Voluntary sustainability standards' role in economic and social upgrading: the cases of Fairtrade and Rainforest Alliance

Le rôle des standards volontaires de durabilité dans l'amélioration économique et sociale : les cas de Fairtrade et Rainforest Alliance

El papel de las estándares voluntarios de sostenibilidad en la escalamiento económico y social: los casos de Fairtrade y Rainforest

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ABSTRACT

Voluntary Sustainability Standards (VSS) influence agri-food Global Value Chains (GVCs) governance, yet their impact remains contested. This paper explores the unintended consequences of VSS mechanisms in economic and social upgrading in the context of GVCs through a qualitative multiple case study of Rainforest Alliance and Fairtrade within the chocolate value chain. Findings reveal that while VSSs foster economic upgrading through productivity improvements and transparency, they also generate unintended consequences, producing social downgrading effects instead. This study contributes to VSS literature by highlighting the trade-offs and complex interplays between economic and social upgrading.

Keywords: voluntary sustainability standards, global governance, global value chains, social upgrading, economic upgrading, downgrading

Résumé

Les standards volontaires de durabilité (SVD) influencent la gouvernance des chaînes de valeur mondiales (CVM) agroalimentaires, mais leurs effets demeurent controversés. Cet article analyse les conséquences non intentionnelles des SVD sur l'amélioration économique et sociale, à partir d'une étude de cas qualitative portant sur Rainforest Alliance et Fairtrade au sein de la chaîne de valeur du chocolat. Les résultats montrent que, si les SVD favorisent l'amélioration économique grâce à des améliorations de la productivité et de la transparence, ils génèrent également des dynamiques de régression sociale. Cette étude met en évidence les compromis et interactions complexes entre l'amélioration économique et sociale.

Mots-clés : standards volontaires de durabilité, gouvernance mondiale, chaînes de valeur mondiales, amélioration sociale, amélioration économique, régression

Resumen

Los Estándares Voluntarios de Sostenibilidad (EVS) influyen en la gobernanza de las Cadenas Globales de Valor (CGV) agroalimentarias, aunque su impacto sigue siendo debatido. Este artículo analiza las consecuencias no intencionadas de los mecanismos de los EVS sobre el escalamiento económico y social en las CGV, a partir de un estudio cualitativo de casos múltiples centrado en Rainforest Alliance y Fairtrade en la cadena de valor del chocolate. Los resultados indican que, si bien los EVS promueven el escalamiento económico mediante mejoras en la productividad y la transparencia, también generan efectos no previstos que conducen a procesos de degradación social. El estudio contribuye a la literatura sobre EVS al destacar las interacciones complejas entre escalamiento económico y social.

Palabras Clave: estándares voluntarios de sostenibilidad, gobernanza global, cadenas globales de valor, escalamiento social, escalamiento económico, degradación

Abbreviations: GVCs (global value chains), FT (fairtrade), RA (rainforest alliance)

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Research related to sustainability in global value chains (GVCs) is gaining momentum (Bush *et al.*, 2015; Dimitropoulos *et al.*, 2023). Particularly, we see an increased interest in voluntary sustainability standards (VSS), which regulate corporate activities in the attempt to mitigate the socio-environmental impacts of international trade. The United Nations Forum on Sustainability Standards (UNFSS) defines them as "standards specifying requirements that producers, traders, manufacturers, retailers or service providers may be asked to meet, relating to a wide range of sustainability metrics, including respect for basic human rights, worker health and safety, the environmental impacts of production, community relations, land use planning and others" (UNFSS, 2013: 4). These certifications are voluntary, private, non-state codes of conduct and standards for sustainable production (Marx *et al.*, 2022). It is distinctive for its third-party auditing process determining compliance before a label can be granted and used (Furumo *et al.*, 2020). Well known cases of VSS active globally include Fairtrade International, Rainforest Alliance (RA), the Forest Stewardship Council (FSC), the Marine Stewardship Council (MSC), the Roundtable on Sustainable Palm Oil (RSPO), the Better Cotton Initiative (BCI), the Fair Wear Foundation (FWF) – among other 450 initiatives (Marx *et al.* 2024). They stipulate corporate responsibilities regarding labor practices, environmental performance, human rights, and do this by tracking compliance in GVCs (Wettstein *et al.*, 2019).

GVCs are complex trade networks orchestrated by multinational companies, linking geographically dispersed economic activities and their governance refers to the authority of companies to determine the allocation of financial, material, and human resources throughout the chain (Lee & Gereffi, 2015; McWilliam *et al.*, 2020). Some studies have shown that VSSs may serve as facilitators of increased participation by Southern producers in GVCs (Van Dijk & Trienekens, 2011). However, GVCs rely on inequitable relations, which has prompted scholars and practitioners alike to discuss the process of "upgrading" producers to improve their value capture in GVCs and the social conditions of workers (Gereffi and Lee, 2016).

The improvement of economic distribution, working conditions and rights of workers has received increasing attention in the GVC literature (Gereffi & Lee, 2016; Piao *et al.*, 2019), but few studies tackle the role of VSS to economic and social upgrading in GVCs (Piao *et al.*, 2019). In this paper, we aim to study the following research question: What are the unintended consequences of VSS mechanisms in economic and social upgrading in the context of GVCs? Particularly in agri-food value chains, previous studies are not completely in agreement on whether VSSs positively impact sustainability (Akoyi *et al.*, 2020; García-Herrero *et al.*, 2019; Furumo *et al.*, 2020; Oya *et al.* 2018; Fridell & Walker, 2019). Our exploratory empirical focus is on the chocolate industry, which faces many socio-environmental challenges, mostly affecting vulnerable cocoa producers, with income disparities trapping producers in systemic poverty and perpetuating child labour (Voora *et al.*, 2019).

We conducted a multiple case study based on the two most relevant VSSs in the cocoa-producing sector, Rainforest Alliance (RA) and Fairtrade (FT). Relying on secondary data, such as documents, observations of online conferences and semi-structured interviews, results show that VSS practices in this industry stimulate changes in chain transparency and increase productivity. These two practices create enabling conditions for social and economic upgrading, but the benefits are not fully reaped at the producer level due to several tensions produced, which refer to as unintended consequences of the model.

We contribute to the literature on the role of VSS in GVCs in three main ways. First, we argue that current VSS key practices should be better adapted for producers to reap more benefits from GVCs. We also provide a better understanding of the dynamic interplay between social and economic upgrading, showing that it involves complex trade-offs. They align with economic and social upgrading in that they improve farmers' capabilities, but also produce unintended downgrading effects. Finally, we expand the discussion of social upgrading in agro-food industries, arguing that in the context of agriculture, social upgrading extends beyond improvements in wages and working conditions (Barrientos *et al.* 2011) to include community-level benefits and producer resilience.

In what follows, we present previous literature on the role of VSS in GVCs and key aspects about social and economic upgrading. We then present our cases and explain how different certification mechanisms interact to generate more sustainability in the context of the chocolate value chain. Finally, we discuss our findings and present our contributions to the literature and to practice.

Literature review

Role of voluntary sustainability standards in global value chains

Over the years, the private effort to turn GVCs more sustainable has been called by different names, such as private standards, multi-stakeholder initiatives, certification schemes and eco-labels (Marx *et al.* 2024). More recently, these standards have been embraced under the label of voluntary sustainability standards (VSS), which are private, voluntary, market-based instruments that establish norms and criteria for sustainable production and trade, focusing on environmental, social, and economic dimensions (Marx *et al.* 2024). VSS have an important role in ensuring compliance with sustainability norms, facilitating sustainable sourcing strategies by lead firms and supporting more sustainable production and processing practices (UNCTAD, 2022).

