

**FROM 'BEAN TO BAR': THE ROLE OF CHOCOLATE MANUFACTURING
COMPANIES AND VOLUNTARY SUSTAINABILITY STANDARDS**

by

Katherine Poole Lehnhoff

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The following individuals certify that they have read, and recommend to the Faculty of Graduate and Postdoctoral Studies for acceptance, the thesis entitled:

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submitted by Katherine Poole Lehnhoff in partial fulfillment of the requirements for
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Examining Committee:

Yves Tiberghien, Professor, Political Science, UBC

Supervisor

Peter Dauvergne, Professor, Political Science, UBC

Supervisory Committee Member

Abstract

This paper examines the growing trend of chocolate manufacturing companies incorporating sustainability standards in the global cocoa supply chain. It focuses on the efforts of major chocolate manufacturers to establish transparent and traceable supply chains, covering the entire production process from "bean to bar." Given that the cocoa and chocolate industry have faced criticism over the use of child labor, forced labor, deforestation, biodiversity loss, and poor farmer standards, the paper investigates where the companies have been placing most of their efforts in addressing these challenges.

However, there are significant divergences in the sustainability standards adopted by chocolate companies, and their areas of focus vary widely. Existing literature on the cocoa supply chain often fails to address these divergent strategies and their implications, as well as recent changes that have occurred in the past five years. To fill these gaps, this paper aims to analyze the evolution of the industry, the extent of divergence in sustainability standards, and the reasons behind the efforts in specific areas of the supply chain.

The paper argues that companies prioritize issues that can potentially damage their reputation and are influenced by international pressure and regulations, such as "Child and Forced Labor" and "Traceability." Among companies, divergences exist depending on the regulatory framework companies decide to follow, with European legislation influencing company behavior. Therefore, the paper situates the "Bean to Bar" initiatives within this framework, shedding light on the existing gaps regarding sustainability initiatives by chocolate manufacturers. It provides an overview of the cocoa supply chain, highlighting the challenges it faces, and introduces Voluntary Sustainability Standards (VSSs).

To support its analysis, the paper compares VSSs adopted by companies, and evaluates trends observed over the past five years. To do this, the paper introduces a scorecard to assess companies' VSSs and efforts across five dimensions related to supply chain challenges: "Environment and Climate," "Child and Forced Labor," "Farmer Incomes," "Community Engagement," and "Traceability."

Lay Summary

This paper investigates how chocolate manufacturers are adopting Voluntary Sustainability Standards given growing concern over criticism for issues in the supply chain such as child labor, deforestation, and poor farming practices. The study focuses on major chocolate companies and their efforts to address these challenges throughout the entire production process, from sourcing the cocoa beans to producing the final chocolate bars. The paper highlights that different companies adopt varying sustainability standards and prioritize different areas. It argues that companies tend to focus on issues that could harm their reputation and are subject to international regulations, such as child labor and traceability. By analyzing voluntary sustainability standards and trends over the past five years, the paper provides insights into the evolving dynamics of the chocolate supply chain. The paper introduces a scorecard to assess companies' sustainability efforts in key dimensions such as the environment, labor practices, farmer incomes, community engagement, and traceability.

Preface

This thesis is the original, unpublished work of the author, Katherine Poole Lehnhoff

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List of Abbreviations

CLMRS	Child Labour Monitoring and Remediation Systems
CRS	Corporate Social Responsibility
ESG	Environmental, Social, and Governance
EU	European Union
ICCO	The International Cocoa Organization
ICI	The International Cocoa Initiative
ILO	International Labor Organization
LID	Living Income Differential
MNC	Multinational Corporation
NGO	Nongovernmental Organization
TNC	Transnational Corporation
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNSDG	United Nations Sustainable Development Goals
VSLA	Village Savings and Loan Association
VSS	Voluntary Sustainability Standards
WCF	The World Cocoa Foundation

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Dedication

This thesis is dedicated to my parents, for always making sure we have chocolates for Christmas.

Chapter 1: Introduction

Manufacturing companies across the world have increasingly included sustainable practices and goals in their organizational structures. Reporting and demonstrating accountability for these sustainable practices has become widespread across different sectors and industries to assess and communicate the social and environmental externalities of an organization's activities, and demonstrate actions taken to internalize those externalities.¹ Many have argued that this change has come due to technological improvements on transparency over the years that have increasingly allowed consumers "to know the origin, legality, and impact of their purchases."² As more information becomes available, companies, and their customers have become aware of the impacts their products have locally, as well as globally. This has increased the amount of scrutiny under which corporations are held up against and has therefore led companies to react through private governance initiatives, such as partnering with third-party certification schemes, and through creating their own voluntary sustainability standards.³ These initiatives have been introduced not only to make their operations more sustainable, but also to provide more information to their consumers and stakeholders on the different stages of their supply chains.

Sustainability in companies is nothing new, Dauvergne and Lister argue this transformation has been happening for several decades, and has only continued to accelerate, as well as integrate more aspects of the global economy.⁴ For commodities, companies have tended to use internationally recognized certifications to signal how sustainability practices are incorporated into

¹ Packer et al., pg. 3

² Grabs, Janina, and Sophia Louise Carodenuto. "Traders as Sustainability Governance Actors in Global Food Supply Chains: A Research Agenda." *Business Strategy and the Environment* 30, no. 2 (2021): 1314–32. <https://doi.org/10.1002/bse.2686>. pg 1314

³ Dauvergne, Peter, and Jane Lister. 2012. "Big Brand Sustainability: Governance Prospects and Environmental Limits." *Global Environmental Change*, pg. 38

⁴ Ibid

their operations. However, in the cocoa supply chain, more companies are opting for Voluntary Sustainability Standards (hereafter VSSs), as they have been setting up their own sustainable initiatives and goals, instead of only committing to third-party certification schemes.

The focus of this paper is on the global cocoa supply chain and chocolate manufacturing companies, where there has been an increasing trend towards chocolate manufacturing companies incorporating sustainability standards and goals. They have done so to have more transparent and traceable supply chains which oversee the cocoa beans from “production to consumption”⁵ or what some companies now refer to as being “from bean to bar”. Given the structure of the cocoa industry, the paper does not focus specifically on cocoa growers, and traders. Instead, it focuses on the chocolate manufacturers as it is these big players that “dominate this industry and are also the ones who are transforming it”⁶ and it is also through their relations with their suppliers that they can demand change in the supply chain. This is not to say that there are other transformations at the local level, with more intermediate processes (such as roasting and grinding of beans) happening at local contexts, but the share of these processes and changes is still minimal as compared to the top-manufacturers.

The cocoa and chocolate industry has long been called out due to concerns over child and forced labor, biodiversity loss, deforestation, and farmer living standards and therefore, has gone through a transformation to address many of these issues. Although, there have been visible improvements in trying to make the supply chain sustainable through making it and its operations more traceable, there remain divergences in the standards chocolate companies chose to operate

⁵ Fromm, Ingrid, 'From Small Chocolatiers to Multinationals to Sustainable Sourcing: A Historical Review of the Swiss Chocolate Industry', in Mara P. Squicciarini, and Johan Swinnen (eds), *The Economics of Chocolate* (Oxford, 2016; online edn, Oxford Academic, 24 Mar. 2016), <https://doi.org/10.1093/acprof:oso/9780198726449.003.0004>, pg. 71

⁶ Ibid

through. Moreover, there are large differences in the topics companies decide to focus on. Much of the current literature on the supply chain of cocoa identifies the trend of companies moving towards more sustainable standards. Furthermore, much work has been done to trace the history, logistics, and supply chain of cocoa and chocolate manufacturing. However, there has not been a study on chocolate manufacturing companies and the role they have in drafting and carrying out their environmental, social and governance (ESG) activities. The current scholarship misses a crucial step in providing a holistic analysis, as not much has been said on the different strategies that chocolate manufacturers have adopted, and what the diverging standards mean for the industry. There are also gaps in addressing changes that have been happening across the industry in the last five years. Therefore, this paper will try to answer the following questions: ‘how has the industry changed in the past five years?’, ‘how divergent are the sustainability standards between companies?’, ‘why has the industry made efforts in some areas of the supply chain, but not others?’

To answer these questions, this paper will conduct a comparative analysis of the voluntary sustainability standards that companies have adopted, especially in terms of the issues the cocoa supply chain is currently facing. To do so, the paper presents a scorecard through which the company’s VSSs and efforts are evaluated on five different dimensions that address these challenges, including ‘Environment and Climate’, ‘Child and Forced Labor’, ‘Farmer Incomes’, ‘Community Engagement’ and ‘Traceability’. The questions for the scorecard were developed in a way that would help capture overall progress as well as commitments from the companies to address these issues. The results from the scorecard indicate that over the last five years there has been progress in two dimensions across chocolate manufacturing companies, ‘Child and Forced Labor’ and on ‘Traceability’. Across companies, the results vary with the worst performing dimension being ‘Environment and Climate’. Although companies are making efforts to combat

deforestation, other aspects remain under committed. The area where all companies are performing the same is on 'Community Engagement' where they have a clear Human Rights Policy and ask their suppliers to respect it through their codes of conduct. These results serve to demonstrate there is a selective response from companies on the topics they have focused on and where their commitments currently are.

Therefore, this paper will argue that although there have been changes in what the industry decides to focus on, these changes have been in areas where the companies are more susceptible to having their reputation damaged and in areas where there has been international pressure and regulation, such as 'Child and Forced Labor' and 'Traceability'. However, the response the companies opt to take is mostly driven by the presence of international norms and pressure, namely European regulation, and where these seem to be missing, the response by companies is not the same. From the results, it can be argued that Asian companies do not respond in the same way as American and European companies do to these pressures and therefore, their corporate efforts are not as developed.

This paper builds on the work of Dauvergne and Lister to argue that the manufacturing companies' 'Bean to Bar' initiatives are an attempt at engaging in Big Brand Sustainability. Therefore, this paper will situate 'Bean to Bar' in Big (Chocolate) Brand Sustainability⁷ and address the gaps that exist within the literature regarding sustainability initiatives by chocolate manufacturers. It will then contextualize the global supply chain through providing an overview of the processes that transform cocoa beans into chocolate bars as well as identify the challenges that affect it. The paper will then describe and define Voluntary Sustainability Standards and

⁷ Big Brand Sustainability is a term coined by Dauvergne and Lister. This paper will expand on this idea and focus on the main aspects of Big Brand Sustainability that can be transferred to the chocolate industry.

compare them to other types of certification schemes that exist in the industry. It will then provide a descriptive analysis that exemplifies the VSSs adopted by the top eight Chocolate Manufacturers.

Chapter 2: Literature Review

2.1 Transnational and Multinational Corporations in International Relations

The study of International Relations has often concentrated on states, and their ability to govern and disrupt the international system. However, the study of transnational corporations (TNCs) and multinational corporations (MNCs) has often been overlooked and understudied in the field.⁸ This has been changing with growing interest in how they are becoming key players in world politics. The shape of the international system has changed, with a shift towards thinking about international corporations as political players in this system,⁹ given their “ability to create or destroy, not order but wealth, and to influence the elements of justice and freedom as part of the value-composition of the whole system.”¹⁰ This is not to say there is agreement in the field on whether international corporations should be included under the study of International Relations. However, Babic et al. identify that corporations have yet to emerge as “broadly accepted and systematically analyzed object[s] of research in international politics.”¹¹ They also argue that this has become problematic in the study of international relations given the “sizable increase in significance and power of internationally operating corporations *vis-à-vis* nation states.”¹² With regards to the issue at hand, this paper takes the perspective that international corporations need to be further integrated in the study of international relations given their increasing involvement in the international economy, but also given their increasing role in sustainability issues.

