

SUSTAINABILITY STRATEGIES ASEMERGING TRENDS FOR COMPETITIVE ADVANTAGES IN CHOCOLATE INDUSTRY

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ABSTRACT

This case focuses on sustainability strategies of global chocolate manufacturers. Many chocolate manufacturers purchase significant amounts of West African cocoa to meet challenges and find new opportunities to simultaneously create strategic value for the company, the supply chain, local farmers, and communities in a globally competitive marketplace. Today, companies use sustainability strategies to continuously create and display strong corporate responsibility derived from public and stakeholder pressure and demands within complex social, environmental and economic issues. This case will provide insights of innovative corporate responsibility and sustainability strategies to increase and sustain competitive advantage for farmers, communities, and companies resulting from increasing market competition, price fluctuations and public demands.

Keywords: *Cocoa, Corporate Responsibility, Strategy, Sustainability*

I. INTRODUCTION ABOUT COCOA & CHOCOLATE INDUSTRY

As we all know that Chocolate is made from the cacao beans, the dried and partially fermented seeds of the cacao tree which is generally referred as cocoa. Cacao trees are small, understory trees that need rich, well-drained soils. The three main varieties of cacao beans used in chocolate are Criollo, Forastero, and Trinitario. Criollo represents only 5% of all cocoa beans grown as it is the rarest and most expensive cocoa in the market. It is difficult to grow, as they are vulnerable to a variety of environmental threats and produce low yields of cocoa per tree (Kowalchuk & Kristine 2008). Forastero is the most commonly grown bean. The African cocoa crop is entirely of the forastero variety. They are significantly hardier and of higher yield than Criollo. Trinitario is a natural hybrid of criollo and forastero. Nearly all cacao produced over the past five decades is of the forastero or lower-grade trinitario varieties (Meta Efficient 2008).

Cocoa is produced by the farmers in the tropical climates of Western Africa, Asia, and Latin America (World Cocoa Foundation 2012). The cocoa sector forms the economic backbone of many countries as it contributes in their gross domestic product (GDP) and provide a basis to earn foreign money. Much of the world's cocoa comes from West Africa, which provides 70% of total output. The two main suppliers are the Cote d'Ivoire and Ghana (BCCCA case study 2013). The world cocoa market includes exports valued at more than \$1.2 billion from Côte d'Ivoire, the world's top-producing country; \$840 million from Indonesia, the number two producer;

and \$650 million from Ghana, the number three producer. The industry also serves as a significant economic engine in Europe and the United States. As the leading importing country, the Netherlands imports approximately \$2 billion worth of cocoa beans, with the United States following with an estimated \$1.2 billion worth of beans. The seeds of the cacao tree have an intense bitter taste that's why it is fermented to develop the flavor. After fermentation, the beans are dried, cleaned, and roasted. The shell is removed to produce cacao nibs, which are then ground to cocoa mass, pure chocolate in rough form. Because the cocoa mass is usually liquefied before being molded with or without other ingredients, it is called chocolate liquor. The liquor also may be processed into two components: cocoa solids and cocoa butter. Unsweetened baking chocolate (bitter chocolate) contains primarily cocoa solids and cocoa butter in varying proportions. Much of the chocolate consumed today is in the form of sweet chocolate, a combination of cocoa solids, cocoa butter or other fat, and sugar. Milk chocolate is sweet chocolate that additionally contains milk powder or condensed milk. White chocolate contains cocoa butter, sugar, and milk but no cocoa solids. The U.S. cocoa and chocolate industry is composed of approximately 650 companies that directly employ nearly 70,000 Americans. More than 2,000 companies in the European Union are part of the chocolate and confectionery products industry (Holly Houston, 2012). Most of the people of these countries are dependent on the production of cocoa and its related product thus provides livelihood and income to these peoples. Unlike larger industrialized agribusinesses, the vast majority of cocoa still originates on family-run small farms that have limited access to resources and organized markets. From the producer point of view, it is globalized cash crop as the demand of cocoa and its related products are increasing day by day in the world market especially in the countries like Brazil, China, Eastern Europe and India because the consumption is increasing in these countries. Chocolate is loved in all over world which is made by many companies in different size, flavor, design, etc. Many chocolate lovers consume and enjoy chocolate without ever thinking about where it comes from or how it was produced. The chocolate industry is steadily growing at \$50 billion-a-year worldwide business. Europe accounts for 45% of the world's chocolate revenue (Jones& Sarah 2009). Following table provide the overview of top 10 global confectionery companies based on their net sales in 2013 (Candy Industry, 2014). These companies manufacture some form of chocolate including non-confectionery items.

