TRADE4SD
Fostering the positive linkages between trade and sustainable development

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Deliverable 4.3: Literature review and empirical evidence on Assessment of sustainability effects of voluntary and ethical trade standards

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D4.3. Literature review on Assessment of sustainability effects of voluntary and ethical trade

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Introduction

International trade brings economic prosperity to many countries (economic growth, increased income, job creation..). Still, at the same time, it may generate significant damages (overuse of land, biodiversity loss, labour rights violation, child labour and increased inequalities (Moïsé & Rubínová, 2021, 2021; Bradford, 2020).
According to the 2030 Agenda for Sustainable Development and the SDG, international trade can play a significant role in promoting sustainable development (Moïsé & Rubínová, 2021, WTO, 2022) by engaging multinational corporations and GVCs to spread social and environmental standards. Sustainable standards are widely analysed in literature as primary emerging forms of transnational regulation. Primarily, they aim to encourage more respectful practices of health, the environment, human and social rights, and sustainable development.

The literature on voluntary standards has focused on their strategic use by stakeholders to serve various interests: NGOs use them to defend their causes, manufacturers use them to manage risks in their supply chains, comply with buyers' requirements, limit their costs and differentiate themselves on the market. Governments use them to regulate markets. At a more general level, various studies describe voluntary standards as forms of government.
This rise in the power of standards has been accompanied by a shift in the responsibility for standardisation from nation-states to international entities such as the International Organization for Standardization (ISO) or supranational entities such as the European Committee for Standardization (CEN), and then to private organisations that are in no way linked to states and that are formed in particular from transnational sectors and value chains that meet considerable economic challenges.
Voluntary Sustainability Standards (VSS) are regulations created by non-state actors to improve the social and/or environmental impacts of multinational business, international trade, and/or global production networks. However, the status of private standards in the WTO remains problematic. Standards-takers are countries with little bargaining power, who cannot affect their terms of trade, and thus, even if they possess domestic antitrust laws, will find it hard to persuade standard-setters to take account of their interests (Mavroidis and Wolfe,

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2017). These private forms of social order can conflict with the fundamental norms of transparency and non-discrimination.

Due to the weak WTO capacity to evolve and integrate sustainable development in international trade, free trade agreements (FTAs) have increasingly been considered an alternative governance framework for the links between trade, environment and labour. As an important export market, the EU includes "Trade and Sustainable Development" (TSD) chapters and proposes a separate promotional model to regulate the links between trade, environment and labour in free trade agreements (FTAs).
The sustainability transition of global value chains is then governed by a set of voluntary sustainable standards that could be classified as public or private.
In this study, we analyse the impact of voluntary sustainable standards (VSS) on the sustainability of global value chains. We also discuss the implications of the proliferation of VSS on public policy at the WTO level and European and local levels.

1. Sustainability assessment and private standards landscape

Literature on voluntary standards has developed considerably over the last two decades. It mainly analyses the strategic use of various stakeholders to serve multiple interests.
The United Nations Forum on Sustainability Standards (Green, 2014) defines VSS 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 fundamental human rights, worker health and safety, the environmental impacts of production, community relations, land use planning and others*. (UNFSS 2020).

1.1. Main characteristics of VSS

Voluntary Sustainability Standards (VSS) are regulations created by non-state actors to improve the social and/or environmental impacts of multinational business, international trade, and/or global production networks. Developed by companies, civil society organisations, and multi-stakeholder initiatives, voluntary sustainability standards (VSS) are widely used to govern environmental and social issues in global supply chains.

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A voluntary standard is a set of specifications, i.e. a list of specific practices (technical, social, environmental) implemented voluntarily by the producer or manufacturer, who indicates this to the final consumer using a label displayed on the product in case of BtoC standards. (Fouilleux, 2020). Conversely, B2B standards do not display a quality label attached and, therefore, are invisible to the final consumers. The latter involves an exchange of certificates between operators within the relevant supply chain. However, this boundary is fluid, as B2B standards often develop into B2C standards. Furthermore, a part of the literature on the definition of VSS places them in the realm of private standards. In addition to Negi's (2020) definition, we also include Stanton's (2012), which defines private standards as "*any common requirements that have been established by non-governmental entities, including wholesale or retail store, national producer association or civil society groups"* (p. 238).
VSS is sometimes seen as "*a form of entrepreneurial authority, whereby a private actor must persuade other (private and public) actors to recognise its authority to develop its own rules, standards, or practices, and therefore the legitimacy of these rules."* (Green, 2014).