Additionally, it has been argued that when it comes to solving global environmental issues, “state capacity and willingness to address the causes are low and inconsistent, leaving many

⁸ Babic, Milan, Jan Fichtner, and Eelke M. Heemskerk. 2017. “States versus Corporations: Rethinking the Power of Business in International Politics.” *The International Spectator* 52 (4), pg. 22

⁹ Strange, Susan, 1996;2009;2011;. *The Retreat of the State: The Diffusion of Power in the World Economy*. Vol. 49. New York: Cambridge University Press. doi:10.1017/CBO9780511559143. Pg 44

¹⁰ Strange, Susan. 1991. "Big Business and the State." *Millennium* 20 (2). Pg. 245

¹¹ Babic et al., pg. 21

¹² Ibid

governments failing to do much at all.”¹³ Therefore, there have been gaps that non-governmental organizations, and multinational corporations have been able to fill, either to complement state capacity or to substitute it.¹⁴ Furthermore, the argument could also be made that through partnerships with the state, and through support from the state these companies are able to get political authority.¹⁵

Furthermore, with the growing concern over sustainability challenges, TNCs and MNCs have increasingly become responsible for ensuring their suppliers are also acting according to national and international regulations. LeBaron et al. argue that non-state business actors have increasingly conducted audits, not only for their own business compliance but extended their roles as “regulators, setting and enforcing standards in supply chains.”¹⁶ Furthermore, they argue that these audits are no longer used “as a business tool but also as an instrument of global governance to define and enforce transnational norms of corporate conduct.”¹⁷

Although there has been a multiplicity in Supplier Codes of Conduct, as well as auditing processes, LeBaron et al. argue that these audits might be conflicting in more ways than one. For example, the “financial relationships between auditors and their clients”¹⁸ can leave space for potential conflicts of interest. Furthermore, issues arise when it comes to the confidentiality and ultimately transparency of these audits.¹⁹ Additionally, the power and incentives companies have over their audit processes and their results might skew the overall interpretation of the audits and might not paint a clear and complete picture of the suppliers’ compliance with the Codes of

¹³ Dauvergne and Lister, pg. 37

¹⁴ Ruggie, John Gerard. 2018. "Multinationals as Global Institution: Power, Authority and Relative Autonomy: Multinationals as Global Institution." *Regulation & Governance* 12 (3): pg. 317

¹⁵ Dauvergne and Lister, pg. 36

¹⁶ LeBaron, Genevieve, Jane Lister, and Peter Dauvergne. 2017. "Governing Global Supply Chain Sustainability through the Ethical Audit Regime." *Globalizations* 14 (6): pg. 959

¹⁷ Ibid

¹⁸ Ibid, pg. 960

¹⁹ Ibid.

Conduct. Therefore, having established the increasing importance and role of international corporations in the international system, this paper will rely on liberal environmentalism,²⁰ and sustainable development to better understand the background on which companies' sustainability initiatives operate.

2.2 Liberal Environmentalism and Sustainable Development

Liberal environmentalism has been at the core of international efforts to tackle environmental problems. Bernstein argues that liberal environmentalism “accepts the liberalization of trade and finance as consistent with, and necessary for, international environmental protection.”²¹ The norms embedded in these efforts stem from the idea that international environmental protection rests on “the promotion and maintenance of a liberal order.”²² Furthermore, through the evolution of global environmental problems, there has been an increase demand in embedding environmental protection in development objectives.²³ Sustainable development as a concept has been around since the late 1980s, but has “gained traction because it offered a way to reconcile the deep international tensions over development and environmental protection”²⁴ and has become the “dominant conceptual framework for international environmental governance.”²⁵ The Brundtland Commission, a sub-organization of the United Nations (UN) developed the most common definition of sustainable development in 1987, which is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own

²⁰Bernstein, Steven. 2002. "Liberal Environmentalism and Global Environmental Governance." *Global Environmental Politics* 2 (3): 1-16.

²¹ Bernstein, Steven F. 2001. *The Compromise of Liberal Environmentalism*. New York: Columbia University Press. doi:10.7312/bern12036. Pg. 7

²² *Ibid*, pg. 1

²³ Macekura, Stephen J., 2015. *Of Limits and Growth: The Rise of Global Sustainable Development in the Twentieth Century*. New York: Cambridge University Press. doi:10.1017/CBO9781139680509. Pg 5

²⁴ *Ibid*, pg. 9

²⁵ Bernstein, pg. 50-51

needs. It contains within it two key concepts: It contains within it two key concepts: [1] the concept of ‘need’, in particular the essential needs of the world’s poor, to which overriding priority should be given; and [2] the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future goals.”²⁶ Therefore, sustainable development came to encompass not just the environment but social aspects of development as well. It is upon this background that we can understand the current state of play, especially with companies engaging in sustainability efforts.

2.3 Big (Chocolate) Brand Sustainability

Liberal environmentalism and sustainable development serve as background to introduce ‘Big Brand Sustainability’ and further understand how international corporations have become power brokers in the international system when it comes to sustainability standards. Dauvergne and Lister provide a theoretical framework for considering global environmental governance, especially in thinking about governance through global supply chains.²⁷ Big Brand Sustainability refers to sustainability efforts of large, well-known brands across various industries. It is through the companies’ brand, a label or logo, that consumers are able to associate value to it.²⁸ However, it goes beyond companies’ efforts to simply re-brand by adding sustainability to their brands. Companies have increasingly adopted environmental standards, defined sustainability in “corporate terms,”²⁹ adopted goals, policies, and standards through their global supply chains to match their sustainable brands. Furthermore, companies have increased their cooperation with

²⁶ Brundtland, Gro Harlem. Report of the World Commission on Environment and Development: "Our Common Future." United Nations, 1987.

²⁷ Dauvergne and Lister, pg. 36

²⁸ Ibid, pg. 38

²⁹ Ibid, pg. 36

other organizations, such as non-governmental organizations and third-party certification schemes, to further legitimize the sustainability of their brand.³⁰ Companies have also adopted third-party verification schemes to make sure they comply with their efforts and commitments. These efforts are typically driven by a combination of ethical concerns and economic considerations, as consumers are increasingly demanding sustainable products and companies recognize the benefits of reducing their environmental impact.

Although companies' efforts to become more sustainable are indeed happening across the board, Dauvergne and Lister argue that companies are turning "sustainability into business value."³¹ This means that through adding more sustainable practices in their operations, companies are reducing costs, and driving business growth but at the same time leading to increases in consumption.³² This means however that "Corporate sustainability efforts can help to slow the impacts of economic growth, but not eliminate the consequences."³³ Furthermore, Big Brand Sustainability depends on consumers, stakeholders, and the overall reputation that companies have based on their brands.

Wyn Grant argues that the response firms have towards "environmental challenges may be in their own interest."³⁴ Given that private companies rely on being able to make profits, any damage to their reputation can impact their survival. Therefore, Grant argues that businesses go beyond thinking about the price and quality of their goods and take into consideration "policies and activities, that seek to make them appear more environmentally friendly than they actually are."³⁵ Furthermore, Grant argues that having a corporate social responsibility agenda not only

³⁰ Ibid, pg. 41

³¹ Ibid, pg. 40

³² Ibid, pg. 37

³³ Ibid

³⁴ Grant, Wyn. "Business: The Elephant in the Room?" Essay. In *Strategies for the Green Economy: Opportunities and Challenges in the New World of Business*, 197–213. New York: McGraw-Hill, 2009, pg. 41

³⁵ Ibid, pg. 200

allows companies to build their reputation, and perceptions of their brand, but these efforts are also “driven by a desire to develop adaptation strategies that will allow companies to stay ahead of their rivals.”³⁶ With these things in mind, the next section will investigate the main aspects of the cocoa supply chain, to better understand what the ‘bean to bar’ standard is and how it relates to the global cocoa supply chain.

³⁶ Ibid, pg. 207

Chapter 3: Main Aspects of the Cocoa Supply Chain

The cocoa supply chain is complex given that there are many players, and processes that transform a bean to a bar of chocolate as well as many issues that need to be addressed. As of 2020, 70% of all cocoa production in the world came from West Africa,³⁷ with more than 62% of all traded cocoa coming from two countries alone, Ghana and Côte d'Ivoire.³⁸ On the consumption side, North America and Europe account for more than 50% of the global market share of chocolate consumption,³⁹ which goes to show how chocolate is rarely consumed in the places of origin.⁴⁰ Six chocolate manufacturing companies (Mondelēz International, Nestlé, Mars, Hershey, Ferrero, Lindt und Sprüngli) transform 40% of chocolate products worldwide.^{41,42}

3.1 Bean to Bar Process

The processes involved in the supply chain are as follows: harvesting; cleaning, fermenting, and drying; roasting; grinding; pressing; mixing; conching; and chocolate.⁴³ This process has often been called 'bean to bar' through which the chocolate pod becomes a chocolate bar. At these stages, different actors are involved. The harvesting stage involves collecting the pods, followed by removing the beans, cleaning them, and fermenting them. This step is done by smallholder farmers mostly in Western Africa. Once the beans have been fermented, they are allowed to dry

³⁷ Thorlakson, Tannis. 2018. "A Move Beyond Sustainability Certification: The Evolution of the Chocolate Industry's Sustainable Sourcing Practices." *Business Strategy and the Environment* 27 (8), pg. 1654

³⁸ "World Cocoa Beans Production, Grindings and Stocks (Thousand Tonnes)." Statistics. ICCO . Accessed April 26, 2023. https://www.icco.org/wp-content/uploads/Supply-Demand_QBCS-XLIX-No.-1.pdf. N.pg

³⁹ Alberts, Heike C. and Julie Cidell. 2016. "Chocolate Consumption, Manufacturing, and Quality in Europe and North America." In *The Economics of Chocolate*. Oxford: Oxford University Press. Pg.120

⁴⁰ Ibid, pg. 126

⁴¹ Ingram, V. J., F. C. van Rijn, Y. R. Waarts, and Henk Gilhuis. 2018. "The Impacts of Cocoa Sustainability Initiatives in West Africa." *Sustainability (Basel, Switzerland)* 10 (11), pg. 4249

⁴² Thorlakson, pg. 1655

⁴³ Squicciarini, Mara P., and Swinnen Johan F M. *The Economics of Chocolate*. Oxford: Oxford University Press, 2019. Pg. xxv-xxvi

so they can be packed and sold either to intermediaries or delivered for grinding. The cocoa processors then take over and roast the beans, either with the shell or without it (which means roasting only cocoa nibs⁴⁴). This process usually involves some alkalization by which the beans develop color and flavor. After the roasting and alkalization are done, cocoa processors then grind the nibs into a paste called cocoa liquor. The cocoa liquor is then pressed to divide it into cocoa butter, and cocoa cakes. The final steps are then taken over by the chocolate manufacturers who mix the cocoa liquor, along with other ingredients such as sugar, and powdered milk. The mixture is then placed into “conches to knead it and smooth it,”⁴⁵ this process is known as conching.⁴⁶ Once the liquid has been mixed, this mixture is sold, either in liquid form or in blocks to make the final chocolate products, which includes chocolate bars, truffles, confectionaries, etc.⁴⁷ What differentiates chocolate from other commodities, is that it is a highly processed product, which means that the quality of the chocolate is “tied to the final stages of the commodity chain, including production methods and marketing.”⁴⁸ Some calculate that “of the value added generated along the chain, final manufacturers and retailers receive a share of 79.4% whereas cocoa farmers obtain 6.6%.”⁴⁹ ‘Bean to bar’ has therefore come to be known as the effort of large manufacturing companies to have full oversight over the steps in the production process, starting with the mapping of cocoa growing farms, to the selection of the beans, to the final processing stages.

⁴⁴ Nibs: the inside of the cocoa bean.

⁴⁵ Squicciarini et al., pg. xxvi

⁴⁶ “Conching gradually reduces the size of the agglomerated particles of cocoa and sugar, and ensures that the butter fully covers the particles. Conching also enhances the chocolate flavor by removing some volatile flavors and acids.”(1)

(1) Dand, Robin. *International Cocoa Trade*. Sawston, Cambridge, UK: Woodhead Publishing, 2016, pg. 12

⁴⁷ Squicciarini et al., pg. xxvi

⁴⁸ Alberts et al., pg. 119

⁴⁹ Boysen, Ole, Emanuele Ferrari, Victor Nechifor, and Pascal Tillie. 2023. "Earn a Living? what the Côte d'Ivoire–Ghana Cocoa Living Income Differential might Deliver on its Promise." *Food Policy* 114: 102389, pg. 1

3.2 Cocoa Production Challenges

Like most other agricultural products, and given the many intermediate processes, the production of cocoa has been plagued by a series of environmental, social, and economic challenges.⁵⁰ The following section describes some of these major challenges. For the purpose of this paper, the challenges presented are the ones that directly relate to the bean to bar process. This means the steps directly involved in the plantation of cocoa beans, the livelihood of the farmers, issues related to human rights, especially child and forced labor, and any other social challenges related to the communities where the chocolate manufacturers have their operations.

3.2.1 Environmental and Climate Challenges

There are several environmental challenges that affect the production of cocoa, not only those related with general climate change concerns, but those that affect cocoa plantations directly. Cocoa plantations have long been faced with challenges related to pests and diseases.⁵¹ Another major problem, especially in West Africa is that the plantations are aging⁵² and therefore, there are problems related to the yield of plantation as well as finding alternatives to these aging plantations. Furthermore, there are problems associated with monoculture, and the lack of diversification in plantations which has lead to other related challenges. These include issues related to the yield of plantations⁵³ such as eroded soils, deforestation⁵⁴, biodiversity loss,⁵⁵ water stress⁵⁶ and pollution.⁵⁷ Deforestation has been among the major challenges in the cocoa industry as cocoa farming has

⁵⁰ Grabs et al., pg. 1314

⁵¹ Fromm, pg. 72

⁵² Ingram et al., pg. 4249.