TABLE 1: Global Producers of Chocolate

Company	Net Sales 2013 (US\$ millions)
Mars Inc (USA)	17,640
Mondelēz International Inc (USA)	14,862
Nestlé SA (Switzerland)	11,760
Meiji Holdings Co Ltd (Japan)	11,742*
Ferrero Group (Italy)	10,900
Hershey Foods Corp (USA)	7,043
Arcor (Argentina)	3,700
ChocoladenfabrikenLindt&Sprüngli AG (Switzerland)	3,149
Ezaki Glico Co Ltd (Japan)	3,018*
Yildiz Holding (Turkey)	2,500

Source: Candy Industry, January 2014

*Include non-confectionery items

A report “Global Chocolate, Cocoa Beans, Lecithin, Sugar and Vanilla Market by Market Share, Trade, Prices, Geography Trend and Forecasts (2011-2016)” was conducted by Markets and Markets (M&M) which predicts that global chocolate market will grow to \$98.3 billion in 2016 from the \$83.2 billion as it was in 2010 (M&M 2011). The factors like health benefits of chocolate, seasonal and festive sales, use of chocolate as functional food, etc. play an important role in increasing the demand of cocoa. It is made in the form of a liquid, paste or in a block or used as a flavoring ingredient in other sweet foods. As consumption continues to increase on an annual basis, it becomes more difficult for the industry to keep up with demand. It is estimated that an additional 1 million tons will be needed by 2020 (Mark, Rob 2013).

The expected additional demand of cocoa and its related products raise few question about how to increase the production, how to improve the quality of cocoa beans, etc. On the other hand there is growing demand for guaranteed sustainably produced cocoa. With the increasing global demand for sustainable cocoa the sector has been pressured to use certification as a guarantee for sustainable cocoa production. Since there is not yet sufficient certified cocoa in the system, this pose another concern for whole supply system. At the same time, many cocoa farmers have few resources to improve the cocoa production as they have little earning with it. That’s why there is demand to address the issues related to increase the sustainable production of cocoa and its related products.

II. A ROAD AHEAD: FULL OF CHALLENGES

Although many chocolate manufactures are performing very well in the market, there are continual challenges that the firm must address such as:

- Millions of smallholder farmers who cultivate small plot size
- Low productivity and disposable income
- Little financial help available for agro-inputs and rehabilitation.
- Unorganized Market
- In organized market, limited number of traders and manufacturers
- Less investments by coco farmers as they are not financial sound
- Underdeveloped supply chain
- Increased demand for sustainable, certified cocoa
- Demand for new planting materials
- Requirement of long-term fund at low interest rate
- Gradual process of sustainable cocoa production which takes time
- Requirement of latest technology to increased sustainable cocoa production
- Replacement of aging trees
- Quality control before and after delivery
- Requirement of more land for planting the cocoa trees
- Demand to increase plant density
- Increase the production of special high-flavor cocoa
- Production of disease resistant cocoa and its related products
- Increase productivity and deployment of improved materials

- Requirement of practical plant breeding programs
- Growing demand for organic cocoa products
- No good access of improved planting material by most of the farmers
- Continuous requirement of good quality planting material in the farming system of every country
- Issue related to child labor and slavery in this industry
- Demand for Fair Trade certified producer
- More research requirement in total supply chain of cocoa production
- New product demand from consumers in new markets located in China, Brazil, Russia and India.
- Reducing incident rates and operational challenges.
- Improving safety metrics.
- Increase firms' capacities through partner organizations.
- Global supply chain expansion into competitors' markets.
- Benchmark international environmental data.
- Requirement to act on above issues on priority basis

