingly and a two-year partnership ensued. This project allowed Stonyfield Farm to revisit its mission, further define the five key areas, and develop a set of indicators to measure progress toward its mission and goals (see Figure 2).

Figure 2. Sample Mission Indicators at Stonyfield Farm

Family Farm Indicators	
•	Percent organic sales
•	Organic acres supported
•	Number of small family dairy farms supported
Profitability/Return on Investment Indicators	
•	Net sales
•	Stock price
•	Market share
Environmental Indicators	
•	Solid waste
•	Pesticides
•	Supply chain greenhouse gas emissions
Enjoyable Workplace Indicators	
•	Compensation
•	Vacation time
•	Holidays
•	Turnover rate
•	Length of service
•	Stock ownership

Stonyfield Farm's interest in developing a suite of sustainability indicators came with one significant constraint – the effort could not require a large time investment of the company's senior and middle managers. This time constraint recognized the Herculean efforts that managers were devoting to the rapidly expanding production. Setting aside considerable time to focus on sustainability training and education would force managers to divert time needed to manage the company's rapid growth. This constraint was especially problematic because the understanding of sustainability concepts among line workers and most managers was quite poor, according to Ms. Hirshberg, Vice President of Natural Resources. At the onset of the project, half of the company's 18-member senior and middle management team had been with the company for two years or less.

Led by the CEO, Gary Hirshberg, and the Vice President of Natural Resources, Nancy Hirshberg, the program involved top and middle management throughout the company's Leadership Team. The latter was a cross-functional/cross-departmental group, which included representatives from all main departments: production, sales, marketing, human resources, and environmental department, among others. The Team met regularly to address some problems or initiate new projects. The key obstacle in the beginning was to get "buy-in" from the staff for this project. Overwhelmed with responsibilities related to company growth and expansion, people did not have the time for any additional work, according to Ms. Hirshberg. Line workers and the Board of Directors were not involved in the program but this might change in the future. Stonyfield Farm recognized that it was communicating its mission better externally (to its customers and general public) than internally (to its employees). Wider employee education and involvement in sustainability projects became one of the key goals, according to Ms. Hirshberg.

SUSTAINABILITY DRIVERS

Why some companies choose to go "green" or even pursue sustainability? Is this a response to outside pressures, an attempt to build a competitive advantage or expression of their values "do the right thing"? Past research on organizations and environment typically referred to four drivers of corporate ecological response – legislation, stakeholder pressures, economic opportunities and ethical motives (Bansal and Roth, 2000, p.717). For example, projects to reduce energy use and waste can lead to significant savings (Veleva et. al. 2001, p.327). Legislative bans on chemicals can lead to innovation and use of environmentally benign substitutes.

New research on corporate drivers, however, has demonstrated that there is a more complex dynamics between what is happening within an organization and in the field it operates. According to Hoffman (2001, p.135), how a company acts is determined by an entire web of interactions between two types of factors: institutional and cultural. The institutional factors (called also "occupational communities") include suppliers and buyers, consumers, financial institutions, shareholders, investors, insurance underwriters, trade associations, academic institutions, and religious organizations. The cultural factors represent the different approaches (or cultural frames) an organization may take. Hoffman (2001, p.140) classifies these into six basic frames: operational efficiency, risk management, capital acquisition, social responsibility, market demand, strategic direction, human resource management and regulatory compliance. Often organizations may have multiple institutional pressures and cultural frames, which lead to a greater variety of responses.

Based on extensive qualitative study, Bansal and Roth (2000, p.717) identified three key motivations for companies to go green: competitiveness, legitimation, and ecological responsibility. Competitiveness relates to developing and sustaining a competitive advantage. Legitimation is defined as "the desire of a firm to improve the appropriateness of its actions within an established set of regulations, norms, values, or beliefs". Ecological responsibility represents the activities targeted at improving a firm's impact on the environment (Bansal and Roth, 2000, p. 726).

What does the case of Stonyfield Farm demonstrate to the theory and practice of sustainability? The following sections explore the motivations and the key external and internal factors behind the company's pursuit of sustainability.