⁵³ Ibid

⁵⁴ Grabs et al., pg. 1314

⁵⁵ Ibid

⁵⁶ Fromm, pg. 72

⁵⁷ Ingram et al., pg. 4249

expanded into forested areas.⁵⁸ Furthermore, several factors influence the productivity of a cocoa tree, such as soil quality, genetic composition, weather conditions, tree age, pruning, cropping activities, and the use of inputs. These variables can influence the yield of a plantation and therefore affect any season's given productivity.

3.2.2 Child and Forced Labor

The chocolate industry has long been criticized over major concerns related to child labor, forced labor, and poor working conditions,⁵⁹ including health and safety standards.⁶⁰ Among these, the challenge that has gotten the most attention is child and forced labor. The International Labor Organization (ILO) defines child labor as “work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development. It refers to work that: is mentally, physically, socially, or morally dangerous and harmful to children; and/or interferes with their schooling.”⁶¹ In the early 2000s media reports made public the case of child labor, child trafficking and forced adult labor in the production of cocoa.⁶² In response to the growing scrutiny and growing pressure for the cocoa industry to enforce labor standards and laws, and eradicate child labor from its supply chains, the Harkin-Engel Protocol was signed in 2001.⁶³ This became one of the best known voluntary, sector-wide protocol of its kind. The Protocol aims to eliminate child labor with support of the cocoa industry through developing standards that can

⁵⁸ Boeckx, Pascal, Marijn Bauters, and Koen Dewettinck. 2020. "Poverty and Climate Change Challenges for Sustainable Intensification of Cocoa Systems." *Current Opinion in Environmental Sustainability* 47. Pg. 108

⁵⁹ Ingram et al., pg. 4249

⁶⁰ Grabs et al., pg. 1314

⁶¹ “What Is Child Labour (IPEC).” International Labor Organization. Accessed July 3, 2023. <https://www.ilo.org/ipecc/facts/lang--en/index.htm>.

⁶² Bertrand, William and Elke de Buhr. 2015. "Trade, Development and Child Labor: Regulation and Law in the Case of Child Labor in the Cocoa Industry." *Law and Development Review (Berkeley, Calif.)* 8 (2): pg. 506

⁶³ *Ibid*, pg. 504

help certify that cocoa has been grown without child labor.⁶⁴ Despite the success in creating this type of voluntary, sector-wide kind of protocol, there have been growing concerns, especially by the ILO on the still high number of children working in hazardous conditions in the farming of cocoa.⁶⁵

There have been additional international, industry wide efforts given the concerns over child labor in the supply chain. The International Cocoa Initiative (ICI) and the World Cocoa Foundation (WCF) were created in the early 2000s to make sure child labor was not used in the production of chocolate.⁶⁶ The ICI has been at the forefront of the efforts to address child labor, especially through the creation of a common definition and key indicators for a Child Labor Monitor and Remediation System (CLMRS). The ICI consulted stakeholders, civil society, governments, and international governments to develop the system which has four core activities that ensure its implementation. These include raising awareness on “child labor and resulting harm amongst farmers, children and members of the wider community”; identifying children in child labor; providing “prevention and remediation support to children in child labor”; and following up with “children identified in child labor to monitor their status on a regular basis.”⁶⁷ The CLMRS has been implemented by a number of chocolate manufacturing companies who are also striving to have all their farmers accounted for in the system.

There have been concerns however related to the effect that addressing child labor could have on making children seek other forms of employment in other industries, as well as general

⁶⁴ Ibid, pg. 505

⁶⁵ “Observation (CEACR) - Adoptée 2018, Publiée 108ème Session CIT (2019). Convention (n° 182) sur les pires formes de travail des enfants, 1999 - Côte d'Ivoire (Ratification: 2003)” Commentaires. Accessed July 3, 2023. <https://perma.cc/A4Y4-LGBW>

⁶⁶ Fromm, pg. 77

⁶⁷ “Benchmarking Study: Overview and Definition of Child Labour Monitoring and Remediation Systems.” ICI Cocoa Initiative. Accessed July 3, 2023. <https://www.cocoainitiative.org/knowledge-hub/resources/benchmarking-study-overview-and-definition-child-labour-monitoring-and-remediation-systems/>

concerns over children that work in other industries, especially in West Africa. However, many companies and organizations have tried to address this through more systemic changes that include efforts to increase access and quality of education. Moreover, under the CLMRS there are efforts to train farmers and communities and raise awareness at large on the potential effects and dangers of child labor.

3.2.3 Farmer incomes and livelihoods

The cocoa market is characterized by having “exports, market power, and price setting...largely determined by the private sector.”⁶⁸ Furthermore, the economic problems of cocoa producers are vast, including limited access to credit⁶⁹ and farmers are faced with low “profits and incomes.”⁷⁰ Others argue that the cocoa farmers also “endure high levels of poverty and poor social infrastructure,”⁷¹ with many young farmers “leaving the sector in search of alternative occupations.”⁷² In terms of the market prices, producers do not reach break point prices, and receive a much lower price for the cocoa beans than at the world market.⁷³ Commodities, including chocolate, have been known for rarely leading “to sustained improvement in livelihood conditions; and more often than not, small holders are trapped in cycles of low productivity, low prices, and inadequate access of credit, inputs, and knowledge to make their production systems more sustainable.”⁷⁴

⁶⁸ Ingram et al., pg. 4249

⁶⁹ Fromm, pg. 72

⁷⁰ Ingram et al., pg. 4249

⁷¹ Barrientos, Stephanie. 2016. *Beyond Fair Trade: Why are Mainstream Chocolate Companies Pursuing Social and Economic Sustainability in Cocoa Sourcing?*, edited by Mara P. Squicciarini, Johan Swinnen eds., pg. 214

⁷² Ibid.

⁷³ Fromm, pg. 72

⁷⁴ Grabs et al., pg. 1314

Furthermore, there are several social challenges that affect the supply chain of chocolate. These mostly involve the empowerment of women and gender equality especially at the farmer and community level. For example, Barrientos found that, although cocoa is a mainly male dominated industry, women “play an important if unrecognized role in cocoa production.”⁷⁵ To address human rights, governments and countries in the cocoa supply chain have adopted the United Nations Guiding Principles on Business and Human Rights, which outlines foundational practices that businesses should put into practice to protect human rights.⁷⁶

To address some of the issues related to farmer incomes, the governments of Côte d’Ivoire and Ghana adopted different mechanism to set prices to guarantee “a minimum price for the farmers throughout the harvest season”⁷⁷ however, these prices tend to be lower than the export price. To address some of the issues related to farmer incomes, they introduced a Living Income Differential (LID) which has as an objective increasing the farmgate price for farmers. The LID proposes to maintain stability in case of fluctuations during the season, either in prices or in harvesting. Additionally, there have been efforts to increase credit and savings at the farmer level. Chocolate manufacturing companies, as well as other developing agencies have been promoting Village Savings and Loan Associations (VSLAs). These are a kind of community-based financial institution, that offers greater flexibility in savings and loans.⁷⁸ The VSLAs rely on their members’ savings to provide credit.⁷⁹ Ksoll et al. argue that VSLAs are designed to establish a local financial market that can direct local savings towards members of the group who need loans.⁸⁰ Additionally,

⁷⁵ Barrientos, pg. 221

⁷⁶ Guiding Principles on Business and Human Rights . United Nations, 2011.
https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf.

⁷⁷ Boysen et al., pg. 3

⁷⁸ Ksoll, Christopher, Helene Bie Lilleør, Jonas Helth Lønborg, and Ole Dahl Rasmussen. 2016. "Impact of Village Savings and Loan Associations: Evidence from a Cluster Randomized Trial." *Journal of Development Economics* 120. Pg. 70

⁷⁹ Ibid, pg. 71

⁸⁰ Ksoll et al. pg. 71

VSLAs incorporate various measures of accountability and governance, which help minimize instances of default and prevent the concentration of power among a select few. Other companies have also started their own Income Accelerating Programs⁸¹ which aim at facilitating the provision of cash transfers directly to the farmers. These cash transfers provide additional income to the farmers and guarantee more stability throughout the season.

3.2.4 Traceability

This dimension has become the most sought after by chocolate companies, as they want to demonstrate to their stakeholders and customers where their cocoa beans come from. This has also become an important standard across the industry to make sure that the root causes to many of the challenges discussed here are addressed. When companies are able to trace their beans back to their origin, they are able to understand the local situation. This is especially important in the case of child labor where companies want to be able to demonstrate their progress in eliminating it from the supply chain. Furthermore, companies have also started to map farms to be able to use this information to control deforestation and know how the land is being used.

However, traceability in some instances might be difficult given issues over land rights. The cocoa supply chain is characterized by production being in the hands of small-scale farmers. About 90-95% of cocoa production is “done on smallholdings of around three hectares, with little standardization in production methods.”⁸² This makes traceability very hard given the large amount of cocoa bean growers, but also because as many as seventy different farmers can mix

81 Myers, Anthony. “Hershey Joins Nestlé in Establishing ‘income Accelerator’ Scheme for Cote d’Ivoire’s Cocoa Farmers.” *confectionerynews.com*, May 2, 2023. <https://www.confectionerynews.com/Article/2023/05/02/hershey-joins-nestle-in-establishing-income-accelerator-scheme-for-cote-d-ivoire-s-cocoa-farmers#:~:text=After%20being%20pioneered%20by%20Nestl%C3%A9,the%20risk%20of%20child%20labour>.

⁸² Alberts et al., pg. 126

their beans into a single shipment.⁸³ Furthermore, there are many players involved in the supply chain of chocolate, not only do chocolate companies have to make sure their Suppliers comply with their Codes of Conduct, but the Suppliers also have to carry out sustainability efforts of their own and make sure the other actors down the supply chain are able to meet these standards.

3.3 International Initiatives Specific to the Cocoa Industry

The cocoa industry has key international organizations that bring actors together, including producing and consuming countries, and companies, to address challenges related to the global cocoa supply chain. For example, as mentioned above, both the International Cocoa Initiative and the World Cocoa Foundation were created to address child labor in the supply chain of cocoa. The ICI is a multi-stakeholder initiative that emerged after the Harkin-Engel Protocol in 2002,⁸⁴ and it is the basis for collaboration between “key companies in the global chocolate industry, concerned politicians, and key civil society actors.”⁸⁵ Since then, it continues working towards addressing child labor and forced labor in the supply chain of cocoa. On the other hand, the WCF is an international membership organization which represents more than 100 companies, which account for “80 per cent of the global corporate market.”⁸⁶ The organization convenes different actors in the cocoa supply chain to address key issues in the supply chain and focuses on three key outcomes, including “increasing farmer income[s], combating child and forced labor, and ending deforestation.”⁸⁷ In terms of ending deforestation, WCF, along with the Governments of Côte d’Ivoire, Ghana and 36 cocoa and chocolate companies, joined together in the Cocoa and Forests

⁸³ Ibid.

⁸⁴ “Our Organisation.” Our Organisation | ICI Cocoa Initiative. Accessed July 3, 2023. <https://www.cocoainitiative.org/about-us/our-organisation>.

⁸⁵ Barrientos, pg. 219

⁸⁶ Fromm, pg. 77

⁸⁷ “Vision and Mission.” World Cocoa Foundation. Accessed July 3, 2023. <https://www.worldcocoafoundation.org/about-wcf/vision-mission/>.

Initiative (CFI) to help “end deforestation and restore forest areas.”⁸⁸ Fromm argues that with the creation of these organizations, the industry “officially manifested their commitments to source cocoa sustainably.”⁸⁹

Furthermore, the International Cocoa Organization (ICCO), an “inter-governmental organization...under the auspices of the United Nations”⁹⁰ was created in 1973. It brings together producing and consuming countries and provides statistics on cocoa prices as well as forecasts in the market. The organization represents 22 cocoa-exporting countries and 29 cocoa-importing countries. Through its multiple International Cocoa Agreements, it has been mandated to oversee achievement of the objectives of the Global Cocoa Agenda for a Sustainable World Cocoa Economy. This is a roadmap set by cocoa stakeholders who “collectively agreed to tackle key challenges and take actions with respect to: sustainable production, Sustainable industry chain, Sustainable consumption, and Strategic management of the cocoa sector.”⁹¹ Having described some of the main aspects of the global cocoa supply chain, including its challenges, this paper will next describe cocoa certification and Voluntary Sustainability Initiatives (VSSs).

⁸⁸ “Cocoa & Forests Initiative.” World Cocoa Foundation, June 28, 2023. <https://www.worldcocoafoundation.org/initiative/cocoa-forests-initiative/>.