III. STRATEGIES ADOPTED AT GLOBAL LEVEL

We require continuous formulation and implementation of strategies as there is no single method which can solve the above issues. Now days, most of the companies started to act to solve these issues and they are formulating and implementing many strategies especially related to sustainable cocoa production and certification. Many facilities and incentives are provided by them which creating the opportunities for different categories of farmers. They started to invest in capacity building of farmers which open the way for improve productivity and high income for the farmers. To address the above issues and challenges facing by cocoa producers and farmers, public and private-sector are partnering with each other. The main purpose of this alliance is providing financial help and expertise to improve sustainable cocoa farming. World Cocoa Foundation (WCF) is playing an important role as it promotes a sustainable cocoa economy through economic and social development and environmental conservation in cocoa-growing communities. At global level International Cocoa Initiatives were also taken in which partnership between NGOs, labor unions, cocoa processors and the major chocolate brands is taken place to change the way cocoa is grown. At the same time, International Cocoa Organization is formed by cocoa-producing and cocoa-consuming countries and National Confectioners Association which fosters industry growth by advancing and promoting the interests of the confectionery industry and its consumers. An alliance is also formed among Cocoa Producers which is Inter-governmental organization to promote the research in cocoa farming.

3.1 Sustainability Priority Issues

Some examples of prioritized specific issues that are of concern to stakeholders within an economic, financial, environmental or social point of views as this could substantially impact a firm's capacity to implement and direct a company's business strategy. Generally shared priority issues are as follows: Consumer Health and Talent Management, Global Competitiveness, Carbon Emissions, Sustainable Agriculture, Operations and Clients, Transparency, Public Policy, Supply Chain, Access to Health care, Ethics, Compliance, Food Safety, Child Labor, Governance, and Ethical Sourcing. Many firms' strategic approach to managing issues is strategic

and driven by top management. However, it is a very challenging and complex process to embed social and natural environmental concerns into a company's daily decision making throughout the company. Therefore, many companies are adopting the following strategies to meet the challenges:

3.1.1 Improve Farmer Incomes and Farming Communities

In order for companies to make a transition towards a fully certified cocoa supply, many firms have created and implemented a Cocoa Sustainability Strategy. These strategies attempt to increase incomes for farmers through modernization of cocoa farming, evoke new farmers, and improve cocoa farming communities. Some companies are utilizing mobile phone technology to give access to crucial information and training for farmers to increase income and cocoa yields in Cote d'Ivoire, and Ghana, Africa. This will help to foster capacity building and progress in literacy, shared information and learning of cocoa growing, production and marketing for farmers and local communities (Reuters Edition, U.S., 2012). World Education oversees monitoring and evaluation of cocoa programs such as the CocoaLink program. The impact of the program includes:

- In 2013, CocoaLink farmers increased incomes and cocoa yields with increases of 10 percent cocoa output than the control cocoa farming communities that were studied. The farmers improved cocoa yields over three years resulting in 45.6 percent from 2.5 cocoa bags per acre in 2011 to 3.64 in 2013.
- Household expenditures, a proxy for incomes, increased 78 percent in test communities
- Conservation training was administered to 88 percent of CocoaLink farmers compared with 68 percent of farmers not associated with CocoaLink.
- Basic Literacy training was received by 65 percent of CocoaLink farmers compared resulting in 35 percent higher than farmers not associated with CocoaLink.
- Bookkeeping training was taught to 65 percent of CocoaLink farmers resulting in 25 percent higher than farmers not associated with non-CocoaLink.
- One-third of farmers using CocoaLink are women