External Drivers

According to Ms. Hirshberg, the key external driver for Stonyfield Farm was the current state of the environment – constantly increasing pollution, resource depletion and biodiversity loss, among others (Veleva 2002). This was the key motivating factor behind the company's founding mission. Stonyfield Farm simply wanted to be a good corporate steward, which corresponds to what Bansal and Roth (2000) call "*ecological responsibility*". This motivating factor represents the ethical aspect of environmental action, which emerges from the "concern for the social good" (Bansal and Roth, 2000, p. 728). Instead of acting only for pragmatic reasons, companies act because it is "the right thing to do".

Competitiveness has also been a motivating factor for Stonyfield Farm, although somewhat less significant. Bansal and Roth (2000, p. 724) argue that firms motivated by competitiveness "actively innovate ecologically benign processes and products to enhance their market position". Striving for sustainable practices has allowed Stonyfield Farm to differentiate itself from competitors and has provided clear public relation benefits. For example, in 1999 alone the company estimated that the received media attention was worth over \$66,000. Although there were some attempts to mimic Stonyfield Farm's approach⁵, most of the companies in the sector were still in the pollution control/compliance stage (Ehrenfeld 1996).

Stonyfield Farm has constantly sought to "improve the appropriateness of its actions within the established set of regulations, norms, values or beliefs", which Bansal and Roth (2000, p. 726) call "*the legitimation factor*". Developing strong connections with local community, environmental advocates, customers and suppliers - the stakeholders who are establishing the new norms of corporate behavior - are examples of how an organization can be an active participant in defining the norms rather than been trapped in constant struggle for compliance.

Regulations and government relations were not a driving force behind Stonyfield Farm's sustainability efforts, according to Ms. Hirshberg. However, these were important for highlighting key environmental problems and areas of concern (Veleva 2002).

Internal Drivers

The key internal driver for Stonyfield Farm's sustainability efforts had always been *top management commitment* led by the CEO, Mr. Hirshberg, and the Vice President of Natural Resources, Ms. Hirshberg. As discussed earlier, Mr. Hirshberg was a former NGO activist who turned to the business in order to make a greater impact on people and the environment. Ms. Hirshberg has been with the company since 1991. She is a passionate proponent of sustainability at Stonyfield Farm and some of her major efforts included starting the company's organic program, managing the solid waste minimization program, developing partnerships with NGOs for educational campaigns, and spearheading the mission program to get employees to improve the company mission performance. She had been active with the Business for Social Responsibility, Organic Trade Association, and EcoPartners. Both Mr. Hirshberg and Ms. Hirshberg were guest speakers at many national and international conferences and meetings, such as the International Dairy Federation, the National Town Meeting on Sustainability, and Business for Social Responsibility.

Another driver behind Stonyfield Farm's unique approach was its *shareholders' support*. The company's initial investors included individuals and foundations with clearly expressed environmental and social values.

STONYFIELD FARM'S SUSTAINABILITY ACHIEVEMENTS

Developing mission indicators allowed Stonyfield Farm to evaluate in a more consistent way its progress within each of the five key mission areas. The indicators were published in a Mission Report, used only internally. A growing number of companies today are using some form of environmental or sustainability indicators to better manage their operations as well as to communicate results to interested stakeholders (Veleva and Ellenbecker 2000). Figure 2 presents some of Stonyfield Farm's mission indicators. Evaluating the indicators revealed that the company was doing well in the areas of quality, profitability, and environment. The key challenge identified by the Leadership Team in year 2000 was employee turnover rate (particularly among hourly workers), which was partially due to the strong economy and related labor movement. Additional areas for improvement included operations/office policies, employee involvement and education about family farming, product packaging, and climate change. This section provides highlights of Stonyfield Farm's numerous achievements in the main mission areas.