Among the contemporary normative instruments of regulation, private and voluntary standards are growing alongside national legislation and international law, claiming to make up for their shortcomings. This rise in the power of standards has been accompanied by a shift in the responsibility for standardisation from nation-states to international entities such as the International Organization for Standardization (ISO) or supranational entities such as the European Committee for Standardization (CEN), and then to private organisations that are in not linked to states and that are formed in particular from transnational sectors and value chains that meet considerable economic challenges.
VSS also have a topic in common: "They often mix SPS and other objectives including social and environmental concerns that may not be related to food safety or plants/animal health protection" (Stanton 2012, p. 239).

Stanton and Green's definitions do not include the possibility for governments to produce standards. In their 2018 typology, Lambin and Thorlakson extend the VSS's definition as they consider that VSS can be broken down into three categories depending on the lead stakeholder: this can be either a government, an NGO, or a company. This enables the inclusion of standards relating to organic agriculture set by the UE and USA governments within the VSS category.

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By controlling the upstream practices of food suppliers, some players have become, to a certain extent, valuable allies for public authorities in changing agricultural practices upstream of the commodity chains. Regulating international trade expansion to mitigate adverse environmental impacts while reducing the yield and return differences between large-scale and smallholder producers has become a pressing sustainability challenge.

As VSS are adopted voluntarily and are not mandatory, they logically cover less agricultural output than public compulsory standards. However, the pace of their adoption is rapidly increasing. According to Tayleur et al. (2017), cropland under some form of sustainability certification covered 1.1% of global cropland, rising at an annual rate of 11% from 2000 to 2012. Heavily traded commodities such as coffee, cocoa, tea, and palm oil have at least 10% of their production area globally under certification (p. 370).

In 2022, Marx et al. noted the significant disparity of the presence of VSS in agriculture and how VSS target specific GVCs such as cacao, coffee, forestry and the garment and textile sector and has no interest in others. Bananas, cotton, oil palm, soybeans, sugarcane and tea are also GVCs targeted by VSS (Meier et al.,. For some commodities, such as cocoa and cotton, more than 20% of the global production area is certified; similarly, close to 15% of the coffee and tea production area is certified (Marx et al., 2024).

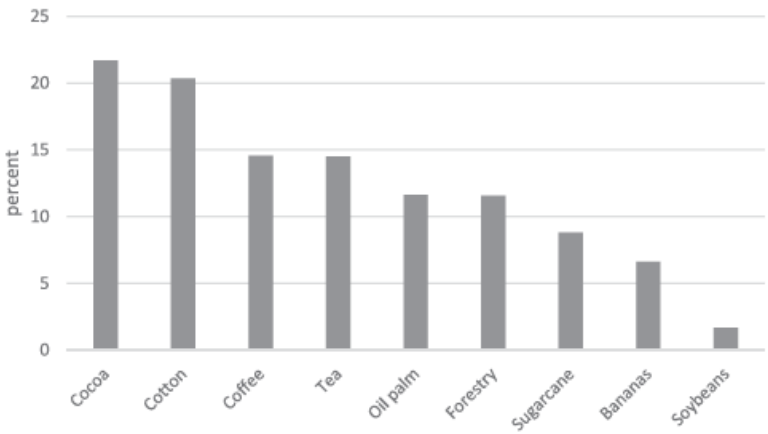

Figure 1: Share of certified production area in total production area by selected commodity, (Marx et al., 2024)

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According to Meier et al. (2020), "In the five years from 2014–2018, the certified area of all agricultural commodities covered (see Table 1) grew by at least half (+52%). Cotton experienced the highest growth rate of its certified area, almost tripled (+173%). This was followed by cocoa, which almost doubled in area (+90%), as well as a notable growth in sugarcane and tea area (+75% and +57%, respectively)". **Errore. L'origine riferimento non è stata trovata.** summarises the area's evolution governed by VSS according to the GVC, and **Errore. L'origine riferimento non è stata trovata.** illustrates it.

Table 1: *Minimum area certified by agricultural commodities (GVC) (Meier et al. 2020)*

Commodity	**Minimum area certified [ha]**	**Share of the global area**	**Area growth 2017–2018**	**Area growth 2014–2018**
Bananas	343,128	6.0%	0.9%	22.8%
Cocoa	3,174,438	26.8%	9.1%	89.7%
Coffee	2,195,681	20.7%	-13.3%	-12.2%
Cotton	5,885,938	18.2%	14.2%	173.2%
Oil palm	2,864,161	15.1%	12.9%	7.1%
Soybeans	1,957,154	1.6%	8.7%	14.6%
Sugarcane	1,947,924	7.4%	-1.6%	15.2%
Tea	673,763	16.1%	0.7%	56.8%
Total based on minimum	19,042,187	8.1%	6.2%	52.0%
Based on maximum	25,406,211	10.8%	3.9%	52.9%
Total based on average	22,224,199	9.5%	4.9%	52.5%