Barrientos (2011) suggests that recent estimates for demand of cocoa in growing markets will surpass supply by 2020. Therefore, chocolate manufacturers are creating socio-economic sustainability initiatives to sustain their cocoa value chains. The World Cocoa Foundation and key members of the cocoa industry formed a new cocoa strategy entitled, CocoaAction. This initiative aims to increase the social, economic and environmental impact for a sustainable supply of cocoa growing and production for farmers and local communities in Ghana and Cote d'Ivoire, Africa by 2020 (Hershey Press Release, May 20, 2014). The key aims of Cocoa Action are listed as follows:

- Strengthening interventions between productivity-enhancing and community development.
- Creating and committing to holistic methods in the shape of a productivity and community development proposal, which portrays how chocolate manufactures can make a substantial and novel contribution.
- Customized field-level delivery based on local circumstances.
- A platform to drive national public-private partnerships and interventions within the framework of chocolate manufacturers' programs.

Many chocolate manufacturers are collaborating with the World Bank and NGOs to ensure that all chocolate products are 100 percent certified cocoa worldwide and are verified by independent auditors to make certain the most significant international standards are sustained for environmental, labor, and farming practices. Companies attempt to beat goals of sourcing by at least 10 percent of its cocoa from certified farms and to

remain on track to a 100 percent certified supply by 2015 – 2020 and beyond. Chocolate manufacturers are increasingly ensuring that all chocolate products use cocoa that is Rainforest Alliance Certified resulting from a firm's strategy to use cocoa from certified farms (Pasolini, 2014). For example, many chocolate manufacturers' source cocoa from the most recognized cocoa certifying organizations in the world: Fairtrade USA, UTZ, and Rainforest Alliance, and continues to collaborate with other prominent certification organizations increase certification of more cocoa from cocoa farmers worldwide. In fact there are lots of challenges involved in it. Many chocolate manufacturers understand the crucial capabilities required to modernize cocoa farming and consequently create entrepreneurial sustainability programs, and public/private initiatives.

In a globally competitive environment, labor is more easily mobile, but the communities are "less mobile than the job themselves" (Jinha, 2009, p. 101). Sourcing cocoa from countries that lack a strong knowledge economy provides many social, economic and environmental challenges for global companies, international supply chains, farmers and communities. Many chocolate manufacturers are working to transform its global supply chain for multiple needs and demands from diverse customers in the US and Canada and in emerging global markets. As a result, firms expect progressive growth for innovative product development, customer service and global sourcing improvement that will lower operating costs while maintaining 100 percent tractability and sustainably sourced. Overall, as chocolate manufacturers continue to implement changes into its global supply chain, suppliers will be required to maintain high levels of sustainability practices and conduct such as:

- Protecting natural resources beyond local environmental laws and regulations.
- Country regulations and local law compliance.
- Strict monitoring of sourcing practices with sourcing partners.
- Protect proprietary and confidential information.
- Follow the Organization for Economic and Cooperation Development (OECD) Multinational Guidelines on antitrust laws.
- Risk and Self-Assessment.
- Independent Auditors.

3.1.2 Strategic Initiatives for Social and Economic Well-being

In order to sustain positive change, many chocolate manufacturers recognize that farming communities must acknowledge the company's initiative are creating daily value for farmers and their communities. For this reason, firms are making significant efforts to improve socio-economic conditions in West Africa through continuous measurement and innovation for over 10 million people that are dependent upon cocoa farming for securing the necessities of life. Currently, several chocolate manufacturers are focusing the company's initiatives in the West African regions of Côte d'Ivoire and Ghana, due to cocoa farmers desire to increase farmer incomes and improve the conditions and livelihoods of cocoa farmers and farming communities and in other countries through continuous measurement and innovation projects.