Quality, organic products and family farms

Stonyfield Farm was established in order to support and revive interest in New England's declining family farmers. Twenty years later it was still following this mission. Stonyfield Farm was buying milk mainly from family-run dairies that produce organic or conventional milk without genetically engineered bovine growth hormone (rbGH). Such hormones are added to a cow's feed to increase milk production. According to Mr. Hirshberg, "the wide use of genetically engineered bovine growth hormones (rbGH) could raise milk supply and lower prices to a point at which family-owned dairies could not compete with large producers" (The Telegraph 1998). Stonyfield Farm, along with Ben & Jerry's Homemade Inc. and Organic Valley, successfully fought an Illinois ban on labeling rbGH-free products.

Organically grown food promotes biological diversity, recycling of nutrients and preservation of soil fertility. It prevents the introduction of toxic and persistent chemical pesticides and fertilizers into the environment and food chain. In addition, to achieve "certified organic status" farmers must not use growth hormones and antibiotics. Many studies have related the use of pesticides and hormones to some cancers (Levy and Wegman 1995, p.668). Thus, Stonyfield Farm provided more jobs while at the same time protecting the environment and human health. Dairy industry nationwide has been drastically changing its structure. Between 1954 and 1992 the number of farms in the U.S. decreased 95% (Outlaw et. al. 1996, p.2). This shift from small, family run farms to large, typically confined animal feeding operations (CAFOs) has led to loss of local jobs, increasing environmental pollution (animal waste and water contamination), use of genetically engineered hormones, and antibiotics.

Consumer and Producer Education

Stonyfield Farm has always been an education-oriented firm. According to the CEO Mr. Hirshberg, the company had done "a very good job of closing the gap between consumers and the environment." To promote consumer awareness of small farms, Stonyfield Farm initiated the "Have-a-Cow" program, where consumers were encouraged to "adopt" a cow. Stonyfield Farm also targeted global warming in its "Put a Lid on Global Warming" campaign. The firm partnered with the Union of Concerned Scientists (UCSs) in an effort to combat the \$13 million advertising campaign by industries opposing global warming. During the campaign, Stonyfield Farm printed a global warming message on more than five million yogurt container lids.

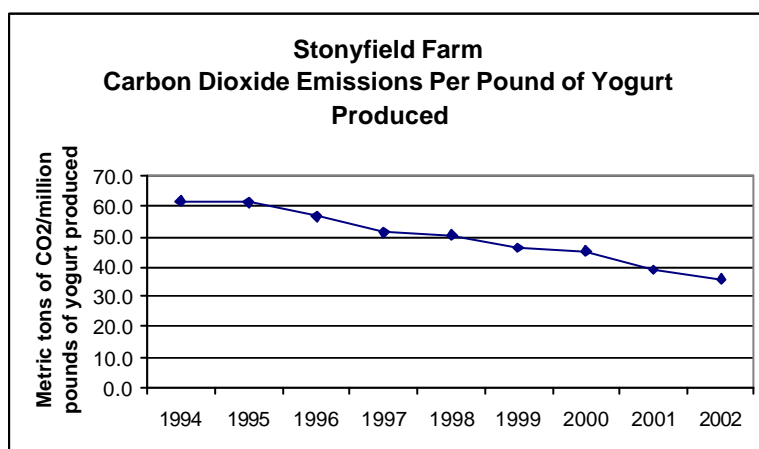
Stonyfield Farm has a special Visitor's Center and offers tours to its facility. The visitor center's purpose is mainly educational. It offers souvenirs, yogurt, and information about the company. Approximately 20,000 people visit the plant annually and this has been another opportunity to educate consumers about family farming, organic agriculture, and environmental protection. The Center offers various cookbooks and other publications to educate consumers on organic food and healthy living, such as "A Practical Guide to Understanding Organic".

Environmental Responsibility

One of Stonyfield Farm's main goals was to reduce carbon dioxide emissions, associated with its manufacturing and production. Figure 3 demonstrates that the CO₂ emissions per unit of product decreased significantly since 1994. In addition, Stonyfield Farm initiated several projects that completely offset its facility CO₂ emissions⁶ (Veleva 2002). The projects included reforestation in the Northwest, building energy efficient straw bale homes in China, replacing inefficient oil boilers with natural gas boilers in schools, methane recovery from coal mines in Ohio and other states. Each of these projects led to specific reductions in the atmospheric CO₂ emissions and when subtracted from Stonyfield Farm's facility emissions, the total was net zero.