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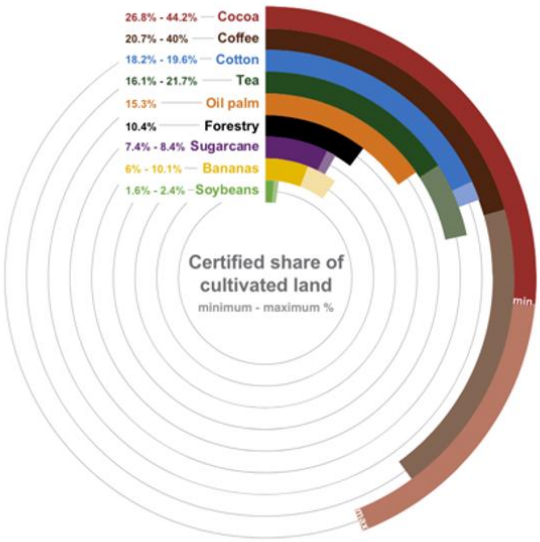

Figure 2: Share of cultivated land having VSS according to specific GVCs (Meier et al.,2020)

VSS certifications are based on third-party certification regimes, where the definition of the standard (creation of specifications), third-party certification (external audit), and accreditation (of auditors) are ultimately regulated by the market while being institutionalised (Fouilleux, 2020).

1.2. Third-Party certification processes

Marx et al. (2022) consider VSS "as a significant private, market-based transnational governance instrument to pursue sustainable development. VSS initiatives have procedures to develop and set standards on a wide range of sustainability issues and have systems to assess and monitor conformity with standards. Fouilleux and Loconto (2017) introduce an aspect that can help in understanding certification processes. To have credibility, standards must undergo double-level control. This implies monitoring, certification and accreditation, which are inseparable from the nature of VSS. Often, VSS uses independent third parties to perform conformity assessments. They also issue certificates to their adopters in case of compliance and allow them to label their products accordingly. Well-known examples of VSS include Fairtrade International, Rainforest Alliance and the Forest Stewardship Council. Over the past

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few decades, VSS has proliferated (UNFSS 2020). Depending on the source used, the number of existing VSS globally ranges between 300 and 500" (Marx et al. 2022, p. 14).
Fouilleux and Loconto (2017) delve into the monitoring process. "To obtain a quality label for their product, the producers and processors must submit themselves to a 'third-party certification.' In exchange for payment, an independent private operator (the 'certifier') visits the producer or processor to check whether their practices conform to the standard. The certifier then provides a compliance certificate that authorises the use of the label on the final product. The certificate accompanies the product throughout the production and distribution chain, making it possible to ensure traceability in the system. In the event of non-compliance, the label is denied or rescinded. The certifier itself is regulated—again in exchange for payment—by an organisation known as the 'accreditation body,' which vouches that the certifier is capable of certifying compliance to the required standard (p. 3)."

Among the most used of these private regulatory initiatives are the Fairtrade Labelling Organization (FLO), the Forest Stewardship Council (FSC), the Fair Labour Association (FLA), Social Accountability International (SAI) and the Marine Stewardship Council (MSC). GlobalGap is a leading VSS in agriculture and certifies farms according to a set of good agricultural practices, including health and safety issues and social and environmental issues (Marx, 2017). Standards setters organisations define social and environmental standards and a procedure to check that products or production processes conform to these standards (i.e. conformity assessment). The standard settings are generally open to multiple stakeholders, including producers (Bennett, 2017).

Table 2: VSS Setter organisations according to Lambin and Thorlakson (2018)

Lead stakeholder	**Government**	**Who sets**	**Who monitors**	**Example**
Government	Voluntary government-led certification	Government, often with input from NGO companies and producers	Third-party	USDA Organic
NGO	NGO Certification	NGO	Third-party	Fair Trade, Rainforest Alliance
	Multistakeholder certification	NGOs, companies, producers	Second, or third party	FSC, RSPO

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Company	Industry standards	Group of companies	First, second, or third party	GlobalGAP, Responsible Care
	Company-led standards	Company	First, second, or third party	Unilever Sustainable Agricultural Code

Control of compliance with the standards is a significant stage in the certification process (figure 3).