For this reason, VSS have become known as governance tools for value chain sustainability (Marx *et al.* 2024). Producers from developing countries are often located at the beginning of GVCs, which provide primary goods and raw materials for more advanced, knowledge-intensive and profitable intermediate production steps in developed countries. While lead firms from developed countries reap high profits, producers from developing countries often earn barely enough to cover production costs (Dietz and Grabs, 2022). This is where VSS can play an important role in shifting the balance between Northern buyers and Southern producers.

VSS aim at achieving its sustainability objectives through two key practices. On the one hand, VSS incentivize producers' better agricultural practices through benefits like price premiums and technical capabilities support (Loconto, 2024). Premiums refer to the additional price paid for crops that meet specific certification standards and are an important component of VSS. Elder (2021)

found that where prices for VSS-compliant products are higher or command premiums, producers can have higher incomes and thus better capacity to invest, adapt, and cope with shocks. The access to training and information is also a way to help producers to adapt to changes in the value chain and maintain their productivity (Elder, 2021).

On the other hand, VSS must ensure compliance with specific criteria, which is then marketed as a label to signal sustainability to consumers (Dragusanu *et al.,* 2014; Schleifer & Sun, 2020). Transparency in the value chain is defined as a state in which information is made apparent and easily available to certain actors (Gardner *et al.,* 2019). Closely related to the notion of accountability, transparency can foster better traceability of production processes and greater efficiency and impact by minimizing risks and monitoring the progress of activities in GVCs (Depoorter and Marx, 2024). Compliance with the norms is then verified through auditing processes led by a third-party certification body (Marx *et al.*, 2024). Through the increased transparency in the value chain, large buyers and multinational firms in GVCs receive reputational benefits and mitigate risks while producers get facilitated market access.

VSS also attract important criticism. Previous research has pointed to the weakened legitimacy and credibility of VSS due to their proliferation (Lout, 2023), creating consumer confusion and thus a decrease in certification efficiency (García-Herrero *et al.*, 2019). Previous research also demonstrates that certifications reinforce the exclusion of the poorest and most marginalized producers, due to the high costs of certification and audits (Minah & Pérez Carletti, 2019; Piao *et al.*, 2019). In this sense, VSS can lead to an unintended effect of market exclusion for smallholders who cannot afford certification or lack technical support, deepening inequalities (Lemeilleur, 2013). Despite the efforts undertaken by VSSs, GVCs remain largely inequitable as lead firms are generally in a power position to dictate where and when profits are distributed (Dallas *et al.*, 2019). Previous research has found that certified producers continue to capture little of the value-added in GVCs (Purcell *et al.*, 2018). Considering all the positive and negative aspects of VSS in the governance of GVCs, it is important to understand how they interact with economic and social upgrading.

Economic and Social Upgrading

The GVC literature emphasizes the role of chain governance in enabling or constraining opportunities for upgrading (Gereffi, Humphrey, & Sturgeon, 2005). In this paper, we adopt the understanding of governance proposed by Gereffi *et al.* (2005), who conceptualize governance as the coordination of inter-firm relationships along the value chain. This approach integrates insights from transaction cost economics, production network analysis, and firm-level learning to explain how governance patterns emerge and evolve. Specifically, they identify three key determinants of governance structures—the complexity of information and knowledge transfer, the degree to which such knowledge can be codified, and the capabilities of suppliers relative to transaction requirements.

Our analysis focuses on how these inter-firm governance relations influence opportunities for upgrading within the chain. In the GVC framework, *upgrading* refers to the process of improving the position of producers by moving into higher value-added activities through enhanced technology, knowledge, and skills, thereby "moving up" into more rewarding functional positions that yield greater profits or earnings (McWilliam *et al.*, 2020; Riisgaard *et al.*, 2010). Therefore, upgrading is conceptualized as a process of organizational learning, enabling firms or nations to strengthen their capabilities and improve their positions within international trade networks (Gereffi, 1999).

For our understanding of economic upgrading, we utilize the widely adopted classification by Humphrey and Schmitz (2002) typology of four upgrading techniques to investigate the implications of certifications at the production level: 1) through increased value added involving product quality, production processes (including conditions and differentiation), and functional or cross-sectoral considerations; 2) through market access, e.g., improved horizontal and vertical relationships; 3) through better governance structures in the value chain, e.g., collaboration or contracts; and 4) upgrading through partnerships and support from external actors.

After fierce criticism, the GVC literature incorporated social aspects in upgrading (Barrientos *et al.*, 2011; Gereffi and Lee, 2016). Social upgrading is "the process of improvements of the rights and entitlements of workers as social actors, which enhance the quality of their employment" (Barrientos *et al.*, 2011, p. 234). Therefore, as a complement to economic upgrading, social upgrading focuses on the improvement of workers' rights, wages, and working conditions. Barrientos *et al.* (2011) highlight that economic upgrading (e.g., improving productivity, accessing higher-value markets) does not automatically translate into social upgrading (e.g., better wages, working conditions). In some cases, firms achieve economic upgrading by cutting labor costs or outsourcing production, which undermines social upgrading.

Previous notions of upgrading apply primarily to industrial and manufacturing value chain contexts. Indeed, smallholder households are not necessarily profit-maximizing firms (Vicol *et al.*, 2019) since they are both labour and capital, pursue complex rural strategies embedded in social structures and institutions, and can integrate themselves into several value chains (Neilson, 2019). Therefore, there is a need to develop a more encompassing notion of upgrading, including the challenges to integrating producers in the Global South. Moreover, the actual trade-offs involved in the strategies adopted for economic and social upgrading are not completely understood in agricultural value chains.

From a GVC perspective, VSSs can then be conceptualised as governance mechanisms embedded in global value chains: they impose criteria, enable monitoring and traceability, and thereby influence the coordination of actors, flows of information, and power relations across the chain (Marx & Depoorter, 2022). In this sense, VSSs interface with the governance of GVCs by altering the structural conditions under which upgrading can occur. They may facilitate upgrading when they codify sustainability-relevant knowledge, strengthen supplier capabilities, and increase transparency. However, they may also create blind spots: for example, when compliance costs exclude weaker suppliers, or when governance through standards reinforces existing asymmetries (Marx & Depoorter, 2022; UNCTAD, 2023). Thus, the link between VSSs and GVCs lies in how standards reshape the governance architecture of the chain, influencing which actors can access upgrading opportunities and which may be sidelined.

Research context

Our research is based on a multiple case study involving RA and FT certifications in the chocolate industry, an industry particularly relevant to our research, as the economic and social problems in this value chain are striking, especially for small producers (Ryan, 2011). Cocoa producers earn approximately $0.78 US per day, well below the World Bank poverty line of $1.90 per day (Fountain & Huetz-Adams, 2018). As their income depends largely on the widely fluctuating world market price of cocoa, producers often rely on their families rather than hired workers (Hebbar, 2007) - indeed, child labor[1] is sometimes their only option (Aglionby & Atkins, 2018). Beans are then exported to European and American markets, with countries like the Netherlands and the U.S. capturing most of the value-added from raw and semi-finished cocoa products

1. Child labor is estimated at 2.1 million children working on plantations in Côte d'Ivoire and Ghana alone (Fountain et Huetz-Adams, 2018).

(UN Comtrade, 2021). Cocoa processors and chocolate manufacturers are dominated by a very small number of companies: between five and six for each segment (Fountain & Huetz-Adams, 2020). To illustrate the disparity in value capture along the chain, cocoa producers capture approximately 6% of the value of a non-certified chocolate bar, whereas manufacturers and retailers capture about 35% and 44%, respectively (see Appendix 1 for more details)(Hayford, 2021; Fountain and Hütz-Adams, 2015).