For its unique approach and significant achievements in regard to global warming, in May 1999 the President's Council for Sustainable Development awarded Stonyfield Farm the National Award for Sustainability (NTM 1999).

Figure 3. Stonyfield Farm – CO₂ emissions

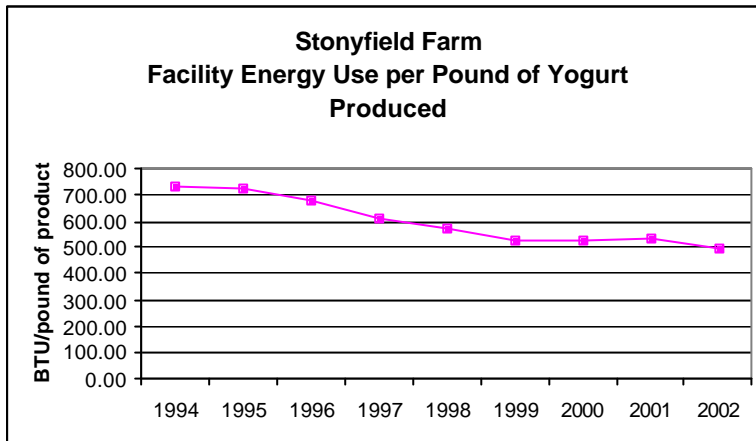


At the same time, Stonyfield Farm recognizes that most of its impacts on climate change are in the supply chain, such as product packaging and methane from cows. This became particularly clear after implementing the sustainability indicators and measuring the company's global warming potential over the supply-chain. To address this issue, Stonyfield Farm has constantly been searching for more environmentally friendly packaging materials.

Energy use is directly linked to global warming but it also generates air pollutants, such as sulfur dioxide and nitrogen oxides, and promotes the formation of ground level ozone. Through lighting retrofits, a hot water recovery system (to capture "waste" heat), and redesigning the yogurt making process, Stonyfield Farm significantly reduced its energy intensity (kWh per pound of yogurt) and saved \$147,216 in year

2000 alone. Figure 4 demonstrates that the energy use per unit of products was significantly reduced over the past eight years. At the same time, due to expansion in production volumes, the total energy use and respectively, CO₂ emissions increased.

Figure 4. Stonyfield Farm Energy Use



Packaging has been a major challenge for Stonyfield Farm, since the company ships millions of yogurt containers annually. Packaging contributes to climate change, waste and air pollution. Over the past several years Stonyfield Farm had continuously worked to address this issue. In 1996, in order to select the packaging with the lowest environmental impact, Stonyfield Farm used the results of a life-cycle assessment undertaken by the Boston-based Tellus Institute consulting group. By switching to polypropylene, in 1998 alone the firm prevented the manufacturing and disposal of over 85 tons of plastic⁷ as well as the use of chlorine and the release of dioxin (by-product in the production of bleached paper).

In 1999 Stonyfield Farm partnered with Polyainers Inc., its principal packaging supplier, to sponsor two life-cycle studies that examined the impacts of its yogurt delivering system. Conducted by the University of Michigan's Center for Sustainable Systems, the studies assessed the total environmental burden of Stonyfield Farm yogurt product delivery system and made a series of recommendations. Some of the recommendations, such as eliminating the lids on small cups, were implemented by 2003; others, such as educating consumers about the environmental benefits of buying in larger containers, would be implemented in the future (Veleva 2002).