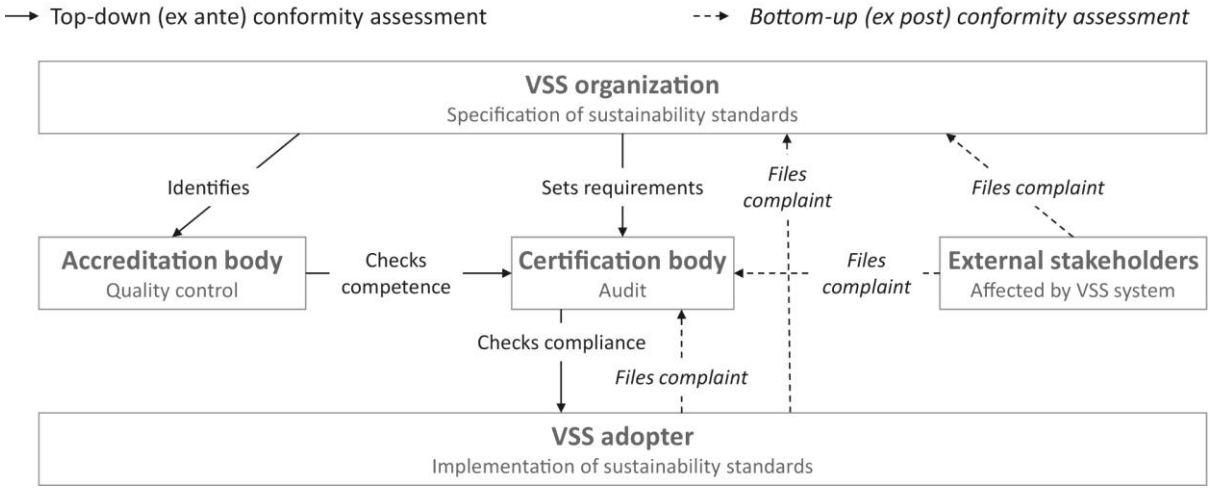

Figure 3: Global governance through voluntary sustainability standards: Developments, trends and challenges (Max et al., 2024)

The proliferation of these control procedures has led to the emergence of a certification market largely dominated by international operators, who often hold a monopoly position on the world market for agricultural products in both Western and developing countries. The result is competition between standard producers when the companies selling labelled products have strong market power.

NGOs appear to be preferred as standard-setting partners by firms in many fields. VSS with similar issues and criteria are increasingly being established by NGOs, and these NGOs compete in the VSS market for adoption by multinational firms. The development of VSS has created an actual demand for Standards, whose proliferation creates competition among them. The risk is that "a bad label drives out a good one". A less stringent and less costly standard

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for firms, it becomes a leader in the market and the benchmark for the concept of a "race to the bottom" in label stringency (Bennett, 2017).

Poret (2019) shows that competition between NGOs leads to varying specifications for standards with varying requirements to differentiate themselves. Another effect of this competition is that NGOs seek to disseminate standards quickly by reducing barriers to entry, thereby reducing the actual impact on production processes, which calls into question the legitimacy of these standards in achieving the ecological transition of production systems (Haack and Rasche, 2021). Sustainability standards need to cope with the diffusion-impact paradox

In addition to VSS, most major chocolate manufacturers in the cocoa value chain have developed corporate social responsibility (CSR) programs related to their supply chains, enabling them to differentiate themselves in the consumer market. Examples of such programs include Cocoa Life (Mondelez), Cocoa Horizon (Barry Callebaut), Mars Cocoa for Generations (Mars Group), and Cocoa Plan (Nestlé). Amiel et al. (2019) analysed these programs based on four variables: the reduction of child labour, the intensification of production, the development of agroforestry, and the exclusion of farms involved in illegal deforestation. Their analysis reveals that these programs are very similar, focusing on capacity-building for producers through training, access to credit for intensification (particularly for purchasing inputs), distribution of cocoa and other tree seedlings, plot mapping, and access to education, among other initiatives.

These programs are often represented by logos on products, confusing consumers.

Some multinationals are seeking to distance themselves from other labels, such as Fair Trade (FT) and Rainforest Alliance (RA). Additionally, the fact that these programs operate in isolation and are layered on top of other certifications allows companies to stand out in the marketplace. However, this fragmentation reduces their potential impact compared to a more coordinated approach or one governed by an independent organisation. Recognising specific standards under ISO 34101 could potentially address this issue (Carimentrand, 2020).

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1.3. Public policy interaction with VSS

Governments create voluntary government-led certifications (USDA organic), NGOs create NGO certifications (Rainforest Alliance, Fair Trade) and multi-stakeholders certifications (FSC, RSPO), and companies create industry standards (Global Gap, Responsible Care) and company-led standards (Mondelez, Cocoa Life). In the case of a government-led VSS, the standard is set by the government itself; however, it often takes the input of NGOs, companies and producers. The NGO itself sets NGO certification standards. If the NGO sets the standard for a multistakeholder certification, it will consider other NGOs, but also companies and producers. Companies set industry standards, and the company itself sets company-led standards.

The distinction between public and private standards in terms of who sets them can have important implications, particularly in the context of the WTO (Mavroidis and Wolfe, 2017). Public standards fall under the WTO, while 'private' standards do not.
According to Negi (2020), earlier literature asked the question of whose interests are taken into account in setting a standard to distinguish between public and private standards. The assumption is that while the former consolidates the interests of all stakeholders (including externalities) in the economy, the latter narrowly pursues the profits of private companies.