⁸⁹ Fromm, pg. 77

⁹⁰ “Home.” International Cocoa Organization. Carlos Follana <https://www.icco.org/wp-content/uploads/2016/05/logo-icco-300x225.png>. Accessed April 25, 2023. <https://www.icco.org/>.

⁹¹ “Who We Are.” International Cocoa Organization, May 12, 2023. <https://www.icco.org/who-we-are/>.

Chapter 4: Voluntary Sustainability Standards

4.1 Third-Party Certification

To better situate VSSs, it is first important to make the distinction between third-party certification and VSSs. Third-party certification is usually associated with the fair-trade movement. Fridell characterizes two distinct phases of the fair-trade movement, the first mostly led by countries in the Global South and the second phase led by non-governmental organizations. The development of certifications is rooted in demands from Southern countries demanding ‘fairer trade’.⁹² As these demands started to grow, the first United Nations Conference on Trade and Development (UNCTAD) took place in 1964, and was among the many attempts of the global South to make the claim that the commodity schemes had failed to increase export earnings for producers in the Global South.⁹³ Fridell argues that two key demands from the Global South countries lie at the heart of the fair trade movement: “the elimination of ‘unfair’ protectionist regulations in the North, and the creation of interventionist mechanism to ensure ‘fair’ prices for commodities produced in the South.”⁹⁴ Furthermore, the demands included reducing tariffs in the Global North to allow for commodity producers to not only export primary commodities but to develop their own value-added processes to production.⁹⁵

The second phase, starting from the 1980s, was no longer focused on “state-managed development,”⁹⁶ instead, this phase is characterized by emphasizing on “market-driven development and voluntarist reforms.”⁹⁷ This phase also included non-governmental organizations

⁹² Fridell, Gavin. 2007. *Fair Trade Coffee: The Prospects and Pitfalls of Market-Driven Social Justice*. Vol. 28;. Toronto: University of Toronto Press. Pg. 29

⁹³ *Ibid*

⁹⁴ *Ibid*, pg. 30

⁹⁵ *Ibid*

⁹⁶ *Ibid*, pg. 39

⁹⁷ *Ibid*

(NGOs) “in both the North and South, as the primary agents of development.”⁹⁸ The reorientation of the second phase meant that there were alternative forms to fair trade through the certification of products and their compliance with certain standards. Certification involves the certification of products through “third-party private sector entities”⁹⁹ all of which have developed their own set of standards. Embedded in the idea of liberal environmentalism, fair trade certification and labeling create regulation through which it is the firms that internalize the environmental, and social costs.¹⁰⁰ When looking specifically at the cocoa supply chain, the most common types of certifications include Organic, Fairtrade, UTZ Certified, and Rainforest Alliance.^{101,102}

These certifications aim at improving “the livelihoods of excluded and disadvantaged producers by providing them with better trading conditions.”¹⁰³ The purpose of these labels is to indicate to the consumers that the products are being produced under environmentally and socially sound practices. Furthermore, they aim at increasing “community investments, and the working conditions of producers.”¹⁰⁴ There is ongoing debate on the effectiveness of these types of certifications to improve the livelihoods of producers. For example, Bertrand argues that “certification alone does not guarantee child labor free chocolate and it is unlikely to lift the sector out of poverty”¹⁰⁵ given that there is limited evidence to suggest increases in their incomes.¹⁰⁶ Furthermore, Fromm argues that the farmers’ situation has only improved marginally¹⁰⁷ given that

⁹⁸ Ibid, pg. 44

⁹⁹ Bertrand et al., pg. 505

¹⁰⁰ Bernstein, pg. 11

¹⁰¹ Fromm, pg. 77

¹⁰² Bertrand et al., pg. 518

¹⁰³ Vlaeminck, Pieter, Jana Vandoren, and Liesbet Vranken. 2016. Consumers' Willingness to Pay for Fair Trade Chocolate, edited by Mara P. Squicciarini, Johan Swinnen eds. Pg 180

¹⁰⁴ Ibid.

¹⁰⁵ Bertrand et al., pg. 518

¹⁰⁶ Ibid

¹⁰⁷ Fromm, pg. 86

these certifications depend on the farmers belonging to some sort of association or cooperative to even be able to apply for the certification.

4.2 Voluntary Sustainability Standards

On the other hand, Voluntary Sustainability Standards are voluntary, regulatory programs carried out by companies. Before describing VSSs, it is important to describe Corporate Social Responsibility (CSR) and Environmental and Social Governance (ESG), as they have become key elements to VSSs. CSR “emerged as a way to try to balance a company’s financial obligations to owners and shareholders with political and public demands to contribute directly to the wellbeing of the economy and society.”¹⁰⁸ On the other hand, ESG incorporates a variety of issues including on the environment, social responsibility, and corporate governance and, it has become a key indicator of “nonfinancial performance.”¹⁰⁹ Most of the chocolate sustainability plans and strategies rely on ESG standards, which means they encompass broader issues of the supply chain, including environmental protection (e.g. water management, land use, deforestation), social issues (e.g. combatting child labor, improving working conditions, reducing gender inequality) and economic (e.g. increasing wages and providing training).

VSSs differ from third-party certification in that they are drafted by companies but can incorporate the third-party certification described above. However, they differ in that they are drafted by the companies and rely on private governance mechanisms, rather than only on third party verification. VSSs are “voluntary practices companies pursue to improve the social and/or

¹⁰⁸ Dauvergne, Peter, 2018. *Will Big Business Destroy our Planet?*. Cambridge, UK;Malden, MA;: Polity Press, pg. 26

¹⁰⁹ Lagasio, Valentina and Nicola Cucari. 2019. "Corporate Governance and Environmental Social Governance Disclosure: A meta-analytical Review." *Corporate Social-Responsibility and Environmental Management* 26 (4). Pg. 701

environmental management of their supplier's activities."¹¹⁰ Berliner et al. argue that by embedding VSSs, companies in return get compensated through customer loyalty, higher prices, and an overall larger market share.¹¹¹ Additionally, and as previously discussed these VSSs are translated into the Supplier Codes of Conduct that the companies have with their Suppliers. These Codes of Conduct embed the type of behavior that companies demand of their suppliers to conduct business with them. LeBaron et al. argue that the rise in these types of mechanisms by companies is explained by a "situation in which developing countries lack the capacity...to enforce labor and environmental standards in their factories, and so 'lead companies' have stepped in to rectify this 'regulatory void.'"¹¹² Additionally, companies have different incentives to create these types of programs. Some of these incentives include companies gaining reputation through them, as seen with Big Brand Sustainability, but in other instances, companies might be under pressure by their "supply chains, customers, and even regulators,"¹¹³ which might make companies more likely to participate in these types of initiatives. However, VSSs do not come without their share of critiques and skepticism.

Berliner et al. argue that by having companies abide by their VSSs, there is a risk that they might divert attention to certain standards, rather than focusing on standards that might require more substantive change from the companies.¹¹⁴ Moreover, given that VSSs are voluntary, and there is no set of standards that must be followed, there is large divergence across VSSs, in terms of the standards but also the goals that the companies set. This might also cause problems when it comes to the way the companies ensure their standards and goals are met. Furthermore, it is not

¹¹⁰ Thorlakson, pg. 1653

¹¹¹ Berliner, Daniel, and Aseem Prakash. "'Bluewashing' the Firm? Voluntary Regulations, Program Design, and Member Compliance with the United Nations Global Compact." *Policy Studies Journal* 43, no. 1 (2014): pg. 117

¹¹² LeBaron et al. pg. 961

¹¹³ *Ibid*, pg. 116

¹¹⁴ *Ibid*

always clear how companies are audited for their practices and whether this auditing is done by third-parties or in-house.

Another concern over VSSs, especially for companies that have operations in other countries, is the regulatory infrastructure of the host country, that might allow more freedom for how the companies operate in them.¹¹⁵ However, others argue that the move towards these efforts provides companies an opportunity “to really understand the challenges facing their supply chains,”¹¹⁶ therefore being able to address them more directly. Furthermore, Packer et al. argue that whether CSR efforts and reports lead businesses to carry out a process of internalizing and mitigating their negative impacts on society is undoubtedly subject to contention. They highlight that one of the major limitations to these efforts is a “lack of a consistent method to account for, to measure, and to compare social and environmental impacts between companies, and how these are interlinked with economic growth and sustainability.”¹¹⁷ In terms of supplier audits, LeBaron et al. also argue that private company inspectors might not impose the same types of penalties against their suppliers for lack of compliance as other state actors might.¹¹⁸

4.3 Cocoa and Chocolate Industry Voluntary Sustainability Standards

Particularly for the chocolate industry, Thorlakson finds that the industry has moved away from using independent certification, to an approach where companies are more transparent about their supply chains.¹¹⁹ Thorlakson lays out three distinct stages through which this happened, the first from the early 2000s to 2008, the second from 2009 to 2014 and the third from 2015 to the present.

¹¹⁵ Ibid, pg. 117

¹¹⁶ Thorlakson, pg. 1659

¹¹⁷ Packer et al., pg 3

¹¹⁸ LeBaron et al., pg. 962

¹¹⁹ Thorlakson, pg 1656

In the early 2000s, and as described above, the cocoa industry was exposed for having child slavery in the production of cocoa in West Africa. This led to the signing of the Harkin-Engel protocol, which “committed [the industry] to stop the worst forms of child and force labor in cocoa production.”¹²⁰ As a result, the Protocol called for increased action by “governments [especially Côte d’Ivoire and Ghana], global industry [compromised of major manufacturers of cocoa and chocolate products as well as other, major cocoa users],¹²¹ cocoa producers, organized labor, non-governmental organizations and consumers.”¹²² Other major actors included the International Labor Organization (ILO), and partner countries (including the United States). The Protocol set out key actions and steps to eliminate the worst forms of child labor, especially for the industry collaborating with key stakeholders to develop and implement “credible, mutually acceptable, voluntary, industry-wide standards of public certification...that cocoa beans and their derivative products have been grown and/or processed without any of the worst forms of child labor.”¹²³ This first stage therefore, is characterized by companies trying to incorporate some form of sustainability in the supply chain to remove any media and external pressure as a result of the exposure of child labor in the supply chains.¹²⁴

The second stage, starting around 2008, saw companies starting to develop their own sustainability programs, instead of solely depending on industry standards,¹²⁵ such as the Harkin Engel Protocol. These standards were mainly at company level and did not explicitly work at the level of farmers. They continued to be primarily focused on increasing productivity and issues around child labor. This stage is also characterized by increasing cooperation between certifying

¹²⁰ Ibid

¹²¹ Original signatories include: Mars, Nestlé, Hershey,

¹²² Harkin-Engel Protocol. 2001, September 1.

https://www.cocoainitiative.org/sites/default/files/resources/Harkin_Engel_Protocol.pdf, pg. 1

¹²³ Ibid, pg. 3

¹²⁴ Thorlakson, pg. 1657

¹²⁵ Ibid

NGOs (such as Fairtrade, UTZ and the Rainforest Alliance) and companies. Thorkalson finds that certifiers lobbied companies in the late 2000s to “convince them of the need for certification”¹²⁶ and reminding them of the impact that negative media coverage had for their brands. Therefore, as major manufacturers “shared this desire to avoid negative publicity related to sustainability lapses in their supply chain”¹²⁷ companies increasingly worked with third-party certifiers. However, certification was not enough, and companies started to realize their commitments to certification were not enough to protect their brands. Companies themselves have recognized that certification did not do enough to address the root causes of many of the challenges of the cocoa supply chain in particular child labor.¹²⁸

In response to fears that certification was “not a major driver of sales”¹²⁹ but they also became an additional cost to companies, chocolate manufacturing companies started developing their own sustainability standards. These standards did not entirely replace certification, they did however expand their areas of focus, including strengthening their relationship with farmers and addressing local problems.¹³⁰ In this new stage of sustainability standards, some companies still rely on third-party certification, but their main source of traceability no longer comes from third-party certification and instead is carried out by them and through their suppliers. However, as is the case with other industries, the chocolate manufacturing companies have started producing sustainability reports and creating websites, to demonstrate and communicate their efforts to address challenges across the supply chain. These reports and websites allow stakeholders to view “some insights into how businesses currently frame, assess, and try to deal with social and environmental

¹²⁶ Ibid

¹²⁷ Ibid, pg. 1658

¹²⁸ Cocoa - Protecting Children Action Plan (PCAP) - mars, incorporated. Accessed July 3, 2023.

https://lighthouse.mars.com/adaptivemedia/rendition/id_7a1584b24b7852d3ab284501c6bf738a5927c540/name_out/Protecting%20Children%20Action%20Plan%20-%20Final.pdf. Pg. 3

¹²⁹ Ibid

¹³⁰ Ibid, pg. 1659

externalities”¹³¹ and economic as well. Chocolate manufacturing companies have increased their attention to issues around gender, women empowerment, deforestation, and providing further support to farmers in the form of “provision of inputs and financing to cooperative management training.”¹³² Furthermore, manufacturing companies are increasingly becoming transparent and sharing information on their supply chains, as presented below, some have expanded their efforts to include specific information on their cocoa suppliers, as well as programs implemented on the ground.