Stonyfield Farm was recognized by the Environmental Protection Agency's Waste Wise Program for its achievements in waste minimization. The company had always put a strong emphasis on waste prevention and elimination whenever possible, then on reduce, reuse and recycle. Over 60% of the generated solid waste was either re-used or recycled. Recovered materials included cardboard, metals, paper, yogurt containers, and wooden pallets. In partnership with Recycline Inc., Stonyfield Farm was recycling its waste yogurt containers to make toothbrushes. The company was accepting back its empty containers, which consumers could drop off or mail on their expenses to Stonyfield Farm's facility in Londonderry, NH. Waste yogurt was used to feed local pigs. The direct savings from the solid waste program in year 2000 were estimated at \$83,791. In 2003 Stonyfield Farm replaced the rigid lids of its small containers with foil, which further reduced waste.

Stonyfield Farm donates 10 percent of its annual profits to environmental groups through its “Profits for the Planet” program. For example, in 1997 alone the company gave out \$164,008 (Gray 1998). The company had given away millions of cups of free yogurt to non-profit events, such as Earth Day, The Walk for Hunger, and Share Our Strengths. Each year Stonyfield Farm donates a couple hundred pounds of yogurt to local food banks.

Yogurt making is a water-intensive manufacturing process and Stonyfield Farm initiated several projects to reduce its water consumption. Rinsing water was recirculated and reused, leading to \$40,299 estimated financial savings in year 2000 alone (Veleva 2002).

Employee Well-being

In addition to its environmental and community responsibility, Stonyfield Farm cares about its employees and aims to provide healthy and safe workplaces and rewarding jobs. In 2002 the firm employed about 180 people (up from 150 in 1999). All full-time employees had good benefits and were offered alternative health care and tuition reimbursement. Stonyfield Farm relied heavily on teams. Examples included organic team, events team, and line efficiency teams. Teams met periodically and the entire company met biannually to review progress. Various surveys were conducted to track employee job satisfaction (new employee survey, exit surveys, climate survey⁸). In addition, every employee had the right to schedule a lunch meeting with the CEO to discuss issues of concern.

CORPORATE CAPABILITIES AND FACTORS OF SUCCESS

Mr. Hirshberg takes a very strong position on the role of business. He believes that “any problem on earth will be solved if business makes it a priority; any problem that has not been solved yet is because business has not made it a priority” (Singhania 1998). Stonyfield Farm’s story demonstrates that a company can be at once profitable as well as socially and environmentally responsible. The question, then, is why aren’t more companies like that? What are the factors and corporate capabilities behind Stonyfield Farm’s success? Has it influenced the business community? And can such a model be replicated in another business environment or industry?

The transformation toward business sustainability is long and complex. As Ehrenfeld (1996) points out, there are three main stages: compliance, prevention, and sustainability. In countries with long tradition in environmental protection, like the United States, almost all companies have moved to the compliance stage. Many progressive firms have moved into the second stage, best characterized with preventive approaches such as pollution prevention, life-cycle assessment, eco-efficiency, and industrial ecology. Very few companies, however, have moved toward the third stage, sustainability. Sustainability requires an expansion of the firm’s strategic horizons in both time and organizational dimension (Ehrenfeld 1996). A second industrial revolution is needed according to McDonough and Braungart (1998, p.6) to move companies from eco-efficiency to eco-effectiveness. Eco-efficiency means to produce more with less, but it still promotes the same production paradigm which has brought us to the present environmental crisis. The concept of eco-effectiveness introduces a completely new paradigm, where industry is regenerative, rather than depletive. It involves design of products that work within the cradle-to-cradle life cycles rather than cradle-to-grave. It separates the biological nutrients from the technical nutrients (which are reused or recycled). It sells services rather than products (McDonough and Braungart 1998, p.6). Such a move toward eco-effectiveness or sustainability, however, involves risk, innovation, and long-term planning – key aspects that deter many companies from undertaking it.

Furthermore, companies have traditionally been driven by governmental regulations in the environmental and social areas. The inertia of such patterns is difficult to overcome.