We justify the use of these two cases because RA and FT are the most widely used and recognized NGO sustainability certifications in the chocolate industry (UNCTAD, 2022). They are both members of the ISEAL Alliance organization[2], assuring the credibility of our cases. FT and RA share similar goals but use different approaches to achieve their objectives (Rainforest Alliance, 2021b). They both construct standards for the three pillars of sustainability: social, economic, and environmental. However, RA focuses more on protecting nature and forest communities (Rainforest Alliance, 2021a), while FT aims at addressing the social injustices that producers face in the form of pricing strategies (Fairtrade Belgium, 2021). In terms of scope, FT reaches more countries, but RA operates on a larger scale, indeed the merger between Rainforest Alliance and UTZ in 2020, had propelled it far ahead of FT in the cocoa sector (UNCTAD, 2022), as depicted in Table 1.

TABLE 1
Presentation of the two cases

	FT	RA
Scope of the certification as a whole		
Certified products	20	9 +
Countries affected	72	70
Total farmers and workers hired	1.890.381	2.300.000
Total of producer organizations	1 880	_
Scope of certification at the cocoa level		
Certified cocoa producers	415 971	1 012 315 (UTZ: 794 431) (RA: 217,884)
Hectares of certified cocoa	1.38 million	2.7 million
Countries affected	22 countries	20 countries
Certified cocoa production (in metric tons)	618 633	1 776 757 (UTZ: 1 337 340) (RA: 439,417)
Sales of certified cocoa (in metric tons)	233 497	1 146 004 (UTZ: 943 436) (RA: 202,568)

Source: authors, based on Fairtrade International (2020) and Rainforest Alliance (2020)

Methods

Data Collection

We built a qualitative research project based on case studies (Yin, 2017), this approach being particularly appropriate in view of the need for a better understanding of processes (Creswell, 2013). We adopt a triangulation of data technique to ensure the confirmability of our findings by corroborating findings across data sources and thus reducing the impact of potential biases that can exist in a single source (Shenton, 2004).

We relied on three main sources of data: interviews, documents, and observations in conferences to bring together multiple perceptions, clarify meaning, and test observations and interpretations for repeatability (Stake, 1998). We used online semi-structured interviews as the primary data collection method due to our inability to conduct field research because of the COVID-19 pandemic (Kobakhidze *et al.*, 2021). Interviews help researchers to access experiences, feelings and opinions of interviewees that are not easily observable (Patton, 2015) and in particular online telephone interviews allow to easily recruit participants in multiple countries, especially in the Global South (Abedi, 2024). They encourage participants to share experiences in a confidential setting (such as home) (Oliffe *et al.*, 2021; Jenner & Myers, 2019), offer greater adaptability (Deakin & Wakefield, 2014; Archibald *et al.*, 2019), and improve access to underrepresented populations in remote areas (Abedi, 2024). They also enhance transcription efficiency and audio accuracy, particularly in the Global South, where background noise is common (Keen *et al.*, 2022).

To do so, we built a general interview guide that served as a reference for our interviews to maintain consistency of topics covered (Patton, 2002). We chose our cases through purposeful sampling (Campbell *et al.*, 2020). We defined that cases had to be third-party independent certification in the chocolate industry dealing with social and economic sustainability issues. Only the two cases we studied fit these criteria. To select the respondents in our sample, we used the following criteria: broad experience in the chocolate value chain, deep knowledge on the operations with at least one of the two certification systems and the position occupied in the value chain. To obtain a more complete picture of our cases and to ensure a diversity of perspective, we purposefully sampled and recruited via LinkedIn a wide range of actors participating in the chocolate value chain, ranging from the actors who build these private regulatory schemes, to producers and retailers of both certifications, ensuring variability and credibility of our findings (Creswell, 2013). Previous research highlights LinkedIn as a valuable tool for recruiting participants in hard-to-access settings (Robinson, 2021), offering granular profile searches and direct contact with professionals across various regions (Dicce & Ewers, 2020).

All interviews were conducted online in either English or French by the first author of the paper, who is bilingual. Due to the diversity of our respondents, the guide served mainly as a checklist with pre-determined topics, following Patton's suggestion (2015). Our questions related to certification processes, the benefits and downsides for producers and other value chain actors, and major changes following certification (see Appendix 2 for the interview guide). We were able to conduct 11 interviews, as depicted in Table 2. All interviewees were anonymized to respect confidentiality.

In addition, we analyzed approximately 880 pages of secondary data from a total of 164 relevant documents, such as (1) FT and RA annual reports, research and guides, and official website pages (107 documents), as well as (2) the annual reports and official website pages of chocolate multinationals, cocoa processors and retail brands (for a total of 57 documents) for the period 2010-2020 (when available, documents from 2003 and onwards were included to compensate for years when documents were not available online). Table 3 contains the detailed list of documents.

Finally, we attended and observed a total of 11 hours of online industry-related conferences (including the annual three-day CHOCOA conference in Amsterdam) and four other webinars for practitioners. This type of data collection with telephone and online interviews, online conferences, and secondary data helped compensate for our inability to conduct field research due to the COVID-19 pandemic, as indicated by prior research (Adom *et al.*, 2020; Hall *et al.*, 2021). Table 4 contains a detailed list of conferences' observations.

2. ISEAL is a meta-organization responsible for defining the best socio-environmental criteria to use in addressing the most pressing issues.

TABLE 2

List and characteristics of our interviewees.

Title	Date	Interview length	Data ID
Project Manager at Fairtrade International, Germany	06/11/20	39 min	V1, FT expert, November 2020
Department Director at Rainforest Alliance, Netherlands	12/11/2020	40 min	V2, RA expert, November 2020
Rainforest Alliance, Côte d'Ivoire	12/11/2020		R3, RA expert, November 2020
Sustainability Policy Analyst at IISD, Canada	16/11/2020	50 min	V4, sustainability policy expert, November 2020
Global chocolate company, Switzerland	18/11/2020	55 min	V5, representative of a global chocolate company, November 2020
Representative of a chocolate processing and manufacturing company, Cameroon	23/11/2020	37 min	V6, Representative of a chocolate processing and manufacturing company, Cameroon, November 2020
UTZ (RA) certified cocoa cooperative, Côte d'Ivoire	25/11/2020	47 min	V7, representative of a UTZ (RA) certified cooperative in Côte d'Ivoire, November 2020
Representative of a Rainforest-Alliance-certified cocoa cooperative, Cameroon	25/11/2020	36 min	V8, representative of an RA-certified cocoa cooperative in Cameroon, November 2020
Director of a cocoa production company in Madagascar and former Chairman of the ICCO, France	03/12/2020	1h38	V9, cocoa expert, December 2020
Director of a UTZ (RA) certified cooperative in Côte d'Ivoire	08/12/2020	1h	V10, representative of a UTZ (RA) certified cocoa cooperative in Côte d'Ivoire, December 2020
Adviser, Sustainable Cocoa, Sustainable Commodities, Chocolate, Chair, Speaker, Moderator, Netherlands	13/01/2021	51 min	V11, sustainable cocoa expert, January 2021