¹³¹ Packer et al., pg. 3

¹³² Ibid.

Chapter 5: Comparative Analysis of the Top Eight Chocolate Manufacturers

“Life is like a box of chocolates, you never know what you are going to get,”¹³³ but all of this is changing as more chocolate manufacturing companies are beginning to provide information on their supply chain and have been increasing their sustainability initiatives in “scope, scale and growing coverage of value chain stakeholders.”¹³⁴ For example, the Ferrero Group provides information on its suppliers, and farmer groups¹³⁵ and Mondēlez International has an interactive map that provides the location of the farms that source cocoa beans.¹³⁶

A large part of the literature in understanding the cocoa supply chain and challenges related to it has mainly focused on describing the VSSs in the chocolate industry. For example, Ingram et al. provide a comprehensive overview of the sustainability initiatives in West Africa, but mostly focusing on initiatives by non-governmental organizations and civil society organizations.¹³⁷ More specifically on chocolate manufacturing companies, Lalwani et al. investigate the range of sustainability initiatives by Nestlé, Mondelez, Ferrero and Mars by trying to answer “how do global chocolatiers tackle social issues, thereby ensuring a sustainable supply of cocoa?”¹³⁸ They investigate these companies because they account for “more than half of the global chocolate retail sales (in US\$).”¹³⁹ However, their study is embedded in supply chain management, and it looks at specific aspects of them such as certification, codes of conduct, partnerships with supply chain

¹³³ Zemeckis, Robert, dir. 1994. *Forrest Gump*.

¹³⁴ Ingram et al., pg. 4249

¹³⁵“Documents.” Documents | Ferrero Sustainability. Accessed March 11, 2023.
<https://www.ferrerosustainability.com/int/en/documents>.

¹³⁶ “Interactive Farm Map.” Cocoa Life - Mondelez International . Accessed March 27, 2023.
<https://www.cocoalife.org/in-the-cocoa-origins/interactive-map>.

¹³⁷ Ingram et al., pg. 3

¹³⁸ Lalwani, Sumit Kishore, Breno Nunes, Daniel Chicksand, and Dev Kumar (Roshan) Boojihawon. 2018. "Benchmarking Self-Declared Social Sustainability Initiatives in Cocoa Sourcing." *Benchmarking : An International Journal* 25 (9). Pg. 3991

¹³⁹ Ibid, pg. 3987

stakeholders, and supplier collaboration programs.¹⁴⁰ Furthermore, their study took place in 2013, at the time, the companies were still establishing their goals and standards and many were in the process of delivering their 2020 objectives.

A similar overview was presented by Fromm;¹⁴¹ however, this was only an analysis of Swiss chocolate manufacturers. Furthermore, Krauss et al. provide a similar overview, but they also include a comparison with Fair Trade certification under a Global Production Network framework.¹⁴² They find that there is a general trend across the cocoa supply chain for private manufacturing companies to develop their own sustainability standards.¹⁴³ However, their study investigates the extent to which “the changing dynamics in cocoa sustainability between civil-society standards and corporate-led initiatives exemplify larger shifts away from civil-society sources of credibility.”¹⁴⁴

5.1 Top Eight Manufacturing Companies

Given this background, this paper tries to build on and compliment previous research, by taking a more holistic approach to the supply chain management and looking at what ESG aspects are presented in the companies’ sustainability reports, while considering the approaches that each company is taking. Furthermore, the analysis seeks to fill in the gaps related to trends in the sustainability efforts of chocolate manufacturing companies and to analyze the divergences that exist within them. To do so, this section focuses on the top eight global confectionery companies as identified by the International Cocoa Organization (ICCO) and will conduct a comparative

¹⁴⁰ Ibid, pg. 3989-3990

¹⁴¹ Fromm, pg. 79

¹⁴² Krauss, Judith E. and Stephanie Barrientos. 2021. "Fairtrade and Beyond: Shifting Dynamics in Cocoa Sustainability Production Networks." *Geoforum* 120: pg. 189

¹⁴³ Ibid, pg. 186

¹⁴⁴ Ibid

analysis across the companies and across a five-year period. Table 5.1 lists the top eight manufacturing companies, in order of their net sales as of 2021. It investigates these companies because they provide an indication of what the industry is doing.

Company	Country	Net Sales 2021 (US \$ millions)
Mars Wrigley Confectionery ¹⁴⁵	United States of America	20,000
Ferrero Group	Luxembourg/Italy	13,566
Mondelēz International	United States of America	11,467
Meiji Co Ltd	Japan	10,075
Hershey Co	United States of America	8,066
Nestlé SA	Switzerland	7,636
Pladis	United Kingdom	4,665
Lindt & Sprüngli AG	Switzerland	4,574

Table 5.1 Top Eight Chocolate Manufacturing Companies¹⁴⁶

5.2 Cocoa Specific Sustainability Plans

It also needs to be highlighted that companies maintain broad sustainability plans that encompasses their manufactured products, customer relations, and overall production objectives. However, it is important to acknowledge that chocolate manufacturing companies also develop distinct plans and reports specifically focused on the cocoa supply chain. Therefore, for the purpose of this paper, I will look only at the cocoa specific plans and their ability to encompass the challenges related to the cocoa supply chain. Table 5.2 outlines the specific plans that the companies have for their cocoa supply chains, and the year they were implemented. The only company among the top-eight that does not have a cocoa specific plan is Pladis. Yilidiz Holding, one of the largest confectionary companies, split off to create Pladis in 2016. Pladis only entered the London Stock Exchange in 2020. Their first sustainability report was only published in 2022 and it included a roadmap with actions and priorities. Therefore, their Strategy might not be as developed as compared to other,

¹⁴⁵ This is a division of Mars Inc

¹⁴⁶ “Chocolate Industry.” International Cocoa Organization, June 22, 2022. <https://www.icco.org/chocolate-industry/>.

more established companies. Nonetheless, they have produced a first report to indicate their commitment to continue reporting on their sustainability efforts.

Company	Sustainability Plan or Strategy	Year	Goals and Priorities
Mars Wrigley Confectionery ¹⁴⁷	Cocoa for Generations	2018	Responsible Cocoa Today and Sustainable Cocoa Tomorrow ¹⁴⁸
Ferrero Group	Cocoa Charter and Cocoa Action Plan	2022	Sustainable Livelihoods; Human Rights and Social Practices; Environmental Protection; and Transparency ¹⁴⁹
Mondelēz International	Cocoa Life	2012	Increase transparency, connecting consumers to our journey / farmers, Promote “self-sustainability” by building capacity in origins, Respect human rights, focus on child rights and women’s empowerment, Pursue partnerships and policy dialogue for greater impact ¹⁵⁰
Meiji Co Ltd	Meiji Cocoa Support Programme	2006	Improving the lives of farmers, and preserving and restoring the local environment as well as technical support for improving the quality of cocoa beans. ¹⁵¹
Hershey Co	Cocoa for Good Strategy	2018	Nourish children, empower youth, build prosperous communities and preserve natural ecosystems. ¹⁵²
Nestlé SA	Nestlé Cocoa Plan	2009	Better farming, better lives, better cocoa. ¹⁵³
Pladis	Sustainability Report 2022 ¹⁵⁴	2020	¹⁵⁵
Lindt & Sprüngli AG	The Lindt & Sprüngli Farming Program ¹⁵⁶	2008	Quality right from the start: Lindt & Sprüngli takes on responsibility from the selection of the cocoa beans to the creation and production of chocolate bars and pralines

Table 5.2 Chocolate Companies’ Sustainability Plans or Strategies (Cocoa Specific)

¹⁴⁷ This is a division of Mars Inc

¹⁴⁸ Cocoa for generations | Mars, incorporated. Accessed July 3, 2023. <https://www.mars.com/sustainability-plan/cocoa-for-generations>.

¹⁴⁹ “Cocoa Charter and Action Plan.” Cocoa Charter and Action Plan | Ferrero Sustainability. Accessed July 3, 2023. <https://www.ferrerosustainability.com/int/en/node/561>.

¹⁵⁰ “Mondelez International.” Accessed April 26, 2023. <https://www.mondelezinternational.com/-/media/Mondelez/Snacking-Made-Right/SMR-Report/2021/MDLZ-ESG-Datasheet-2021.xlsx>, n.pg

¹⁵¹ Meiji Cocoa Support Program. Accessed July 3, 2023. https://www.meiji.com/global/sustainability/sustainable-sourcing/pdf/Meiji_Cocoa_Support_Program.pdf.

¹⁵² “Cocoa.” The Hershey Company. Accessed July 3, 2023. https://www.thehersheycompany.com/en_us/home/sustainability/sustainability-focus-areas/cocoa.html.

¹⁵³ “Sustainable Cocoa.” Nestlé Global. Accessed July 3, 2023. <https://www.nestle.com/sustainability/sustainable-sourcing/cocoa>.

¹⁵⁴ Sustainability Report 2022. Pladis. Accessed July 5, 2023. <https://sustainability.equinox.com/wp-content/uploads/2023/04/Equinix-Inc.-2022-Sustainability-Report-Highlights.pdf>.

¹⁵⁵ See above for information on Pladis

¹⁵⁶ Lindt & Sprüngli Farming Program. Accessed July 3, 2023. <https://www.lindt-spruengli.com/amfile/file/download/id/7009/file/Farming-Program-Brochure-2022-EN.pdf>.

5.3 Methodology and Overview

Given the nature of what this paper is trying to investigate, it relies on secondary data, that was collected from the companies' sustainability reports to build a comparative analysis of the industry's Voluntary Sustainability Standards. For this analysis, I used publicly available information found in the companies' sustainability reports and sustainability webpages. All data were downloaded and accessed between January to July 2023. It should be noted that when reviewing sustainability reports, it is important to consider that they may not provide a fully accurate and comprehensive depiction of the efforts undertaken by companies. This is due to potential delays in the data presented and the existence of undisclosed information. Nevertheless, this preliminary review enables an overview of the sustainability initiatives undertaken by chocolate manufacturing companies and creates opportunities for additional research and ongoing monitoring of the companies' goals and progress.

Furthermore, to conduct a Comparative Analysis, both within the current sustainability plans, and to provide an update on their progress, a scorecard was created. The scorecard was inspired on the work done by Be Slavery Free, with other partnering universities, civil society groups and consultants.¹⁵⁷ Their scorecard encompassed scores given to companies based on a questionnaire sent to chocolate manufacturing companies, and trading and processing companies. Their scorecard overlaps in some of the dimensions upon which the scorecard for this paper was developed. However, the questions are different as this paper tries to get at more specific aspects from each of the dimensions. This scorecard was built with questions encompassing five dimensions: 'Environment and Climate', 'Child and Forced Labor', 'Farmer Incomes', 'Community Engagement', and 'Traceability'. The questions were developed in a way that would

¹⁵⁷ "Exploring the Chocolate Scorecard - 4th Edition." The Chocolate Scorecard. Accessed July 10, 2023. <https://www.chocolatescorecard.com/explore>.

help capture overall progress as well as commitments from the company to address the major issues that the cocoa supply chain faces. The questions, along with their respective scores can be found in the Appendix (Appendices A to E).

The comparison was done across two dimensions, the first is across a five-year period to see what the general trends across the cocoa industry are and whether companies have engaged in different types of behavior. To conduct this analysis, I looked at the companies' sustainability reports from 2017 and those from 2022. For the 2022 analysis, I was also able to find information on the company's websites given that these were updated to reflect their current commitments. For some companies, I could directly find their cocoa specific plans and reports (as outlined above). However, some of the companies did not have cocoa specific reporting in 2017, instead, I used their general companywide sustainability reports to get a sense of their efforts in addressing the challenges in the cocoa supply chain. The only company for which no 2017 sustainability report was found was for Pladis. As mentioned above, their first sustainability report was only published in 2022 given that they were only established in 2020. Table 5.3 presents the Sustainability Reports that were used for the analysis on the trends in the cocoa and chocolate industry since 2017.