This research indicated that Stonyfield Farm was one of a handful of companies that chose to make the step toward sustainability, and the result was clearly a success. Yet this was not just good luck. It was the company's visionary approach. In their book "Built to last", Collins and Porras (1994) present one of the most comprehensive studies of successful companies. This study is based on comparisons between visionary and nonvisionary companies. They define visionary companies not just as successful or enduring. They are "the best of the best in their industries and have been that way for decades." Many of them "have served as role models for the practice of management around the world" (Collins and Porras 1994). Contrary to business school doctrine, "maximizing shareholder wealth" or "profit maximization" were not the primary objectives or the dominant driving force for most of the visionary companies. Making money is only one, and not necessarily their primary, objective. In fact, the study revealed that visionary companies have had core ideology to a greater degree than the comparison companies. The authors call this paradox "the Genius of the AND": a visionary company does not "simply balance between idealism and profitability, it seeks to be highly idealistic *and* highly profitable" (Collins and Porras 1994).

Another key factor for Stonyfield's success was top management support. Its founder, Samuel Kaymen, the CEO, Mr. Hirshberg, and the Vice President of Natural Resources, Ms. Hirshberg, were people with high ideals, goals and personal missions. Their stories revealed that Stonyfield Farm had become merely a tool to achieve their goals to make a larger impact on society and environment than any individual or even non-profit organization can do.

No company would succeed in business if it does not provide high-quality products or services. Making the very highest quality, best-tasting yogurt was the first priority for Stonyfield Farm. The company relied on continuous innovation in product formulations and packaging. The use of six live cultures, natural fiber and organic ingredients; original messages on its yogurt containers and lids had clearly differentiated the company from its competitors. In such a way, Stonyfield Farm successfully integrated a wide array of stakeholders including consumers, NGOs, suppliers, distributors, and shareholders.

Customer loyalty was another factor for Stonyfield Farm's success. The company is growth-oriented and consumer driven. Demand for Stonyfield Farm's products continued to grow rapidly even when other companies' products were on sale. And surprisingly, this had happened while Stonyfield increased the average price of their products. The company's unique approach to put concerns about health and environment first had increased the number of customers. There is a growing market for environmentally preferable products. Surveys show that a growing number of people in the developed countries are willing to pay a premium for such products. The business world realizes this too. Surveys of top corporate executives have found that they believe "greater opportunities in the management of environmental affairs come from producing environmentally friendly products and services to differentiate their companies from competitors" (Dillon and Baram 1993).

Cross-disciplinary coordination was another key corporate capability at Stonyfield Farm. The company relies heavily on teams to address problems and come up with original ideas for further product innovation, packaging improvement or reducing employee turnover. According to Bolino et. al. (2002), social participation behaviors on the part of employees are likely to facilitate the creation of network ties, which are the basis of creating a social capital. The latter is a critical source of sustainable organizational advantage (Nahapiet and Ghoshal 1998). An evidence of the good management-employee ties at

Stonyfield Farm is also the culture of open communication. For example, employee survey in 1999 revealed that insufficient vacation time was the most prevalent complaint among the workers. Comparisons with other companies in the sector revealed that Stonyfield Farm's vacation time was below the average for the industry. As a result, top management decided to give each employee additional vacation days.

Product Stewardship calls for reduction of the life-cycle environmental effects of products (U.S. EPA 2003). Very few companies, however, have embraced this idea and are taking concrete steps towards its practical application. Among the best-known examples are Interface Inc., which is taking back its old carpet for recycling; and Xerox, which has eliminated many toxic chemicals from its products and is leasing its products instead of selling them. Stonyfield Farm developed product stewardship capabilities that made it unique in the entire sector. The life-cycle assessment of its packaging; taking back and recycling its waste containers are only two examples of extended producer responsibility. With no legislation currently to demand product stewardship, proactive companies like Stonyfield Farm are both improving their image and getting ready for any future regulatory changes.

Part of Stonyfield Farm's success was result of having a market niche. There is a growing demand for organic products, and Stonyfield Farm grasped this market opportunity. For example, sales of organic milk nearly doubled from about \$16 million in 1996, to almost \$31 million in 1997, according to dairy industry figures. Overall, the demand for organic food is expected to grow even more in the future (Gilbert 1999). In fact, one may argue that the company actually helped drive the organic food market by its numerous educational initiatives.