Concerning economics and, more precisely, agriculture, states are known to enact and enforce sanitary and phytosanitary standards that control the use of pesticides and other chemical agents to protect farmers and consumers from any adverse side effects. Theoretically, each country can set its own agricultural standards, thus creating hundreds of different standards. Consequently, trade is impossible as a country's standards only satisfy its needs, not its neighbours. Non-harmonised standards make it impossible for countries to trade (Marx and Wouters, 2015).

The distinction between private and public fades on the level of the standards themselves because standards typically 'travel' between private and public spheres. This shows that many of these standards are embedded in national or international legislation. In this way, government or intergovernmental regulation forms the framework for the private standard-setting process.

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In addition, standards are not made in one regulatory arena but in several. Ansell and Balsiger (2011) refer to the idea of circuits of regulation, which captures the notion that regulation occurs through the interaction of separate but overlapping regulatory arenas. These circuits have a horizontal (travelling between regulatory arenas, public and private ones) and a vertical dimension (travelling between levels of governance). In the case of VSS, the overarching standards often originate from public legislation and then get further specified through a private decision-making process. In this way, many of the standards in VSS are certainly not entirely private.

Governments provide incentives also in fostering adoption and, in the case of developing countries, financial and technical assistance. One can find many examples of international donors engaging with VSS. At present, international donors such as DIFID, USAID, World Bank, Belgian Technical Cooperation, and GIZ provide financial as well as technical support to various VSS setting bodies such as Fairtrade, Global Gap, Rainforest Alliance and UTZ

For example, the EU is promoting the consumption of 'deforestation-free' products and reducing its impact on global deforestation and forest degradation. The new Regulation (EU) 2023/1115 on deforestation-free products entered into force on 29 June 2023.
As a general rule, operators (and traders who are not SMEs) will have to set up and maintain a Due Diligence System. The operator or trader that places or makes available on the market or exports a relevant product is responsible for the product's compliance and for the overall compliance with the Regulation.
European legislators and EU Member States have given significant attention to companies' roles in tackling social, economic, and environmental issues.
On 23 February 2022, the European Commission adopted a proposal for a Directive on corporate sustainability due diligence. The EU's Corporate Sustainability Due Diligence Directive (CSDDD) firmly embeds human rights and environmental requirements in corporate governance systems to ensure responsible business conduct along global value chains. The new rules will ensure that companies in scope identify and address adverse human rights and environmental impacts of their actions inside and outside Europe.

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The laws on corporate sustainability due diligence will be enforced through:

- Administrative supervision: Member States will designate an authority to supervise and enforce the rules through injunctive orders and effective, proportionate and dissuasive penalties (in particular fines). At the European level, the Commission will set up a European Network of Supervisory Authorities that will bring together representatives of the national bodies to ensure a coordinated approach.
- Civil liability: Member States will ensure victims get compensation for damages resulting from an intentional or negligent failure to do due diligence.

As confirmed by both economic theory and empirical evidence, corporations have historically used limited liability to evade tort liability and externalise societal damages. In the context of environmental and human rights protection, the proposed Corporate Sustainability Due Diligence Directive (CSDDD) could significantly improve the situation by establishing civil liability for failures in due diligence regarding subsidiaries and business partners within the supply chain. Under this directive, companies could not escape responsibility for environmental harm or human rights violations by simply utilising subsidiaries or outsourcing harmful activities to distant partners.

Some authors argue that companies could misuse this directive through strategies like selecting a favourable burden of the proof regime or creating complex supply chains to hinder victims' ability to claim damages due to a lack of due diligence (Marx, 2022).

Companies often rely on voluntary sustainability standards developed by third parties to comply with their duty of care. The European regulation specifies that while certification or other third-party verification mechanisms may be used in risk assessments, they cannot replace the operator's responsibility for due diligence.

Some VSS, such as Rainforest Alliance and Fairtrade International, introduce criteria related to deforestation. Stopping deforestation has been applied to recent plantations since 2014 for RA and 2018 for FI (Carimentrand and Ballet, 2023).

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The fact that an operator is certified by a VSS does not mean that a due diligence system is not required. However, VSS provides a way to fulfil parts of the EU regulation's due diligence requirements (e.g., proof of compliance).

Marx et al. (2024) consider sustainability due diligence an ongoing, proactive, and reactive process that can be defined by six distinct steps (Figure 4).