Company	Sustainability Plan or Strategy
Mars Wrigley Confectionery ¹⁵⁸	Sustainable in a Generation Plan ¹⁵⁹
Ferrero Group	Sharing Values to Create Values – Corporate Social Responsibility Report 2017 ¹⁶⁰
Mondelēz International	Cocoa Life: 2017 Progress Report ¹⁶¹
Meiji Co Ltd	Meiji Annual Report 2017 ¹⁶²
Hershey Co	2017 Corporate Social Responsibility Report ¹⁶³
Nestlé SA	Creating Shared Value and meeting our commitments 2017 ¹⁶⁴
Pladis	
Lindt & Sprüngli AG	Sustainability Report 2017 ¹⁶⁵

Table 5.3 Chocolate Companies’ Sustainability Plans or Strategies in 2017

The second part of the analysis included a comparison across companies on each of the five dimensions. This was done by looking specifically at the companies’ latest sustainability reports and webpages related to their actions to capture what the companies are doing, and their commitments to address the challenges in the cocoa supply chain. For both exercises, the results from each of the five dimensions were aggregated. This was a choice done by the author to present a more holistic overview of the trends the industry has taken, but also to outline the differences that exist within companies. For that reason, the results presented in the next section are aggregated by dimensions. The full tables and results can be found in Appendices F to J. The next section presents the results based on the scores obtained from the scorecard.

¹⁵⁸ This is a division of Mars Inc

¹⁵⁹ Sustainable in a Generation Report September 2017-2018. Mars, 2018.

https://lhcdn.mars.com/adaptivemedia/rendition/id_86343d566f07ca74d52dcdc9f3d0be5087779ecc/name_out/Mars%20Sustainability%20Report%20-%20English.pdf

¹⁶⁰ Sharing Values to Create Values - Corporate Social Responsibility Report 2017. Ferrero Group, https://www.ferrerosustainability.com/int/sites/ferrerosustainability_int/files/2020-12/report_2017_complete.pdf.

¹⁶¹ Cocoa Life: 2017 Progress Report. From Cocoa Farmers to Consumers, Connecting Both Ends of the Supply Chain. Mondelez International https://assets.ctfassets.net/qggsjlmfzfm/3aTIPdnoqja4BLRRg7rWr2/ad2b835b7f68a937c6fdd340ab6953bf/Cocoa_Life_Progress_Report_2017.pdf.

¹⁶² Annual Report 2017. Meiji. https://www.meiji.com/global/investors/results-presentations/annual-reports/pdf/2017/annual-reports_2017_en_all_print.pdf.

¹⁶³ 2017 Corporate Social Responsibility Report. The Hershey Company. <https://www.thehersheycompany.com/content/dam/hershey-corporate/documents/csr-reports/2017-hershey-csr-report.pdf>.

¹⁶⁴ Creating Shared Value and Meeting Our Commitments 2017. Nestlé. https://www.nestle.com/sites/default/files/asset-library/documents/library/documents/corporate_social_responsibility/nestle-csv-full-report-2017-en.pdf.

¹⁶⁵ Sustainability Report 2017. Lindt and Sprüngli, n.d. <https://www.lindt-spruengli.com/media/amasty/amfile/attach/JkVnBpGtYNjC5jm990UMnNS7OrNAiEH7.pdf>.

Chapter 6: Results

This section presents the results from the comparative analysis. It will do so by first presenting overall trends and changes in each of the five dimensions in the last five years (between 2017 and 2022) and will then compare where the companies currently stand in their efforts to address these challenges.

6.1 Trends in the Sustainability Standards 2017 to 2022

The following section presents the results from the comparison in the five dimensions across a five-year period. Table 6.1 presents total aggregate points by category for the two years compared and the percent changes in each of the five dimensions from 2017 to 2022. The last column shows the percent change, in relation to the total points possible per dimension. Table 6.2 shows the total possible points per category and the percent of points that the companies, as an aggregate, achieved in each of the years.

	Total points by category 2017	Total points by category 2022	Percent difference 2017 to 2022
Traceability	17	59	247%
Farmer Incomes	24	35	46%
Child and Forced Labor	24	53	121%
Environment and Climate	24	45	88%
Community Engagement	29	47	62%

Table 6.1 Trends in the Sustainability Standards from 2017 to 2022

	Total possible points by category	% points 2017	% points 2022
Traceability	120	14%	49%
Farmer Incomes	56	43%	63%
Child and Forced Labor	96	25%	55%
Environment and Climate	96	25%	47%
Community Engagement	72	40%	65%

Table 6.2 Points breakdown from the Sustainability Standards from 2017 to 2022

The two largest increases were in areas related to ‘Traceability’ and ‘Child and Forced Labor’. More specifically, companies demonstrated increases in the amount of beans that can be traced back to farms, as well as efforts to increase the percent of farms that have been mapped. Companies also had clearer roadmaps and commitments to traceback beans. For ‘Child Labor and Forced Labor’ companies demonstrated efforts to increase the implementation of Child Labor Monitoring and Remediation Systems and to cover more families under these types of systems. There were also increases on the number of families currently covered by these types of systems as well as efforts to raise awareness among them and their communities.

However, looking at Table 6.2, although there were large increases in ‘Child and Forced Labor’ and ‘Traceability’, the companies do not cover 60% of the points. This means that even though there have been efforts to increase certain aspects of these categories, according to the scorecard, they are lacking in other aspects of these dimensions. For example, when looking more specifically at ‘Child and Forced Labor’ although there have been changes in monitoring and reporting on child labor, the same efforts have not been carried out for other types of forced labor, including forced or bonded labor. Furthermore, although companies have put efforts in place to address access to education, not all of them have done so or not all of them have specific strategies to address the systemic challenges that lead to child labor. For ‘Traceability’, although companies have clear roadmaps under which they plan to achieve 100% traceability, they do not have specific dates to achieve this which puts into question their roadmap and efforts to achieve this.

6.2 Comparison between companies

This section presents the results from the comparison across companies, from their Voluntary Sustainability Standards and Plans as of 2022. Table 6.3 shows the aggregate comparison among the different dimensions for each of the companies. The sub-sections below provide further breakdown on each of the areas for each of the dimensions.

	Traceability	Farmer Incomes	Child and Forced Labor	Environment and Climate	Community Engagement	Average score
Mars Wrigley Confectionery	Orange	Orange	Green	Green	Green	Orange
Ferrero Group	Orange	Orange	Orange	Red	Orange	Orange
Mondelēz International	Red	Orange	Orange	Orange	Orange	Orange
Meiji Co Ltd	Red	Red	Red	Red	Orange	Red
Hershey Co	Orange	Orange	Orange	Red	Orange	Orange
Nestlé SA	Orange	Orange	Red	Red	Orange	Orange
Pladis	Red	Red	Red	Red	Orange	Red
Lindt & Sprüngli AG	Green	Green	Orange	Red	Orange	Orange

Table 6.3 Comparison of the Companies Sustainability Efforts

Note: The companies have been color coded, Red = little to no activity identified (less than or equal to 50% of the points achieved for each of the categories); Orange = some activity or commitment identified (between 50% and 75% of possible points achieved); Green = strong activity identified (more than 75% of points achieved)

6.2.1 Environment and Climate

All the companies in the analysis participate in the Cocoa and Forests Initiative by the World Cocoa Foundation and the governments of Côte d'Ivoire and Ghana. For this reason, all (8/8) companies demonstrate clear commitments towards combatting deforestation and actions related to reforestation. They also have actions for non-conversion, to avoid having forests being turned into cocoa plantations. Actions to prevent deforestation include reforestation, mapping of farms, and training farmers on good agricultural practices. Most companies (7/8) identify general climate change concerns as well as the challenge of increasing plant yield and productivity. However, among them, not all demonstrate clear commitment to help address these challenges. The same can be said about addressing the loss of biodiversity, only (4/8) companies mention biodiversity loss as a challenge, with only one (1/8) company having a clear plan to address it. Furthermore, among the challenges, the reduction of greenhouse gas emissions is not addressed at all, it is only identified by two (3/8) companies but with no clear indication to address the challenges related to reducing greenhouse gas emissions in the cocoa supply chain. Lastly, only two companies (2/8) mention having dedicated research on topics related to environmental practices and addressing climate change (such as how to increase plant yield, and on cocoa variations).

6.2.2 Child and Forced Labor

Child labor is among the most important dimension that companies try to cover. All companies have clear mention of the Child Labor Monitoring and Remediation System (CLMRS) and have adopted it. However, when it comes to the implementation of the system, six (6/8) companies have information on how many of the farmers are covered by it. Some companies do not specify the exact percent of families covered by the system; however, they do indicate the total number of

farms reached. Three companies (3/8) indicated they have plans to fully incorporate CLMRS among their farmers by 2025. Three (3/8) more indicated they have plans to do so but with no set date. Six (6/8) companies have clear partnerships with leading NGOs, such as Save the Children, the ICI and the WCF, to help tackle child labor in the supply chain. When it comes to addressing the root causes of child labor, six (6/8) companies specified clear commitments and efforts to help increase access to education for children, either through improving the infrastructure for the schools, providing school supplies, or overall awareness efforts. When it comes to forced labor, it is much less clear what the commitments are by the companies, with only two (2/8) companies mentioning efforts to address forced adult labor but with no clear commitment or system in place to monitor it.

6.2.3 Farmer Incomes

In terms of increasing farmer incomes, seven (7/8) companies have a partial commitment to help increase farmer incomes. These commitments include efforts to add a premium to the price of cocoa or to pay higher incomes. Furthermore, two (2/8) company specified cash transfers to help support farmers, their families, and communities while another indicates having Income Accelerating Programs. Companies also specified plans to help train farmers. These efforts include either direct agricultural training on best practices or through training in financial practices to support farmers. Seven companies (7/8) have indications of helping farmers diversify their sources of income, however, only two companies have clear commitments and information on their activities, such as training farmers in other income generating activities including activities like beekeeping and reforestation. Lastly, all (8/8) companies have adopted a model of Village Saving

and Loans Associations and they help farmers through getting these set up as well as efforts for them to access loans and credit as well as learn how to save.

6.2.4 Community Engagement

All companies have a Human Rights Policy which they have drafted using the United Nations Guiding Principles on Business and Human Rights. The companies also make reference to it and their own Human Rights Policy in their Supplier Codes of Conduct. However, it is not quite clear how it is that companies hold their suppliers accountable to these policies and whether there are any processes by which the companies deal with non-compliance of these policies. On more specific issues, such as community engagement, all companies report having some relationship at the community level where they conduct trainings, raise awareness on social, environmental, and human rights issues, such as child labor. When it comes to empowering women, most (6/8) companies mention efforts to help empower women. Most of their work includes increasing farmer incomes through which women are also directly impacted. However, it is not clear what their specific commitments are and their programs to help empower women in these communities. Only one of the companies has clear indications as to what empowering women looks like in their program and the type of support they provide locally.

6.2.5 Traceability

Traceability here refers to the company's ability to trace cocoa beans back to their place of origin. This also includes the ability to have information on Tier 1 Suppliers (otherwise known as direct suppliers) and Tier 2 Suppliers (also known as sub-contracted parties from Tier 1 Suppliers). The questions asked here tried to encompass the efforts companies have put towards tracing cocoa

beans, and whether they have plans to achieve full traceability. Another important aspect of traceability is being able to map farms. This helps companies have information related to the farms including environmental concerns such as deforestation, as well as plantation yield. Based on the scores, more than half of the companies can trace more than 80% of their cocoa beans to their place of origin, while all companies have put in place efforts to map the farms where their cocoa beans are sources from. For five (5/8) of the companies, I was able to find information on their suppliers (either Tier 1 or Tier 2). Out of these five, only three (3/8) have information on their Tier 2 suppliers. Furthermore, six (6/8) companies have a target date on which they want to achieve 100% traceability, with most of them setting a target for 2025. Only one (1/8) company has achieved their goal and has further plans to incorporate other cocoa products, such as cocoa powder, into the plans for traceability.

Chapter 7: Discussion

This section focuses on the results outlined in the preceding chapter, bringing together the key discoveries in a comprehensive manner. The results above are varied, especially because some companies show progress in certain areas, but there are clear areas where the efforts are not the same.

7.1 Comparison across companies

The results above indicate that the areas where the companies are performing the worse is on the 'Environment and Climate'. Most of the companies' efforts and commitments for this dimension relate to deforestation and reforestation. However, these commitments do not translate to other challenges such as biodiversity loss, general challenges related to climate change, and plant yield and productivity. 'Traceability' is another area where there are large variations, with more than half of the companies scoring higher than 50%, but others performing below this. This area however is the one that has had the most development in the past five years. This is not to say companies have improved their 'Traceability' simply to say that there have been more commitments to improve this area in the years to come. It could also be that this is one of the hardest to implement given that farms have to be mapped and the information needs to be shared across the supply chain. The category where all companies are performing the same is on 'Community Engagement'. They demonstrated commitment in having a Human Rights Policy that also must be respected by their Suppliers. However, although companies have a Human Rights Policy, it is not clear how they enforce it and what happens when a Supplier does not comply with it. On 'Farmer Incomes' companies also demonstrated commitments to helping farmers diversify

their sources of income, but it is not entirely clear how it is that they have supported farmers in increasing their incomes.