FUTURE PLANS AND SUSTAINABILITY

Despite its success, Stonyfield Farm has its challenges. According to Ms. Hirshberg, the three priority areas in the near future are (i) goal setting with employee involvement; (ii) climate change; packaging and distribution; and (iii) environmental management system. Addressing those will bring the company further ahead on the way to sustainability.

Stonyfield Farm is committed to a strong growth and expansion. In October 2001 the Danone Group purchased 40% of Stonyfield Farm's shares and raised concerns among many of its friends and customers. Would the company manage to follow its mission in the future and keep its high profile or it would lose its identity eventually? What did this partnership mean for both sides?

According to the top management, the agreement allowed Danone initially to purchase 40% of Stonyfield Farm's shares, providing liquidity exit for the nearly 300 Stonyfield Farm shareholders, many of who were friends and employees who helped the company with crucial financial assistance during its start-up phase. In 2003, subject to the successful mutual partnership, Danone would have the right to purchase all remaining non-employee stock, resulting in Danone's majority ownership and financial consolidation. Stonyfield Farm would remain a completely independent private firm with Mr. Hirshberg having a long-term arrangement to continue as Chairman, President and CEO. Stonyfield Farm welcomed two Danone appointees to its five-member board. Provisions were made to keep all current employees, suppliers, brand name and ability to make donations to environmental causes.

According to Ms. Hirshberg, this was a strategic partnership that would not change Stonyfield Farm's mission and approach. The agreement was signed after a long and careful consideration of different candidates. Danone Group was chosen, since both companies had compatible missions when it comes to environmental responsibility, health and nutrition.

It remains to be seen how this partnership will affect Stonyfield Farm. According to the company management it was an excellent model for enabling emerging value-driven firms to gain in strength and stature, while remaining loyal to the growing base of consumers who seek organic and natural products.

CONCLUSION

The case of Stonyfield Farm of New Hampshire demonstrates that it is possible to be a responsible corporate citizen and at the same time be highly profitable; that one is not necessarily at the exclusion of the other. The process of business transformation toward greater social and environmental responsibility requires overcoming the inertia of the existing business paradigm, taking risks and developing innovative approaches. There is no prescribed path to follow but rather an array of options. Yet visionary companies like Stonyfield Farm have seen the new opportunities and chosen to lead the way and serve as a model company in the twenty-first century.

ENDNOTES:

1. Grocery store sales are the sales at the retail and these differ from the wholesales, usually tracked by a company.
2. "Private label" is not a company but an aggregation of store brands therefore is not considered a competitor.
3. Natural foods market is tracked separately from the grocery store sales.
4. The Lowell Center for Sustainable Production (LCSP) was established in 1996 at the University of Massachusetts Lowell to promote sustainable production practices. It includes faculty members from several departments and has been involved in numerous projects with businesses, NGOs, and communities in U.S. and abroad.
5. In 1994 Dannon started the "Danimals" campaign that put messages about wild animals on its yogurt containers and promised to donate percentage of its profits to the National Wildlife Federation. In 1999 Colombo began the production of organic yogurt. Both efforts have been short-lived and not very successful.
6. Facility CO₂ emissions include the emissions from the production processes within a facility. They do not count emissions from transportation, raw materials extraction or product use.
7. Using polypropylene instead of high-density polyethylene allowed Stonyfield Farm to use less plastic by making yogurt containers thinner.
8. This was a job satisfaction survey, which asked series of questions related to compensation, benefits, work hours, career opportunities and social environment, among others.

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Contact information:

Vesela Veleva, Sc.D.

Citizens Advisers

230 Commerce Way,

Portsmouth, NH 03801

Phone: 603.436.1513 x 3664

vveleva@citizensfunds.com

www.citizensfunds.com

Biographical Information:

Vesela Veleva is a Social Research Analyst at Citizens Advisers – part of Citizens Socially Responsible Investment Funds. She is also associated with the Lowell Center for Sustainable Production and holds a doctorate degree in cleaner production and pollution prevention from the University of Massachusetts Lowell. Her main research interests involve sustainable production and indicators of sustainability.