Source: authors

TABLE 3

Detailed list of documents

Type of document	Number	Information and period covered
Fairtrade		
Annual report	14	From 2003 to 2020 (excluding 2015, 2016 and 2017)
Monitoring report	12	From 2007 to 2019 (excluding 2016)
Research and guide	12	From 2010 to 2018 with interruption[1]
Research and external assessment	8	From 2009 to 2018 with interruption, not produced by Fairtrade
Offical website page	10	Articles and information pages on the official Fairtrade International and Fairtrade Canada websites
Rainforest Alliance		
Annual report	11	From 2013 to 2020 without interruption, with UTZ annual reports from 2007 and 2017
Monitoring report	6	From 2012 to 2020, with interruption
Research & guide	20	From 2015 to 2020, with interruption and UTZ documents
Research and external assessment	2	2008-2013 and 2018. Documents concerning UTZ
Offical website page	12	Articles and information pages on the official RA and UTZ websites
Cocoa processors: Barry Callebaut, OLAM et Cargill		
Annual report - Barry Callebaut	7	From 2009 to 2020 with interruption
Annual report - OLAM	15	From 2005 to 2020
Annual report - Cargill	3	From 2016 to 2019
Chocolate companies: Mars, Hershey, Ferrero et Mondelez		
Annual report - Mars	4	From 2017 to 2020
Annual report - Hershey	7	From 2013 to 2019
Annual report - Ferrero	11	From 2008 to 2019
Report on human rights (Mars, Mondelez)	3	2019-2020
Official website pages (Mondelez, Ferrero)	2	Articles and information pages on the official Mondelez and Ferrero websites
Retailers: Carrefour, Métro et Sobeys		
Annual report (Carrefour, Métro)	2	2019-2020
Official website pages (Sobeys, Carrefour)	3	Articles and information pages on the official Sobeys and Carrefour websites
Total	**164**	

Source: authors

TABLE 4
Detailed list of conferences' observations

Title	Date	Organizations	Length	Data ID
Scientific webinar				
"What do we know about the impacts of market-based sustainability tools on farmers livelihoods"	01/10/2020	The Living income Community of Practice et Evidensia	59 min	C1
"Voluntary sustainability standards, public procurement and trade policy"	05/10/2020	Evidensia et UNFSS	94 min	C2
"Demystifying the concept of a living wage: what is it and how can it promote your work?»	07/10/2020	The Living income Community of Practice	85 min	C3
"Living income and standards systems: implementing living income requirements in standard systems"	22/10/2020	The Living income Community of Practice*	59 min	C4
Chocoa 2021 Annual conference: Chocolate makers' conference (CMF) and Amsterdam sustainable cocoa conference (ASCC)[4]				
A promising future for organic?	24/02/2021	Chocoa 2021	60 min	C5
Agroforestry: the transformative power of cocoa	24/02/2021	Chocoa 2021	60 min	C6
Craft chocolate sustainablility impacts	24/02/2021	Chocoa 2021	60 min	C7
Data is king: digitization & supply chain transparency	24/02/2021	Chocoa 2021	60 min	C8
Private label sustainability trends	25/02/2021	Chocoa 2021	60 min	C9
Re-thinking diversification	25/02/2021	Chocoa 2021	60 min	C10

Source: authors

Data Analysis

In analyzing the practices of VSS, open coding was employed to categorize various practices and their impacts. Open coding ensures that data analysis remains grounded in the actual experiences and observations of those involved in the study. By not imposing pre-existing frameworks, researchers discover new insights that might otherwise be overlooked (Charmaz, 2014). In this first round of coding, we summarized segments of data with descriptive themes related to VSS activities and impacts, creating codes such as "audits", "trainings", and "overproduction". In doing so, we developed an initial list comprised of 10 codes through a consensus between the authors. Table 5 below represents therefore our data structure.

Building on this initial round of open coding, which allowed for the identification of discrete practices within voluntary sustainability standards, axial coding was used to establish relationships between these practices and broader thematic patterns. Following Strauss and Corbin's (1990) approach, axial coding helped reorganize fragmented data into two key themes: enhancing productivity and increasing transparency. These themes emerged as central mechanisms through which voluntary standards influence economic and social dynamics. These more meaningful units of analysis allowed for the creation of more integrated and advanced patterns, which were the subject of debate between authors, but were resolved by consensus in an iterative process.

By linking these themes to the broader framework of economic and social upgrading, as well as recognizing unintended downgrading effects, this analytical process aligns with Charmaz's (2014) emphasis on developing a nuanced, grounded interpretation of social phenomena. This structured coding approach ensured that findings were not only emergent from the data but also analytically robust in capturing both the intended and unintended consequences of VSS practices. By establishing relationships between these codes, it became evident that while VSS can facilitate upgrading, they may also impose constraints that exacerbate inequalities or disrupt local economies. This nuanced understanding underscores the importance of critically assessing sustainability interventions to mitigate potential negative spillover effects.

Results

In this section, we present the findings related to VSS mechanisms and their implications for upgrading in the chocolate industry's GVCs. Specifically, we investigate the relationship between economic and social upgrading and highlight some tensions emerging from the implementation of VSS practices. Guided by our conceptual framework, we explore how the two key practices implemented by VSS interact with economic and social upgrading of producers. We demonstrate that while VSS hold the potential to foster economic upgrading (particularly through adding value, giving access to markets and improving governance structures of the chains) and some social upgrading (such as the improvement of working conditions and empowerment of women), the unintended consequences of their practices might lead to downgrading effects for producers. Our findings reveal that VSS practices, namely 'enhancing productivity' and 'increasing transparency', generate both positive and negative outcomes. This ambivalence highlights the inherent complexity of upgrading and downgrading dynamics, as well as the intricate interplay between the economic and social dimensions of these processes.

Tensions generated by enhancing productivity

Our findings point to mixed perspectives on the consequences of VSS's strategy of enhancing productivity. Sustainable agricultural practices are aimed at increasing the quality and the yields of cocoa production, hence to economically upgrade producers through increased value added and better access to higher value markets. VSS are looking to optimize production processes through implementation of management techniques and tools (notably for soil management, integrated pest management, etc.) that boost production, and consequently, promote economic upgrading through increased value added in production processes. Through extension services and inputs for training, the quality and quantity of production is improved: *"With certification comes what we call the introduction of good agricultural practices on the producer's farm. And these good agricultural practices help to improve the quality and quantity of the producer's production."* (V10, representative of a UTZ [RA] certified cocoa cooperative in Côte d'Ivoire, December 2020).

TABLE 5

Data structure emerging from the coding process

Open coding	Axial coding	Upgrading/ downgrading effects	
		Economic impacts	Social impacts
Capacity-building *"Training has long been the backbone of our certification programs and the secret to their success on the ground."* (Rainforest Alliance, 2019 annual report: 15)	**Enhancing productivity**	**Upgrading Effect:** *"(we) provide a good basis for helping improve agricultural education and adopting integrated farming systems, sustainable intensification and renewing trees to increase productivity and incomes. "* (UTZ certification external assessment, 2014: 117) **Downgrading Effect:** *"The producer absorbs all the costs of certification and complying with the standards but is unable to sell everything under Fairtrade conditions, so you end up eating a Milka chocolate, for example, that comes from cooperatives that are Fairtrade certified, that have spent all the money to comply, to pay the costs of certification and so on, but in the end they don't receive the minimum prices."* (V1, 2020).	**Upgrading Effect:** *"Certifications help to improve social problems with schools, canteens etc. thanks to the premium."* (R3) **Downgrading effect:** *"I find that Fairtrade is always a bit moralistic. They have rules about how a cooperative is run, how the members of a cooperative are going to vote to spend the premium, and so on. The Rainforest Alliance is much more direct, paying a premium. The premium is a reward for the farmer for producing sustainably and it goes to the farmer. There are no decision-making rules in the cooperative."* (V11, 2021)
Quality *"Certification guarantees [...] the quality of everything we produce, from cocoa to foodstuffs."* (V10, 2020)			
Optimization *"You (farmers) need to combine your best productivity so you need good agricultural practices, you need to know how to grow more for less [...]"* (V2, 2020)			
Production conditions *"Because before certification, growers had no control over the molecules. Pesticides were used in a haphazard way, but certification [regulates this], and that's a real advantage for the environment and for the grower."* (V8, 2020)			
Over-production *"Certification means that we have to overproduce at a given time."* (V10, 2020)			
Insufficient certified market *"There is no increasing demand for sustainable products"* (V4, 2020)			
Data & digitalization *"Auditors will also use new technology, like satellite imagery, to capture data that cannot be easily detected in a single auditing visit, making audits more rigorous and efficient."* (Rainforest Alliance, 2019 annual report: 26)	**Fostering trans-parency**	**Upgrading effect:** *"In addition to our robust digital programs underway, we are currently testing ways to benchmark the living income gap in Ghana and Côte d'Ivoire; this information will then be used to support companies that want help close that gap by making extra payments to farmers."* (Rainforest Alliance 2018, annual report: 17) **Downgrading effect:** *"they have to comply with the certification and pay for the audits and pay for the other investments, but it does not guarantee that they can actually sell their cocoa as certified afterwards and get all the benefits of that"* (V5, 2020)	**Upgrading effect:** *"We have a database in place, where we identify each household with the children who should be going to school and who aren't. This database exists, and at the end we have a follow-up to remedy the problem. There has been considerable progress in this area, because since I've been here, over 600 supplementary judgements have been issued for children who didn't have birth certificates (which prevents them from going to school)."* (V7, 2020) **Downgrading effect:** *"It's true that when we say to Côte d'Ivoire, you mustn't plant cocoa in parks or protected areas, we tell them once, twice, they don't do it, they distribute land, and so on, and then all of a sudden, we come down on them, (...) taking people out of protected areas"* (V9, 2020)
Audits The inspection is carried out by a third party (not the standards organisation). The teams will work with the internal system to check the organisation, the documents and the farmers. (Interview notes, R3)			
Traceability *"Over the last two years, they (the certifiers) have switched to traceability based more on cooperatives and farmers rather than country traceability."* (C9)			
Dishonesty *They are audited and the auditing for sure incorporates an element of whatever you say that there are repercussions if they don't get a certain score and farmers know that; so, there's a big incentive to cheat the audits and stuff like this you know"* (V5, 2020)			