Two companies, Meiji and Pladis, are the worst performing across most of the dimensions. As explained above, Pladis is a relatively new company, therefore, they do not have many ongoing efforts. However, they do have commitments for certain areas, including on deforestation, child labor and community engagement. As will be discussed, this could be the case given the emergence of international standards that companies have agreed to abide by as well as upholding reputation and being able to compete in the chocolate market. For Meiji, Kanji Tanimoto argues that unlike American and European companies, companies in Japan do not face the same pressure from civil society and the power of NGOs is relatively weak in demanding for changes related to corporate social responsibility.¹⁶⁶ Furthermore, the Japanese government has also been “less active in its policies regarding CSR”¹⁶⁷ as it has been traditionally understood that these issues belong to “corporate management itself.”¹⁶⁸ This can be seen in Meiji’s efforts related to the cocoa supply chain, where its efforts are lagging in all but one area, community engagement. Meiji’s behavior helps to understand the influence reputation has on companies, if they do not have pressure from civil society and its customers, then they are unlikely to change their commitments.

7.2 Corporate Reputation

Child labor has been one of the biggest issues the chocolate supply chain has had to deal with. As discussed above, this has been a challenge since the early 2000s and the chocolate companies have been held against large amounts of scrutiny over concerns of child labor persisting. The most recent

¹⁶⁶ Tanimoto, Kanji. “Structural Change in Corporate Society and CSR in Japan.” Essay. In *Corporate Social Responsibility in Asia*, 45–65. Abingdon, UK: Routledge, 2010, pg. 47

¹⁶⁷ Ibid

¹⁶⁸ Ibid.

case was in 2022, when eight citizens of Mali brought a case against Nestlé, Mars, Hershey, Mondelez and some trading companies including Cargill, Olam, and Barry Callebaut for their involvement in child labor.^{169,170} The case was eventually dismissed, however, having such cases can be damaging to the companies, and they help shed light to the issue. Furthermore, as presented above, child labor in the supply chain was one of the main reasons chocolate manufacturing companies started to adopt sustainability standards. This is one of the biggest challenges that can affect their reputation, so it is consistent that companies would continue their commitments to getting rid of child labor in the supply chain.

7.3 International Regulation

Despite the growing role that companies and their brands play in the efforts to make their supply chains and more sustainable, international environmental regulation still plays an important role in dictating the behavior of companies. As presented above, the cocoa and chocolate industry have several international organizations that have introduced systems, and standards that help guide the companies' behavior related to the challenges of the supply chain. Although these are non-binding efforts, companies have a reputation to keep and therefore compliance with these types of standards is crucial for them to maintain it. All companies express commitment with the non-binding initiatives, such as the Cocoa and Forest Initiative, they have agreed to at an international level. As discussed above, companies depend on their corporate social responsibility agendas to build on their reputation. Therefore, they must participate in these types of schemes to demonstrate their commitment to the issue, but also to continue competing with their rivals to further their

¹⁶⁹ Stempel, Jonathan. "Hershey, Nestle, Cargill Win Dismissal in U.S. of Child Slavery Lawsuit." Reuters, June 29, 2022. <https://www.reuters.com/business/hershey-nestle-cargill-win-dismissal-us-child-slavery-lawsuit-2022-06-28/>.

¹⁷⁰ "Issouf Coubaly et. AL V. Nestlé, Cargill, Barry Callebaut, Mars, Olam, Mondelēz, and Hershey." International Rights Advocates. Accessed July 13, 2023. <https://www.internationalrightsadvocates.org/cases/cocoa>.

brand value. This could also explain why, although Pladis is a relatively new company, it has decided to join the Initiative and demonstrates commitments towards combatting deforestation.

Furthermore, there have been other international efforts to help guide companies, instead of these standards being solely driven by companies. As described above, Europe is one of the main markets for the consumption of chocolate, therefore, companies must comply with European regulation when it comes to selling their products there. The European Union (EU) has been a critical player in developing environmental and food safety policy that has gone beyond affecting consumers and companies in the European Union. Barnes argues that “the EU is the only supranational institution to have implemented an internal climate change policy that has allowed it to adopt the role of a leader in international climate change politics.”¹⁷¹ For this reason, the introduction of the European Green Deal demonstrates Europe’s efforts in developing comprehensive policy that helps guide the efforts for combatting climate change, but also the influence that European regulation has at a global level. It is through these proposals, and their rollout that companies have had to adapt their standards to be able to comply with European regulation. Many of the chocolate companies cite EU regulation in their documents, signaling strong commitment to being able to meet the EU standards to continue to have access to the European market.

More specifically, the EU Regulation on deforestation-free supply chains, which came into force in 2023, will “ensure that a set of key goods exported or placed on the EU market must be deforestation free”¹⁷² and companies will also have to conduct strict due diligence. This will

¹⁷¹ Barnes, Pamela M. “The Role of the Commission of the European Union: Creating External Coherence from Internal Diversity.” Chapter In *The European Union as a Leader in International Climate Change Politics*, 41–57. London: Routledge, 2011, pg. 41

¹⁷² “Green Deal: New Law to Fight Global Deforestation and Forest Degradation Driven by EU Production and Consumption Enters into Force.” Directorate-General for Environment, June 29, 2023. https://environment.ec.europa.eu/news/green-deal-new-law-fight-global-deforestation-and-forest-degradation-driven-eu-production-and-2023-06-29_en.

mean that companies will need to increase their traceability efforts to be able to give an overview of the situation in their supply chain. I argue that given the trends in the last five years in the chocolate industry with relation to their Voluntary Sustainability Standards, companies were reacting to the introduction of the proposals by the Green Deal and therefore were moving towards committing in areas such as deforestation and traceability. Furthermore, it is because of these international regulations that we can see how companies are selective in their focus. With the deforestation regulation coming from the EU, there is strong commitment by the companies on addressing this issue, which is also linked with traceability. However, the same is not true for other areas where there seems to be less efforts by companies, such as research on climate related matters and on matters related to the cocoa plantation (e.g., on cocoa varieties).

It is worth mentioning two other companies here, Lindt and Sprüngli and Mars, as they stand out for having almost opposite scores. Mars is an American company, with most of its operations in the United States. However, Mars does have some factories located in Europe (in France, Poland, Germany Netherlands, and Germany).¹⁷³ The company has therefore had to work to meet EU due diligence requirements and has stated they have started to implement EU due diligence legislation.¹⁷⁴ Despite this, from its reports, it is not clear how these requirements are separated between its American and European factories. However, Mars has put in place many commitments that would be ready to respond to the EU due diligence, but these have mostly been in relation to deforestation, and child labor. There have been efforts to address traceability, but they have been limited to these areas. Furthermore, as introduced above, Mars was involved in a case brought against them on child labor. Although the case was later dismissed, the implications

¹⁷³ Myers, Anthony. "All Mars' Products in Europe to Be Sourced with 100% Sustainable Cocoa." *confectionerynews.com*, October 5, 2022. <https://www.confectionerynews.com/Article/2022/10/05/All-Mars-products-in-Europe-to-be-sourced-with-100-sustainable-cocoa>.

¹⁷⁴ Ibid, n.pg

of having a case against them on instances of child labor serves as signal of where they need to dedicate their efforts.

Lindt and Sprüngli on the other hand is a Swiss company, which has had its Farming Program in place since 2008. The most important commitments of the program are on traceability and farmer living conditions. However, as opposed to other companies, Lindt and Sprüngli prides itself on buying “high quality cocoa”¹⁷⁵ which is why traceability is very important to be able to ensure the quality of the beans. Furthermore, the company also uses traceability to be able to target improvements in farmer incomes. However, although it has efforts to address deforestation, from its Farming Program, it is not clear what the commitment is to address environmental and climate change challenges through having more traceability. Furthermore, on ‘Child and Forced Labor’ Lindt and Sprüngli seems to be performing worse than Mars, however, this is not because they have not committed to child labor, but in their sustainability report it was unclear how they have committed to other types of forced labor. Lindt and Sprüngli’s response to child labor is a demonstration of their selective response to addressing issues that affect their brand the most.

Comparing these two companies serves to indicate the selective responsiveness that companies have to their activities. Mars has to comply by European regulation to maintain operations in its European factories. On the other hand, Lindt and Sprüngli have dedicated their efforts to boost their brand through making it one of the most ‘bean-to-bar’ companies from this study, and therefore, their reputation now relies on being able to continue sourcing beans that can be traced back. Lastly, it is also important to bring Meiji back to the discussion here on international regulation. Meiji mostly sells chocolate products in Japan, and its European market

¹⁷⁵ “The Lindt and Sprüngli Farming Program.” Home - Farming Program (by Lindt & Sprüngli). Accessed July 12, 2023. <https://www.farming-program.com/en/>.

is very limited. Therefore, it does not need to follow European regulation, and this leads to its under commitment in certain areas.

7.4 Future research

This paper tried to create a scorecard that could analyze chocolate manufacturing companies and evaluate their sustainability standards with relation to cocoa. However, companies have wider sustainability standards, further research could be carried out to see whether these broader sustainability standards encompass other activities. Furthermore, the analysis presented here does not consider the extent to which the companies engage in verification practices, and how this is carried about. It would be critical to consider the extent to which these VSSs are verified and by whom as this may suggest issues in the legitimacy of their commitments and efforts. Although the paper highlights efforts by the chocolate companies, it does not identify the success or failure of the strategies adopted. It might be hard to evaluate their success given that the analysis here depends on sustainability reports and webpages. The analysis could be extended to incorporate statements by the companies on their reports and commitments and further study the impact these commitments and programs have at the local context.

Given the multitude of actors, internationally and nationally, the scorecard could be expanded to include questions related to international standards such as the United Nations Sustainable Development Goals (SDGs), compliance with the International Labor Organization standards, partnerships with other types of third-party certification such as Fair Trade and the Rainforest Alliance and other non-governmental organizations. This would further help in identifying divergences in the sustainability plans as well as to why the companies have opted to develop their own VSSs. Furthermore, it does not identify the regulatory environment in which

the companies operate, both at the local level (level of producer country) and at the international level (level of consumer country). Although it does identify the European Union's Green Deal as source of regulating behavior, more needs to be done to understand the extent to which these types of regulations influence the companies' behavior.

Furthermore, this study focuses only on cocoa as being the main ingredient for chocolate. However, there are other products that go into making chocolate, such as dairy, sugar and vanilla. Some companies recognize the need to understand these supply chains as well and have integrated sustainability plans for these products as well but not all companies have done this. For that reason, it would be beneficial to have an analysis that investigates whether the companies focus on other products in the same way as they do for cocoa and what this could mean for the overall sustainability efforts the companies are making.

Lastly, this paper only focuses on the top-eight companies based on their net sales from 2020, but it misses out on many more companies that are involved in the cocoa supply chain. Therefore, an analysis that extends beyond the top-eight companies would help in complementing the argument here on reputation and international standards leading the sustainability standards of companies.

Chapter 8: Conclusion

While the role of transnational and multinational corporations continues to be an area of study in international relations, more has to be done to understand the interactions between international standards, intergovernmental organizations, international organizations and these types of companies, especially when they have far-reaching impacts. Furthermore, the interaction between customers and products such as chocolate needs to be further studied to understand how these sustainability commitments are perceived and the impact they can have on the consumer and stakeholders. Additionally, the perceived impacts of these types of commitments needs to be studied at a local level. If we are not able to see change at the local level from these types of commitments, we will be able to make better conclusions about what these types of efforts mean for the cocoa supply chain.

This paper presents a holistic overview of the cocoa supply chain, its challenges, and the implications of having Voluntary Sustainability Standards. The paper emphasized the divergences in sustainability standards adopted by chocolate companies and the trends that have been driving their standards. By analyzing the evolution of the industry and the dynamics within the supply chain, the paper has argued that companies prioritize addressing issues that can damage their reputation and are influenced by international pressure and regulations. It has also introduced the concept of "Big Brand Sustainability" to situate the "Bean to Bar" initiatives within a broader framework. This research contributes to a better understanding of the complex landscape of sustainability initiatives in the chocolate industry and identifies areas for further exploration and improvement.

Through a comparative analysis of the chocolate manufacturing companies' VSSs it found two main areas where the chocolate manufacturing companies have mostly been focusing their

efforts in ‘Child and Forced Labor’ and ‘Traceability’. The paper argues that changes in these areas can be explained through two main sources of pressure, international regulation and standards and reputation. Using the top-eight chocolate manufacturing companies and their sustainability reports, this paper presented the trends the industry has had with relation to its sustainability standards as well as the differences that currently exist within them.