There are many other programs that are initiated by chocolate manufacturers to promote social and economic opportunities for farmers and local communities. However, fluctuations of cocoa prices and cocoa production drive farmer poverty (Marshall, et al., 2013). Furthermore, it is difficult to produce and maintain the highest cocoa quality and to provide equal opportunities to all the farmers every time. Nevertheless, firms are creating new Corporate Social Responsibility (CSR) models for farmers and local communities by providing a better future for farmers and local communities will help to sustain cocoa production and competitive advantage for

farmers, local communities and for the company itself from increasing market demands and price fluctuations. A new CSR model can work as a filter to analyze current commitments and explore new opportunities for increasing the wellbeing of the company's stakeholders such as consumers, employees, investors, business partners, communities and local governments, policy makers and non-governmental organizations for improving performance that leads to global competitive and comparative advantage for farmers and chocolate manufacturers. In addition, many companies develop initiatives in the form of hosting sports and other activities to promote national consumer education for healthy lifestyles. Another unique and innovative initiative by some chocolate manufacturers is creating shared value between business schools and MBA students to lead private-public coalitions in farming communities for increasing social impact (Financial Times, 2014). Understanding the role of business and management in society is becoming an important strategy for sustaining responsible business strategies. Overall, new business models are needed to create new opportunities for global competition. Many chocolate manufacturers have also taken many steps to protect the natural environment which include sustainable product design, sustainable sourcing of raw materials, etc. Some initiatives taken by firms to:

- Purchase sustainable paper from those suppliers who are certified by Forest Stewardship Council or Sustainable Forestry Initiative and use sustainable forestry practices.
- Focus the company's initiatives towards recyclable packaging, including foil, boxes, syrup bottles, and paper wrappers. Waste reduction assisted the company in saving lots of money for its future operations.
- Develop zero-waste-to-landfill facility. The waste, which is generated from its operation, is not used for land filling. Most of the waste is recycled and the waste which is not able to recycle; goes into energy incinerator and is used as a fuel. Many firms have established 2015 waste reduction goals.
- Purchased palm oil from suppliers who are the members of Roundtable of Sustainable Palm Oil (RSPO) due to the highly controversial impact on ecosystems. Some firms are also members of RSPO.

IV. CONCLUSION

As the expectations of markets and stakeholders evolve, chocolate manufacturers started to refine its approach by managing environmental, social and governance issues. The overall focus is given to engage with its various stakeholder groups, including cocoa farming families, its business partners, consumers and investors. In particular, firms create initiatives for consumer well-being and health, product safety and quality and local community programs in various countries to improve cocoa farming and social conditions. It may be said that chocolate manufacturers various initiatives will yield fruitful results, which will support and advance its business in global markets. Furthermore, we have to understand that these companies can make substantial efforts to increase social, environmental and economic sustainability. Consequently, the capacities of chocolate manufacturers to foster positive social and environmental change in farming communities provides continual challenges and opportunities for farmers and local communities to drive sustainability together and increase the competitiveness of the firm and farming communities.

REFERENCES

- [1] 21st Century Cocoa Sustainability Strategy, The Hershey Company Corporate Social Responsibility, www.thehersheycompany.com, retrieved: April 22, 2014