Source: authors

V7, representative of a UTZ (RA) certified cooperative in Côte d'Ivoire, also sustains this: *"Today, with [the] continuous improvement [required by VSS], we have received agricultural training [by VSS bodies] that allows us to say to the producer if you do that, instead of gaining 2kg you can gain 4kg."* (November, 2020).

Many interviewees agree that this support for increased productivity actually led to positive results in terms of yields, including sustainability policy experts and workers in both of the VSS bodies. The motivation behind the willingness and the practice of increasing productivity is threefold. First, VSS are trying to boost yields to increase the potential revenue of producers linked to cocoa production, as some of our evidence suggests: *"Someone who was doing maybe 500 kg before, with good practices he'll end up doing 800 kg. So there's an increase in income after certification."*. (V7, representative of a UTZ (RA) certified cooperative in Côte d'Ivoire, November 2020). Additionally, V10, representative of a UTZ (RA) certified cocoa cooperative in Côte d'Ivoire, adds: *"Before he was certified, in Côte d'Ivoire, he produced around 400kg. When they became certified, [they] find themselves with the same plot of land... [with] more than a ton. This increases his yield considerably. And of course it affects his income."* (December 2020).

Secondly, improving agricultural practices for productivity appears to be part of a wider diversification strategy that VSS are trying to implement to foster producers' resilience. During the Chocoa 2021 annual conference, a panel was held on "Re-thinking diversification" (C10). One strategy highlighted by a speaker was increasing yields of a given plot of land dedicated to cocoa and using other land areas of the farm to diversify production with other crops. In doing so, it allows producers to maintain or increase their cocoa production while diversifying into new markets, enhancing their resilience and viability on the long-term.

Thirdly, productivity is a means to 'professionalize' the cocoa sector, with the underlying potential need to reduce the number of small farms that are "judged not viable". V11 (expert in sustainable cocoa, January 20201) indicated that this professionalization may not be feasible nor desirable depending on the scale of the farm, and therefore, smaller farmers might consider going out of cocoa production in such cases:

> *There's also the problem of scale. [...] If you have half a hectare, it's difficult to make a profitable investment. But now, if you have one hectare, you're still stuck in poverty. In the ISO standard and also in the Fairtrade standard, not in the Rainforest Alliance standard, there is this farm investment plan. So before starting to commit to sustainability, with the help of a cooperative, the farmer draws up an investment plan and decides whether or not it's profitable. If it's not profitable, [producers are] discouraged from doing it. Maybe [producers] should leave cocoa. [...] I think that very small farms can't be profitable, and you can't have a life on a very small farm.* (V11, expert in sustainable cocoa, January 2021)

In addition to the economic benefits, there are also indirect social upgrading effects that may derive from changing agricultural practices. The increase in yields, subsequently leading to an increase in sales under VSS terms, also enables producers to increase the premiums they receive (in addition to their income) and improve social conditions for the community. Premiums are an important component of FT and RA. The benefits of the premiums are both explained by our respondents and by FT reports: *"With the part of the premium that is paid to the cooperative, the cooperative uses this to build schools closer to these localities so that children can benefit from [schooling]."* (V7, representative of a UTZ (RA) certified cooperative in Côte d'Ivoire, November 2020). V7 explained that in 13 years of working in the cooperative, he saw the construction of 7 schools thanks to the premium, as well as 8 boreholes. Similarly, FT reports point out that 31% of its premiums were paid directly in cash to the farmers (Fairtrade Foundation, 2016). More community projects are highlighted by reports and our respondents in relation to premiums, thereby creating spillovers for women and children: *"For example, we launched community support projects for women, grouping them into associations, and they developed market gardening projects. They were financed [by the premiums] and at the end, they had [an] income that enabled them to finance other women's communities as well"* (V7, representative of a UTZ (RA) certified cooperative in Côte d'Ivoire, November 2020).

These projects target women in particular, but not exclusively. For example, in their 2018-2019 report, Fairtrade states that communities and families are stronger when women can participate in decision-making processes and earn an income (Fairtrade, 2019), which speaks to one key aspect of social upgrading speaking to empowerment. For that reason, Fairtrade had set up a school called 'The Women's School of Leadership' in Côte d'Ivoire, which trains women for 'leadership' roles within the cooperative. We have many examples among our data on how premiums benefit cooperatives, producers and the community, which in turn are linked to the amount of sales and availability of certified cocoa, hence productivity: *"With respect to good practices, that boosts production, it allows us to live and send our children to school"*. (V8, a representative of an RA-certified cocoa cooperative in Cameroon, November 2020).

Nevertheless, some respondents, especially representatives of cooperatives, local and global chocolate companies, pointed out that the increased yields associated with VSS might also be responsible for overproduction and, consequently, to a drop in cocoa prices on the world market: *"Certification is the reason for the overproduction of cocoa in Côte d'Ivoire. Because when I told you that the producer used to have trouble getting 400 kilos, but with certification, the producer has gone up to almost a tonne...well today the average in Côte d'Ivoire is 600-700 kilos per hectare. That's almost 300 kilos more."* (V10, representative of a UTZ [RA] certified cocoa cooperative in Côte d'Ivoire, December 2020).

Overproduction contributed to the decline of cocoa prices on the world market, putting back farmers in a difficult position. The undesirable effect of focusing on increased productive yields was also noted by another respondent, a chocolate company interviewee who highlighted the effect of increasing the attractiveness of the sector and overcrowding it: *"[...] if we get them to increase the productivity, then the farm income can increase as well. But at the same time so many farmers were flocking into cocoa ... that we reached an over-production pretty quickly, which also might have contributed to the world market price decline again"* (V5, representative of a global chocolate company, November 2020).

Finally, it is also important to acknowledge the problem of demand. With an increased offer, cooperatives are suffering from a lack of contracts that cover their entire production. RA stated that although the production of most cocoa producer is 100% certified, producers do not sell 100% of their production as certified (V2, RA worker, November 2020). FT confirmed that *"a [certified] producer...sells part of his production under FT conditions and part of his production under normal conditions"* (V1, FT International worker, November 2020).