Companies have responded selectively to ‘Child and Forced Labor’ and ‘Traceability’ given that these areas can be of most impact to the reputation of a company and because there is growing international pressure to achieve more transparency on supply chains. When comparing companies, we can see this in action with Asian companies being less responsive than American and European companies to these types of demands. As introduced with Big Brand Sustainability, this is also an effort for companies to compete against each other and adding sustainability to their brands is one way of surviving.

It is also necessary to recognize that the chocolate industry remains largely fragmented given that most of the companies do not only produce chocolate products, but either have other products in their recipes or produce other types of food products. When looking at their sustainability reports, some companies focus on all products that are mixed with chocolate, such as dairy products, sugar, and vanilla. Some companies do not make these distinctions, and therefore, there remain questions as to how the companies deal with other agricultural products and how these products are governed internationally.

The cocoa supply chain is much more complicated than was presented here. There are clear areas that need to be considered, especially in thinking what it is that companies are trying to achieve through their goals and standards. From the results here, sustainability has become a way of framing their operations despite them not addressing the most pressing challenges. As

companies continue to navigate these challenges, it is crucial to maintain a critical and vigilant approach to ensure genuine progress in achieving sustainability goals throughout the cocoa supply chain.

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Appendix

Appendix A

These are the questions asked for the 'Environment and Climate' dimension. The total score possible for this dimension is 12 points.

1. Does the company have a clear plan to address deforestation in the cocoa industry?
 - The company has no plan – 0 points
 - The company identifies deforestation as a challenge – 1 point
 - The company has a clear commitment to combat deforestation – 2 points
2. Does the company have a plan to address plantation yields and plant productivity?
 - The company has no plan – 0 points
 - The company identifies plantation yields/productivity as a challenge – 1 point
 - The company has a clear plan to help increase plant yield/productivity – 2 points
3. Does the company have a clear plan to address loss of biodiversity?
 - The company has no plan – 0 points
 - The company identifies biodiversity loss as a challenge – 1 point
 - The company has a clear commitment to address biodiversity – 2 points
4. Does the company have a clear plan to address greenhouse gas emissions in the supply chain of cocoa?
 - The company has no plan – 0 points
 - The company identifies reducing greenhouse gas emissions as a challenge – 1 point
 - The company has a clear commitment to reduce greenhouse gas emissions – 2 points
5. Does the company have a clear commitment to addressing challenges related to climate change?
 - The company has no commitment – 0 points
 - The company identifies general climate change issues as a challenge – 1 point
 - The company has a clear commitment to address the challenges related to climate change – 2 points
6. Does the company have a clear commitment to research on climate related topics (such as how to increase plant yield, cocoa variations, etc.)
 - The company has no commitment – 0 points
 - The company mentions some types of research – 1 point
 - The company has a clear commitment to invest on research to address climate related topics – 2 points

Appendix B

These are the questions asked for the ‘Child and Forced Labor’ dimension. The total score possible for this dimension is 12 points.

1. Does the company have a clear Child Labor Monitoring and Remediation System (CLMRS) or similar in place?
 - No clear system in place – 0 points
 - The company has a mention of the system, but implementation is not clear – 1 point
 - The company has a clear mention of the system as well as its implementation – 2 points
2. Does the company have a goal to achieve full coverage under the CLMRS?
 - The company has no goal - 0 points
 - The company has a goal, but no specific date - 1 point
 - The company has a goal with a set date – 2 points
3. What percentage of farmers are currently covered by the Child Labor Monitoring and Remediation System?
 - Not clear – 0 points
 - 0 - 50% - 1 points
 - 51 - 75% - 2 point
 - 76 - 90% - 3 points
 - 91 – 100% - 4 points
4. Does the company have partnerships with NGOs that help support eliminate child labor?
 - No partnerships or not clear – 0 points
 - The company has partnerships with leading NGOs – 1 point
5. Does the company have a system in place to monitor forced/bonded/slave labor?
 - No clear system in place – 0 points
 - The company has a mention of the system, but implementation is not clear – 1 point
 - The company has a clear mention of the system as well as its implementation – 2 points
6. Does the company strive to give children access to education?
 - No clear strategy – 0 points
 - The company has a strategy to increase access to education – 1 point

Appendix C

These are the questions asked for the 'Farmer Incomes' dimension. The total score possible for this dimension is 7 points.

1. Does the company have a clear commitment to provide farmers with higher incomes?
 - No clear commitment – 0 points
 - The company has a partial commitment – 1 point
 - The company has a clear commitment – 2 points
2. Does the company have clear commitment to train farmers?
 - No clear commitment – 0 points
 - The company has a partial commitment (e.g. only on agricultural practices, only on financial practices) – 1 point
 - The company has clear commitment to train farmers – 2 points
3. Does the company have a clear commitment to help diversify income sources of farmers?
 - No clear commitment – 0 points
 - The company has a partial commitment – 1 point
 - The company has a clear commitment to help farmers find ways of diversifying their income source – 2 points
4. Does the company follow a Village Savings and Loan Association (VSLA) model?
 - The company does not follow a VSLA model – 0 points
 - The company implements a VSLA model – 1 point

Appendix D

These are the questions asked for the 'Community Engagement' dimension. The total score possible for this dimension is 9 points.

1. Does the company have a clear Human Rights Policy?
 - The company has no clear Human Rights Policy – 0 points
 - The company has a Human Rights Policy – 1 point
2. Does the company adopt the United Nations Guiding Principles for Human Rights?
 - The company does not adopt the UN Guiding Principles – 0 points
 - The company adopts other international sets of standards – 1 point
 - The company adopts the UN Guiding Principles – 2 points
3. Does the company have commitment to have Tier 1 suppliers uphold the Human Rights Policy?
 - The company does not mention this commitment – 0 points
 - The company mentions the commitment in the Supplier Code but it is not clear how Tier 1 suppliers will be held accountable – 1 point
 - The company includes this in the Supplier Code of Conduct – 2 points
4. Does the company work towards having active local community engagement?
 - The company does not demonstrate active local community engagement – 0 points
 - It is not clear the amount of engagement the company has with local communities – 1 point
 - The company demonstrates active local community engagement – 2 points
5. Does the company work towards empowering women?
 - The company does not demonstrate active involvement – 0 points
 - The company mentions women empowerment, but it is not clear how this is done – 1 points
 - The company demonstrates clear efforts to help empower women – 2 points

Appendix E

These are the questions asked for the ‘Traceability’ dimension. The total score possible for this dimension is 15 points.

1. What percent of the cocoa is traceable?
 - 0-65% - 0 points
 - 66-80% - 1 point
 - 81-95% - 2 points
 - 96-100% - 3 points

2. Is there an effort to map (GPS/polygon) farms? If so, what percentage is mapped?
 - No effort – 0 points
 - Clear effort to map the farms – 1 point

3. What percentage of farms is mapped?
 - Not clear – 0 points
 - 0-80% - 1 point
 - 81-90% - 2 points
 - 91-100% - 3 points

4. Does the company have a clear roadmap to trace cocoa beans back?
 - No roadmap – 0 points
 - No clear roadmap but indications of a strategy – 1 point
 - There is indication of a roadmap but implementation is not clear – 2 points
 - Clear roadmap for increasing traceability – 3 points

5. Does the company have a list of all Tier 1 and Tier 2 suppliers?
 - No or partial information on the suppliers – 0 points
 - Information only on Tier 1 suppliers – 1 point
 - Information on Tier 1 and 2 suppliers – 2 points

6. Does the company have a target date to achieve 100% traceability?
 - No clear date – 0 points
 - The company has date – 1 point
 - The company has achieved the target – 2 points
 - The company has achieved the target and has further plans – 3 points

Appendix F

This table shows the results for each question on the dimension of 'Environment and Climate'.

	Q1		Q2		Q3		Q4		Q5		Q6		Totals		Percent points	
	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022
Mars Wrigley Confectionery	1	2	1	2	0	1	1	1	1	1	0	2	4	9	33%	75%
Ferrero Group	2	2	1	1	0	1	0	1	1	1	0	0	4	6	33%	50%
Mondelēz International	1	2	0	2	0	2	0	0	1	2	0	0	2	8	17%	67%
Meiji Co Ltd	1	2	1	1	0	0	0	0	0	1	0	1	2	5	17%	42%
Hershey Co	1	2	1	1	1	0	0	0	1	2	0	0	4	5	33%	42%
Nestlé SA	2	2	1	1	0	0	0	0	1	1	1	0	5	4	42%	33%
Pladis		2		0		0		1		0		0	0	3	0%	25%
Lindt & Sprüngli AG	1	2	0	1	0	1	0	0	1	1	1	0	3	5	25%	42%
	9	16	5	9	1	5	1	3	6	9	2	3	24	45		

Appendix G

This table shows the results for each question on the dimension of ‘Child and Forced Labor’.

	Q1		Q2		Q3		Q4		Q5		Q6		Totals		Percent points	
	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022
Mars Wrigley Confectionery	0	2	0	2	0	2	0	1	0	1	0	1	0	9	0%	75%
Ferrero Group	1	2	0	0	1	4	1	1	0	0	1	1	4	8	33%	67%
Mondelēz International	2	2	1	2	1	2	1	1	0	0	1	1	6	8	50%	67%
Meiji Co Ltd	0	2	0	1	0	1	0	0	0	0	0	0	0	4	0%	33%
Hershey Co	1	2	0	2	1	2	1	0	0	1	1	1	4	8	33%	67%
Nestlé SA	1	2	1	1	1	0	1	1	0	0	1	1	5	5	42%	42%
Pladis		2		0		0		1		0		0	0	3	0%	25%
Lindt & Sprüngli AG	2	2	0	2	1	2	1	1	0	0	1	1	5	8	42%	67%
	7	16	2	10	5	13	5	6	0	2	5	6	24	53		

Appendix H

This table shows the results for each question on the dimension of ‘Farmer Incomes’.

	Q1		Q2		Q3		Q4		Totals		Percent points	
	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022
Mars Wrigley Confectionery	2	1	1	1	1	1	1	1	5	4	71%	57%
Ferrero Group	0	1	1	2	0	1	0	1	1	5	14%	71%
Mondelēz International	1	1	1	1	1	1	1	1	4	4	57%	57%
Meiji Co Ltd	1	1	1	1	0	0	0	1	2	3	29%	43%
Hershey Co	0	1	1	2	2	1	1	1	4	5	57%	71%
Nestlé SA	1	1	1	1	1	2	0	1	3	5	43%	71%
Pladis		0		1		1		1	0	3	0%	43%
Lindt & Sprüngli AG	2	1	1	2	1	2	1	1	5	6	71%	86%
	7	7	7	11	6	9	4	8	24	35		

Appendix I

This table shows the results for each question on the dimension of ‘Community Engagement’.

	Q1		Q2		Q3		Q4		Q5		Totals		Percent points	
	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022
Mars Wrigley Confectionery	1	1	0	2	1	1	0	1	2	2	4	7	44%	78%
Ferrero Group	1	1	2	2	1	1	1	1	1	1	6	6	67%	67%
Mondelēz International	0	1	0	2	0	1	1	1	2	1	3	6	33%	67%
Meiji Co Ltd	1	1	0	2	0	1	2	1	0	0	3	5	33%	56%
Hershey Co	0	1	0	2	1	1	1	1	2	1	4	6	44%	67%
Nestlé SA	1	1	2	2	1	1	1	1	1	1	6	6	67%	67%
Pladis		1		2		1		1		0	0	5	0%	56%
Lindt & Sprüngli AG	0	1	0	2	1	1	1	1	1	1	3	6	33%	67%
	4	8	4	16	5	8	7	8	9	7	29	47		

Appendix J

This table shows the results for each question on the dimension of ‘Traceability.’

	Q1		Q2		Q3		Q4		Q5		Q6		Totals		Percent points	
	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022	2017	2022
Mars Wrigley Confectionery	0	2	0	1	0	1	2	2	0	1	0	1	2	8	13%	53%
Ferrero Group	1	2	1	1	0	0	2	2	0	2	1	1	5	8	33%	53%
Mondelēz International	0	0	1	1	1	1	1	2	0	2	0	1	3	7	20%	47%
Meiji Co Ltd	0	3	0	1	0	0	0	1	0	0	0	1	0	6	0%	40%
Hershey Co	1	2	1	1	0	1	0	2	0	1	0	1	2	8	13%	53%
Nestlé SA	0	1	0	1	0	1	0	2	0	2	1	1	1	8	7%	53%
Pladis		0		1		0		1		0		0	0	2	0%	13%
Lindt & Sprüngli AG	1	3	0	1	0	3	2	3	0	0	1	3	4	13	27%	87%
	3	12	3	8	1	7	7	15	0	8	3	9	17	59		