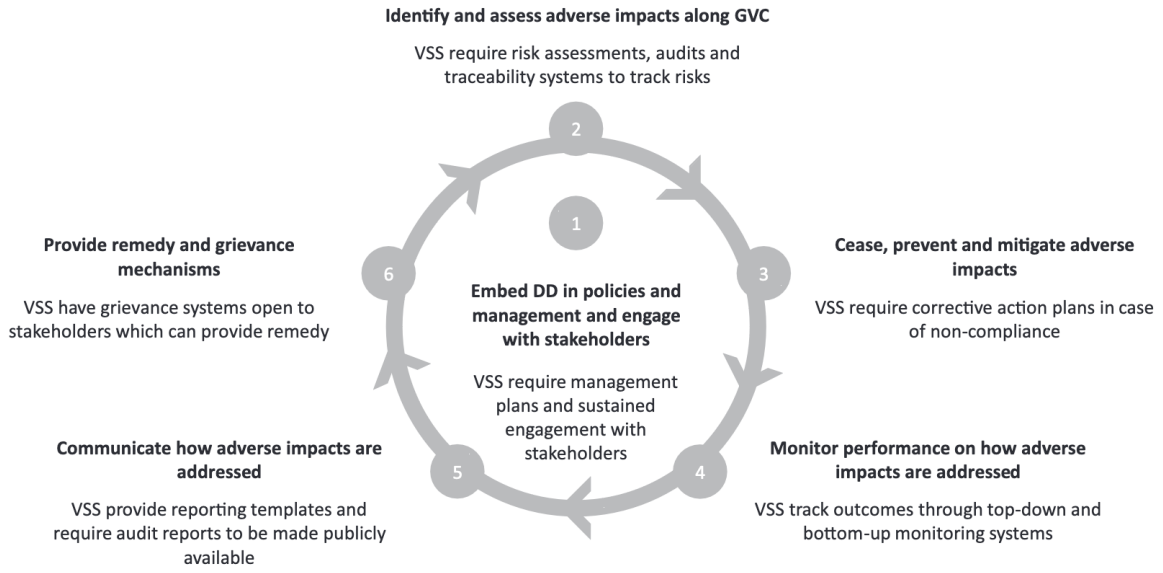

Figure 4: Complementarity between due diligence approaches and VSS. (Marx et al., 2024)

Companies should identify and address actual or potential risks to prevent or mitigate negative impacts on sustainable development associated with their activities, in particular, their sourcing from poor countries and their marketing

The integration of VSS in public policies can be expected to develop further, especially in trade-related policies and an expanding 'governance *through* trade agenda' (Marx, 2017). Some already advocate the integration of sustainability standards in the EU Generalised System of Preferences (GSP) scheme.

According to Marx (2015), four factors drive this integration of private standards into public policy.

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- One is a movement towards the regulatory operationalisation of due diligence requirements. Legislation introduced due diligence requirements in the food sector following several food crises.
- Second, as noted above, governments in an interconnected world have increasingly sought to govern beyond their borders and through trade.
- Third, VSS are becoming essential tools in export promotion.
- Finally, VSS offer some other advantages. First, they allow governments to reach policy objectives without having to commit additional costs and resources to reforming the national regulatory framework and setting up the necessary verification mechanisms. Second, they allow governments to bring social and environmental criteria into the economy without forcing them on the private sector. They gradually introduce them and make them semi-voluntary or mandatory through supportive policies. hird, the increasing proliferation, specialization and diversification of VSS allow governments to meet the differing sectoral and regional demands better and hence allow for more tailor-made approaches suitable to standard-takers.

Finally, Russo et al. (2023) consider that Sustainability public standards serve two main policy goals:

- They can solve asymmetric information issues due to the credence nature of sustainability attributes. The role of the public sector may be (i) adding credibility to certification (public inspections), (ii) reducing transaction costs and favouring coordination (as in geographical indications), (iii) developing voluntary standards when firms are unable to bear the costs, (iv) reducing the barrier to trade and levelling playing field (v) developing voluntary standards with higher sustainability requirements than private ones (Russo et al. 2022).

- They can increase the production of positive social and environmental externalities. Because market prices may fail to capture the value of the externalities, firms may adopt technologies that result in a production that is less sustainable than the social optimum, even when using perfect information. Mandatory standards can constrain firms to adopt

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socially desirable production processes (Schubert & Blasch 2010, Pretty et al. 2001, Meemken et al. 2021).

Lambin and Thorlakson (2018) summarise (figure 5) interactions between public policies and VSS organisation setters with a view to differentiation and convergence in the standards market.