Therefore, the promise of economic upgrading through market access of higher value markets ends up being broken. The market for sustainable cocoa is often characterized as insufficient to absorb all the certified cocoa produced, saddling producers with the costs of certification and "sustainable" production even though they may not get a higher price for their cocoa or even receive a premium. Therefore, the increased productivity gives the prospect of increased incomes, but it doesn't necessarily happen as contracts do not cover the entire production: *"there is an increasing production of the standard compliant cocoa, Fairtrade, organic but there is no increasing demand for sustainable products, so that's another condition you know."* (V4, sustainability policy expert, November 2020).

The benefits of increased productivity are therefore limited by the (relatively) small size of the certified market, that is mostly at the global scale (i.e. for exports). Indeed, VSS products don't have much of a local market: *"As far as we're concerned, on a local level, it has to be said that certified organic chocolate in Cameroon is also appreciated: 1) by expatriates and 2) by a certain social class, but the majority can't afford to buy it because of the cost. As a result, the customer base is so small, the consumers of this range are really a very small target because you don't have many expatriates, the middle class isn't high enough to be able to absorb the production."* (V6, representative of an artisanal chocolate processing and manufacturing company in Cameroon, November 2020).

Tensions generated by increased transparency

Our data indicates contradictory perspectives on the means to achieve increased transparency and the consequences of it, particularly on what it concerns prospects for economic and social upgrading. VSS set up a range of practices at different nodes of the GVC, in particular with producers and with companies, to improve transparency at the chain level and consequently promote economic upgrading through better governance structures. To allow for greater transparency within the chain, refined techniques of data gathering, including audits, have become central to the VSS's work. For instance, our interviewees mention cooperatives' implementation of household tracking programs (including the number of children) and income management records: *"Each producer has a record of his income and expenses. This allows us to see, depending on the size of the farm, the nature of its income, the size of its household, the people in charge of it."* (V10, representative of a UTZ (RA) certified cocoa cooperative in Côte d'Ivoire, December 2020).

The use of intensive technology such as geographic information systems and geo-satellite surveys have also become instrumental to increasing transparency but also controlling the projections about future yields. In utilizing these different tools in combination, VSS bodies and industry experts increase the knowledge they have on the

cooperatives' production and income capacities: "*Now we do geo-satellite surveys to map all the farms taking part in a cooperative and count the cocoa trees, they know the probable production per tree, and they build up a history of annual production figures over time and that's how it's increasingly possible to control what goes into the pipe, which is the supply chain.*" (V11, expert in sustainable cocoa, January 2021)

Another expected effect of gathering data at the producer level is to better design interventions to improve sustainability issues. Data becomes essential to VSS's strategies to tackle sustainability challenges, as V2, RA employee, explains: "*I think as of many things data is also really key to the certification, having a much quicker understanding of the impact and where, will allow us to tailor interventions much better.*" (November 2020). A representative of a global chocolate company agrees with this point: "*you have to get awareness if you want to be active into [the] sustainability field about what impact sustainability activities have, on what kind of policy, recommendations or changes are recommended because of what you do.*" (V5, November 2020). As a result, data is gathered for targeting action on recurring problems in the chocolate industry value chain.

In particular, audit mechanisms as means to achieve transparency does not receive unanimous support. While some experts and VSS employees promote the benefits of auditing mechanisms for transparency, chocolate companies and cooperatives representatives remain skeptical. Auditing constitutes a common practice of VSS to ensure compliance with the VSS standards and implies in loco visits to the farms. On the one hand, VSS and cocoa experts highlight that audits are essential tools to push producers to remedy any potential non-compliant activities or practices. For example, in a Fairtrade Labelling Child Labour Position paper (Fairtrade Labelling Organizations International, 2010), they highlight that:

> *While immediate action follows child labour findings in an audit, the exact consequence is assessed on a case-by-case basis according to [a] set criteria (e.g. the numbers of underage workers found, the condition of work impact on health and education, unaccompanied children and so forth). [...] In the case of a suspension the producer is not able to enter into new trade relationships under Fairtrade conditions until the suspension is lifted. The decision to lift a suspension is based on corrective actions and results of follow-up audits. If child labour is still detected the producer could be decertified.*

This demonstrates how audit ensures compliance to the VSS standards. Additionally, V11, an expert in sustainable cocoa, highlights the necessity of transparency in improving practices: "*The cooperative must also understand that if there is non-compliance, it must not be hidden. They have to change the practice before there is an inspection. So, this will be a new tool against child labour.*" (V11, January 2021).

Therefore, some actors see that increased transparency through the audit mechanism is a process leading to social upgrading as well, i.e. improvements in health and working conditions. The key assumption held by VSS representatives, is that improvements may only come through the addition of mandatory criterion, as exemplified in this impact report by RA: "*(There is evidence of) strong improvement over time for a number of criteria in several crop-region groupings. Not surprisingly, the greatest improvements were seen in two additional criteria that became mandatory in December 2015: criterion 5.15, requiring access to potable water (one of the eight essential needs), and criterion 6.16, requiring showers and changing rooms for workers who handle agrochemicals.*" (RA Impacts Report, 2018).

The way VSS and cocoa experts present the audit mechanism highlights the benefits of auditing practices and full transparency as necessary and desirable for everyone's sake, including for producers. In a cocoa commodity briefing published by the Fairtrade Foundation (2016), they describe that "*Fairtrade producer organisations are audited against Fairtrade Standards, which provide a framework for a sustainable approach to production that can have long-term economic, social and environmental benefits for farmers and their communities.*" (p. 14).

Similarly, RA presented their new plan for "transforming the cocoa sector: strengthening cocoa certification" in which they highlighted a new set of measures based on "*trust and transparency*" (Rainforest Alliance, 2020). The measures are threefold (p.56): "*1) stronger systems to identify and manage risk – including improved data analysis and targeted audits; 2) advanced monitoring techniques to help auditors better detect child labor and deforestation; 3) increased awareness amongst farmers and farmworkers of key sustainability issues, including deforestation and biodiversity loss*". These examples illustrate how VSS and cocoa experts believe in the audit mechanism as a tool for greater transparency to achieve better social benefits for producers.