- [2] Barrientos, S. (2011). Beyond Fair Trade: Why are Mainstream Companies Pursuing Social and Economic Sustainability in Cocoa Sourcing? Paper to ILO/IFC Better Work Conference, October 2011.
- [3] Retrieved from betterwork.com/global/wp-content/.../Session-1-Beyond-Fair-Trade.pdf on May 24, 2014.
- [4] BCCCA Case Study (2013) Creating a sustainable chocolate industry, <http://businesscasestudies.co.uk/bccca/creating-a-sustainable-chocolate-industry/the-world-market-for-cocoa>, retrieved: July 22, 2014.
- [5] Candy Industry (January 2014), <http://www.icco.org/about-cocoa/chocolate-industry.html> retrieved July 22, 2014.
- [6] Financial Times. (April 22, 2014). The MBA blind spot, www.ft.com Retrieved on September 2, 2014.
- [7] Holly Houston (2012) World Cocoa Foundation, The Center for Strategic and International Studies, <http://csis.org/publication/why-sustainable-cocoa-farming-matters-rural-development>, retrieved July 23, 2014.
- [8] Hershey's 2013 Corporate Social Responsibility Report. Retrieved from www.thehersheycompany.com/social-responsibility/.../2013_THC_CSR.pdf on May 24, 2014.
- [9] Hershey's Facts: The Hershey Company, Investor Relations Department, 100 Crystal A Drive, P.O. Box 810, Hershey, PA 17033-0810 Retrieved :www.thehersheycompany.com dated on March 23, 2014
- [10] Hershey India. (2014). <http://www.hersheyindia.com/about/history/>, Retrieved: March 30, 2014
- [11] Hershey's News. (May 20, 2014). Hershey Joins With World's Largest Cocoa And Chocolate Companies in Cocoa Action Initiative. Retrieved from www.thehersheycompany.com on May 24, 2014.
- [12] Hershey's Responsible Sourcing. (2014). Retrieved from www.thehersheycompany.com on May 24, 2014.
- [13] Jones, Sarah (2009). "U.K. Stocks Fluctuate as Mining Shares Rally; Cadbury Declines". Bloomberg, http://en.wikipedia.org/wiki/chocolate#cite_note_45 Retrieved July 24, 2014. Jinha, A. E. (2009). Smiths Falls In The World: A Study of Globalization In A Rural Canadian Town. *Just Labour: A Canadian Journal of Work and Society, Volume 14*. Autumn 2009.
- [14] Kowalchuk & Kristine (2008) "Cuckoo for Cocoa". Westworld Alberta, http://en.wikipedia.org/wiki/chocolate#cite_note_45, Retrieved July 24 February 2014.
- [15] Mark Gultinan, Rob Lockwood, SielaMaximova, A. Roberto Sena Gomes and Georges Sodr  (2013), Review of Propagation Methodologies to Supply New Cocoa Planting Material to Farmers, Brigitte Lalibert Bioversity International WCF Partnership Meeting, Washington DC, USA.
- [16] Markets and Markets (M&M), "Global Chocolate, Cocoa Beans, Lecithin, Sugar and Vanilla Market by Market Share, Trade, Prices, Geography Trend and Forecasts (2011-2016)", <http://www.candyindustry.com/articles/global-chocolate-market-worth-98-3-billion-by-2016>, Retrieved July 23, 2014
- [17] Marshall, Scott; Brown, Darrell; Sakarias, Bex; and Cai, Min, "Mad cassee: Competing with a 4x Fairtrade business model" (2013).
- [18] Business Administration Faculty Publications and Presentations. Paper 18. Retrieved on March 24, 2014 from http://pdxscholar.library.pdx.edu/busadmin_fac/18
- [19] Meta Efficient (2008), "Criollo Chocolate: Efficient Food of the Gods", www.metaefficient.com/food-and-drink/criollo-chocolate-efficeint-foods-of-the-goods.html, Retrieved July 24,2014.

- [20] Pasolini, Antonio. (Feb, 2014), Chocolate gets sweeter with CSR in the mix, Just means, <http://www.justmeans.com/blogs/%E2%80%8Bchocolate-gets-sweeter-with-csr-in-the-mix>, Retrieved: May 4, 2014
- [21] Reese, Andrew (2008). REESE'S Peanut Butter Cups: The Untold Story. iUniverse. ISBN 978-0-595-48707-3.
- [22] Reuters Edition, U.S. (August 6, 2012). Hershey's CocoaLink Mobile Phone Program Delivers 100,000 Farmer and Family Messages During First Year in Ghana. Retrieved from <http://www.reuters.com/article/2012/08/06/idUS137424+06-Aug,2012+BW20120806> on May 24, 2014.
- [23] The Hershey Company 2011–2012 Corporate Social Responsibility Disclosure Index www.thehersheycompany.com, Retrieved: May 24, 2014.
- [24] The Hershey Company News. Hershey Announces Global Supply Chain Transformation. www.thehersheycompany.com, Retrieved August 17, 2014.
- [25] World Cocoa Foundation (March 2012) "Cocoa Market Update", <http://worldcocoafoundation.org/wp-content/uploads/Cocoa-Market-Update-as-of-3.20.2012.pdf> retrieved July 22, 2014.