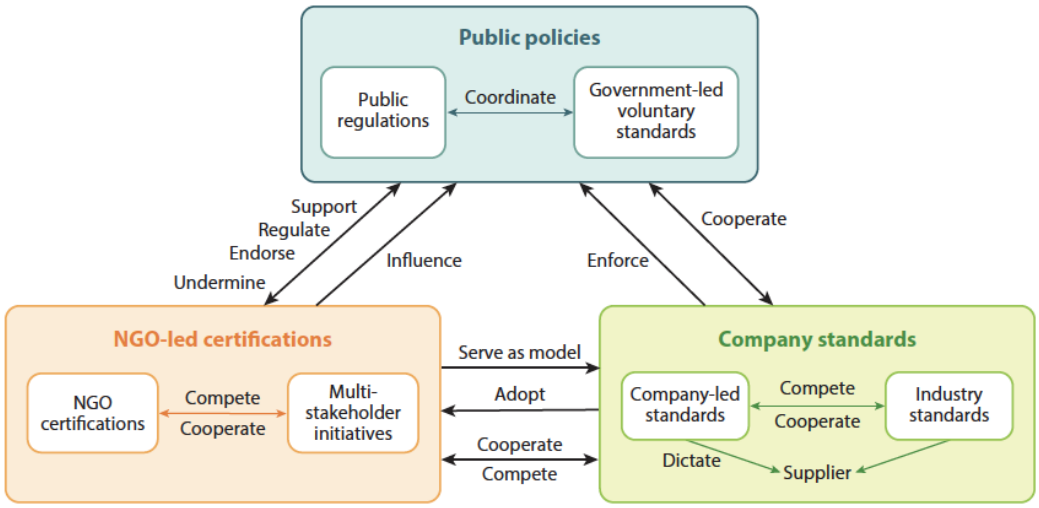

Figure 5: Main interactions between public policies, NGO-led certification, and company standards (Lambin and Thorlakson, 2018)

2. World Trade Organization (WTO) an orchestrator or meta-regulator

The status of private standards within the WTO remains problematic. Countries with limited bargaining power, often called "standards-takers," struggle to influence the terms of trade. Even if they have domestic antitrust laws, they find it challenging to persuade "standard-setters" to consider their interests (Mavroidis and Wolfe, 2017).

From the perspective of officials, the WTO is a contract among governments. A significant concern for delegates is the distinction between what is public (and thus subject to WTO rules) and what is private (and therefore considered outside of WTO jurisdiction). This concern is particularly relevant when considering which private standardising bodies should be subject to WTO principles.

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Some scholars advocate for orchestrating various sustainable standards as a feasible approach to global governance. This orchestration could help bridge the gaps between international and transnational regime complexes, enhancing the benefits of fragmentation, decentralisation, and scale (Abbott, 2012). In the context of climate change and other sustainability issues, the proliferation of transnational institutions is reshaping governance across numerous areas, including environmental protection. Keohane and Victor (2011) introduced the "regime complex" concept for climate change, emphasising how the multiplicity of institutions and regimes could be better coordinated to address these global challenges effectively.

As public standards proliferated, countries were compelled to negotiate and harmonise their national standards. This standardisation process began with tariffs and the General Agreement on Tariffs and Trade (GATT). It was later carried over to the World Trade Organization (WTO) after its creation in 1995. In the 1960s, the Food and Agriculture Organization (FAO, 1961) and the World Health Organization (WHO, 1963) introduced the Codex Alimentarius, which became enforceable in international trade by establishing the WTO. Today, while states are generally free to set new standards, they are restricted in areas where the WTO legally binds them.

The Codex Alimentarius, as enforced by the WTO, applies to all agricultural goods. However, some stakeholders within the agricultural market believe that the Codex is insufficient and seek to go beyond its requirements. As a result, they comply with public standards (as all goods crossing borders of WTO member countries must abide by the Codex) and add private standards that are often stricter and oriented toward specific sustainability goals.

Private standards allow any group to create a Voluntary Sustainability Standard (VSS), meaning there is no limit to the number of existing standards. This proliferation leads to coordination challenges between standards. For example, a Tunisian olive exporter wishing to export to the EU must satisfy the public WTO standards, as well as the standards set by the International Olive Council (IOC), EU regulations, and additional VSS such as GlobalGAP, organic or fair-trade certifications, and various ISO quality standards. The public standards remain the same if the exporter also wishes to enter the Japanese market. Still, the VSS requirements may differ, as Japan does not necessarily recognise the same private standards as the EU.

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This scenario, which can be extrapolated to every other destination country, results in an endless and increasingly costly burden for producers and exporters as they attempt to comply with the myriad public and private standards required by different markets.

Derkx and Glasbergen (2014) describe the proliferation of private standards in a common area as "uncoordinated." Although these standards aim to address the same issues—such as deforestation or hunger—there is often no coordination among them. As a result, some standards may approach the problem similarly but compete with each other to gain market share (Lambin and Thorlakson, 2018). This overlap can occur because, initially, distinct standards may evolve to meet new market demands, leading to direct competition. A notable example provided by Reinecke et al. (2012) is the UTZ and Rainforest Alliance certifications. UTZ originally focused on fair trade, while Rainforest Alliance concentrated on deforestation. Over time, UTZ expanded to include deforestation criteria, and Rainforest Alliance began incorporating fair trade elements. This led to an overlap in their standards, ultimately resulting in the two organisations merging in January 2018.