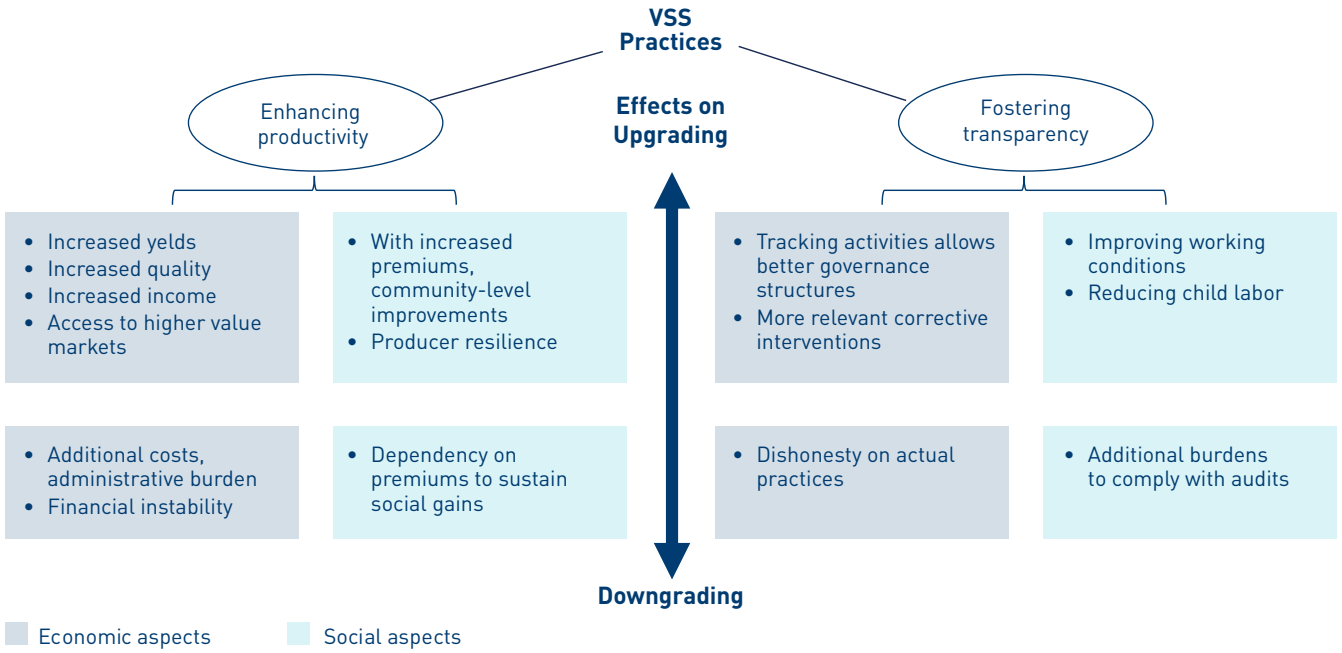
On the other hand, manufacturers and cooperative representatives meet the effects of auditing processes with skepticism. In the quotation below, we show the reasoning of a global chocolate company to reduce its use of VSS certification in favor of an in-house program. According to the interviewee, the reality of auditing processes may encourage misrepresentation on assessments by producers behind closed doors at the cooperatives, out of fear of losing certification: "*They have more and more often incentives to cheat. [...] Now (without audits) people talk much more openly about what's really going on and why they are able or not able to comply with certain things... They would never say that if there were an auditing scheme because they would know they might just kick them out of the program*" (V5, representative of a global chocolate company, November 2020).

Another limit of auditing schemes adopted by VSS is that they highlight the disconnect between the sustainability requirements of the standards and the reality of producers. The additional burdens on producers derived from the auditing requirements leave them in a perpetual state of tension, between disclosing more information and concealing it to avoid negative repercussions. An interviewee, this time a representative in a cooperative, highlights the discrepancy between the VSS auditing process and the actual reality of producers' life: "*When we say that the grower, who is illiterate, has to memorise certain information to get it out of his mouth [for carrying out the audit], it's difficult. For example, they are asked to give their exact delivery for the year. That's a problem. [...] They live in rather difficult conditions, so archiving documents is also a problem. As soon as he gets his bonus, he can't keep the document for three years.*" (V7, representative of a UTZ (RA) certified cooperative in Côte d'Ivoire, November 2020)

In figure 1 we present a synthesis of our main findings. While VSS encourage economic upgrading by helping farmers increase their yields and improve farming techniques, these improvements do not always guarantee higher incomes. The global market for certified cocoa remains limited, and as a result, producers may find themselves unable to sell their entire certified output at premium prices. This creates a paradox where economic upgrading through enhanced production capabilities can lead to financial instability and, ultimately, social downgrading as farmers struggle to sustain social certification costs while dependent on premiums to sustain social gains. On the transparency side, VSS may improve oversight of farms, yields and incomes, helping economic upgrading due to better governance structures which may lead to better working conditions, reduce child labor and provide an enhancement of the quality of life of the communities. Especially, the audit mechanism is seen by VSS implementers as key to ensuring transparency and promoting social upgrading. Our data show that producers must meet VSS standards to obtain certification, driving improvements at the production level before being audited. However, this is subverted by dishonesty on actual practices and may end up causing additional burdens to comply with audits.

FIGURE 1

VSS practices and up-downgrading dynamics at the producer level



Source: authors

Discussion

Our findings contribute to the literature on VSS and to the literature of economic and social upgrading in agricultural GVCs in different ways.

Contribution to the voluntary sustainability standards literature

We extend the VSS literature by demonstrating how transparency measures can have counterproductive effects in the governance of GVCs. While audits are intended to ensure compliance and accountability (Gardner *et al.*, 2019), our findings indicate that they may incentivize producers to manipulate data or conceal non-compliance to avoid penalties, ultimately reducing trust within the certification system. This aligns with concerns raised by previous research (Lout, 2023) that audit-based governance can create perverse incentives that undermine the very goals of sustainability standards.

Additionally, our study sheds light on the administrative burden imposed by auditing requirements. Many smallholder farmers struggle to comply with documentation and record-keeping demands, reinforcing power imbalances between certification bodies and producers. As a result, some chocolate companies have moved away from third-party certifications in favor of direct engagement with producers, a shift that raises important questions about the long-term viability of VSS as governance tools for sustainability (Rainforest Alliance, 2020).

In this sense, our study contributes to the broader literature on voluntary sustainability standards by emphasizing the importance of adaptability in certification schemes. While VSS have long been recognized as mechanisms for promoting sustainability in GVCs (Marx *et al.,* 2024), our findings highlight that their rigid structures and compliance-heavy models often fail to accommodate the diverse needs and constraints of smallholder farmers. We propose that VSS must evolve to incorporate more flexible, context-sensitive mechanisms that prioritize long-term capacity-building over short-term compliance metrics. This aligns with emerging critiques (Depoorter and Marx, 2024; Meemken *et al.,* 2021; Oberlack *et al.*, 2023; Ponte, 2022) that call for a shift from standardized, externally imposed sustainability models toward more participatory and inclusive approaches that empower producers as active decision-makers in certification processes.

The Interplay Between Economic and Social Upgrading and Downgrading

Our findings also contribute to the economic and social upgrading literature by demonstrating that they do not always move in parallel, and in some cases, they can be in tension with one another. Economic upgrading—such as productivity increases, improved market access, and better governance structures—does not automatically translate into social upgrading, a finding consistent with Barrientos *et al.* (2011). Instead, economic upgrading can sometimes lead to social downgrading effects when productivity improvements result in overproduction, declining prices, or an increased burden on without corresponding improvements in working conditions or livelihoods.

Our study reveals how efforts to improve transparency - intended as a governance mechanism for economic upgrading - can also lead to social downgrading. The auditing and monitoring requirements imposed by VSS place additional administrative burdens on producers, particularly smallholder farmers with limited resources. Instead of fostering genuine transparency, these measures often push producers toward strategic misrepresentation to avoid penalties, reinforcing power imbalances rather than

improving governance. This finding is consistent with what Ponte (2022) describes in what happens with environmental upgrading efforts in the coffee sector.

These findings suggest that upgrading processes are not linear or universally beneficial; rather, they are dynamic processes involving complex trade-offs where gains in one area may come at the expense of another. While economic upgrading is often framed as a pathway to development, it must be accompanied by measures that prevent social downgrading, such as ensuring fair wages, reducing certification costs, and creating mechanisms that distribute value more equitably across the chain.

Expanding the Concept of Social Upgrading in Agricultural GVCs

Our findings also pointed out how premiums provided by VSSs can revert into holistic improvements at the community level, going beyond individual enhancement of working conditions and an increase in wages. In particular, the cases show that VSS contribute to social upgrading through reinvestment in local infrastructure, such as schools and clean water projects, funded by certification premiums. This aligns with the argument that VSS can generate positive externalities at the community level (Fairtrade Foundation, 2016).

This expanded understanding of social upgrading could serve as a steppingstone for future studies in the area. While social upgrading is traditionally conceptualized as improvements in wages, job security, and working conditions (Barrientos *et al.*, 2011; Gereffi & Lee, 2016), our study expands this notion to encompass the broader social dynamics in agricultural settings. Unlike manufacturing industries, where labor is detached from ownership, smallholder farmers in agricultural GVCs often operate within family-run or community-based production systems (Neilson, 2019). Thus, social upgrading in this context must also account for improvements in producer resilience, community well-being and intergenerational livelihood security.

However, we also identify a crucial limitation: these benefits are contingent on producers securing sufficient contracts to sell certified products. When certified supply outstrips demand, farmers are forced to sell their crops at conventional market prices despite incurring certification costs, ultimately undermining social upgrading efforts. This highlights the fragility of VSS as a mechanism for sustained social improvements and supports prior critiques regarding the exclusionary nature of certification schemes (Lemeilleur, 2013; Minah & Pérez Carletti, 2019).

Conclusion

Our study provides a nuanced perspective on the role of VSS in economic and social upgrading, highlighting the tensions and trade-offs inherent in certification-based governance of GVCs. While VSS create pathways for economic and social improvements, their benefits are often constrained by market dynamics, certification costs, and structural inequities in GVCs leading to downgrading effects to producers. By expanding the concept of social upgrading to include community-level benefits and producer resilience, we offer a broader framework for assessing the impact of sustainability certifications in agricultural value chains.

The sustainability certifications we study also operate in sectors like coffee and bananas, which share similar challenges with the chocolate value chain, making our research results transferable to other sectors and certification schemes (UNCTAD, 2022). By conducting further case studies in other agri-food industries in developing countries, further studies could enhance the findings' transferability. Despite the growing prevalence of certification systems, improvements are still needed to better influence GVCs' and actions. Our research indicated how the overemphasis of VSSs on productivity can have unintended negative effects, such as overproduction, market saturation, and ultimately harm producers. Additionally, disconnected audits and compliance costs create imbalances, especially for producers without guaranteed market demand. Future studies should explore these unintended consequences across sectors.

Our findings hold significant implications for policymakers, certification bodies, and industry stakeholders seeking to enhance the effectiveness of VSS. First, VSS bodies should adopt more flexible and context-specific mechanisms that account for the realities of smallholder farmers, such as reducing the financial and administrative burdens associated with certification, offering tiered compliance structures, and providing more substantial support for producer resilience. Second, transparency mechanisms should be redesigned to balance accountability with trust (Depoorter and Marx, 2024), such as incorporating participatory monitoring approaches that engage producers and cooperatives more meaningfully. Finally, lead firms and retailers must take greater responsibility in ensuring that certified products find a place in global markets. Increased investment in sustainable sourcing commitments and consumer education on the value of certified products can help expand demand.

This research presents limitations that open the door for future studies. Data collection during the COVID-19 pandemic limited us to remote telephone interviews with cooperative managers, possibly missing producers' experiences, despite multiple requests to our cooperative respondents. Previous research has acknowledged this type of limitations in terms of lack of internet connection, especially for marginalized stakeholders such as farmers (Hall *et al.*, 2021; Archibald *et al.*, 2019). Future studies could include field research to collect interviews and observations and include more stakeholders such as farmers. Another limitation of the study is the small number of interviews with different stakeholders. In trying to overcome this limitation, online webinars and conferences from various players in the chocolate industry were attended and longitudinal secondary data were gathered for the period 2010-2020, including the annual reports and official website pages of chocolate multinationals, cocoa processors and retail brands. We also collected FT and RA annual reports to get further information on VSSs in the chocolate industry, to assess the dynamics of the players in the chocolate industry but also to compensate for our inability to conduct field research due to the COVID-19 pandemic, as indicated by prior research (Adom *et al.*, 2020; Hall *et al.*, 2021).

In addition, there is limited transferability of findings from this research to different cases because the study is contextual due to its qualitative approach (Stake, 1998). By conducting further case studies in other agri-food industries (such as coffee, tea, etc.), further studies could enhance the findings' transferability. Indeed, the limited focus only on FT and RA as the most relevant third-party VSSs in the cocoa-producing sector could be overcome by further research that looks for a comparative and longitudinal analysis with other certifications and with other value chains. While this study provides a snapshot of current dynamics, future research could adopt a longitudinal perspective to examine how governance configurations and upgrading dynamics evolve over time, particularly as VSS and market conditions continue to change.

A final limitation is the use of documents publicly available on companies' websites and companies' reports, of which the content reliability could be hard to validate. The documents themselves can contain a certain number of biases that require further investigation. Future studies could also use complementary data gathering techniques to avoid over-dependency on documents to increase triangulation and ensure the confirmability of findings, such as focus groups and direct observations (Patton, 2015).

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APPENDIX 1

Distribution of value among stakeholders in a non-certified chocolate value chain

Each Stakeholder's Share in the Cocoa Supply Chain

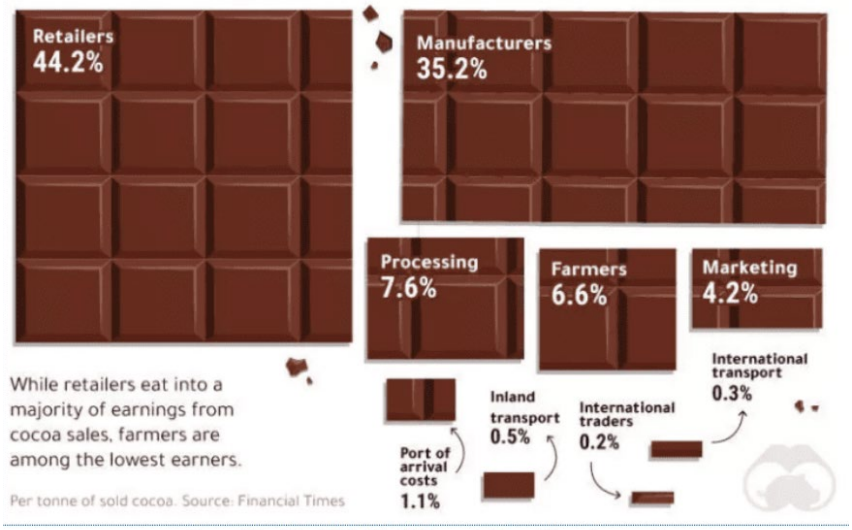


Image: Visual Capitalist / World Economic Forum (November, 2020)

Source: Hayford (2021)

APPENDIX 2

General Interview Guide

1. General information

To begin, can you summarize your experience in the chocolate industry?

2. Certifications' features

- Regarding the functioning of the standards, can you explain the certification process of the cocoa beans?
- Are the standards accessible to all farmers or are there barriers?
- What are the advantages and disadvantages of certifications?
  - For farmers
  - For cocoa traders
  - For processing companies
  - For chocolate companies
  - For retailers

3. Improvement of the living conditions of farmers

- How do certifications improve their living conditions?
  - Living wage
  - Infrastructure (health, education)
  - Financing/credit/investment for production
  - Water quality
  - Cooperatives
- What do certifications allow farmers to do (in term of empowerment)?
  - Participate in and make local policy decisions
  - Awareness of their position and ability to act (to ask, to want)
  - Networking, leadership, home management, etc.
  - Adoption of new farming practices, machinery and equipment
  - Investment, savings, loans.
- Do you think that certified farmers have a better position in the value chain? If so, why?
- In addition to the resources given by certifications, what do you see that is different about a farmer who has been certified for some time and a farmer who is not certified? Can you give me an example?
- How do standards affect other industry players?

4. Limitations of certifications

- What is your organization still aiming to do? What is left to do?
- In product certification, what are the barriers and challenges you face?
- Do you think some certifications are better than others? If yes or no, why? What is different between these certifications?

5. New perspective for sustainable cocoa

- What do you think living wage brings more for standards and for farmers?
- How do you see the future of certifications in the industry?

6. Conclusion

- Do you have any additional comments on the subject, elements to add? Any thoughts to explore?
- Do you know anyone who would be interested in participating in the research?

Source: authors