To address the problem of uncoordinated proliferation of standards, the concept of "meta-governance" has been proposed (Fransen, 2015). Meta-governance involves bringing together stakeholders within the Global Value Chain (GVC)—including retailers, branded firms, standard setters, and producers—to discuss how to better address common issues and steer the GVC toward greater sustainability through Voluntary Sustainability Standards (VSS). Lambin and Thorlakson (2018) describe meta-governance as a way to create better coherence across certification schemes. This process is generally led by private entities such as the International Organization for Standardization (ISO) and the International Social and Environmental Accreditation and Labeling (ISEAL) Alliance. However, in some cases, governments have also been involved in meta-governance efforts, such as organic standards.

While intended to address the lack of coordination among multiple standards, the concept of meta-governance introduces its own set of challenges. As Fransen (2015) notes, meta-governance does not entirely resolve the coordination problem; instead, it shifts it to a higher level. Instead of multiple uncoordinated standards, there are now several meta-governance bodies, each with its own approach to making Global Value Chains (GVCs) more sustainable.

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This can lead to a new layer of complexity, as these bodies may not be fully aligned with each other.

Lambin and Thorlakson (2018) acknowledge the mixed success of meta-governance, particularly in sectors like organic agriculture and sustainable tourism. In organic agriculture, the proliferation of different standards and certification systems led to the International Task Force on the Harmonization and Equivalence in Organic Agriculture in 2003. This partnership, involving United Nations agencies such as the Food and Agriculture Organization (FAO) and the United Nations Conference on Trade and Development (Moïsé & Rubínová, 2021, 2021), along with the International Federation of Organic Agriculture Movements, eventually evolved into the United Nations Forum on Sustainability Standards (UNFSS). The UNFSS is an intergovernmental meta-governance body that works to regulate Voluntary Sustainability Standards (VSS) by imposing common goals and priorities on existing standards initiatives, thereby improving coherence among them, particularly in organic agriculture (Glasbergen and Schouten, 2015; Lambin and Thorlakson, 2018).

In the case of sustainable tourism, Lambin and Thorlakson (2018) highlight the success of harmonisation efforts, which have focused on standard-setting and certification procedures. These efforts have increased the capacity of individual standards initiatives to implement certification programs. A key example is the Global Sustainable Tourism Council, which emerged from the merger of several meta-governance movements. This council has effectively harmonised standards and certification processes within the industry. However, as Derkx and Glasbergen (2014) point out, while this harmonisation at the meta-governance level is a significant achievement, there is still much work to be done to ensure that these converged standards have a tangible impact on the lives of workers in the tourism industry.

In summary, while meta-governance has made strides in certain sectors, it also introduces new coordination

In conclusion, while meta-governance offers a framework to address Voluntary Sustainability Standards (VSS) proliferation, it only partially solves the coordination problem. If VSS targeting similar themes do not consolidate under a single meta-governance body, the issue of uncoordinated efforts merely shifts to a higher, aggregated level. Even when a successful merger occurs, such as in the case of organic agriculture, where the United Nations Forum on

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Sustainability Standards (UNFSS) plays a pivotal role, this does not guarantee meaningful on-the-ground impacts. This success raises the question of whether other public entities, like the World Trade Organization (WTO), should play a more active role in harmonising VSS.

The WTO currently does not regulate private standards, as it views itself strictly as an intergovernmental entity. However, discussions around the WTO's role in private standards have been ongoing, particularly within the context of the SPS (Sanitary and Phytosanitary) Committee. These discussions gained momentum after Saint Vincent and the Grenadines raised concerns in 2007 about the challenges posed by the proliferation of private standards, especially for small, vulnerable economies.

Despite efforts by an ad hoc Working Group and later an electronic working group to define "private standards," no consensus was reached, leaving private standards outside the WTO's regulatory framework. A clear and universally accepted definition of private standards is essential for the WTO to take action. Until such a definition is established, the WTO's ability to regulate and potentially harmonise these standards remains limited, leaving the coordination challenges posed by the proliferation of VSS unresolved.

Negi (2020) highlights the ongoing reluctance of developed countries to include private standards within the World Trade Organization's (WTO) Sanitary and Phytosanitary (SPS) Agreement. This reluctance is rooted in the complex nature of private standards caught between public and private domains and the absence of a clear, universally accepted definition of what constitutes a "private standard." This issue is further complicated by a north-south divide, with developed countries often pushing back against any expansion of the WTO's mandate that would encompass these private, frequently voluntary standards.

The ongoing debate is exemplified by the discussions at the WTO Public Forum in September 2016, which focused on whether the development of private standards should be more transparent. Mavroidis and Wolfe (2016) pointed out that both WTO committees involved—the SPS Committee and the Technical Barriers to Trade (TBT) Committee—struggle with this issue, unable to overcome the divide between public and private standards. This divide reflects a geographical and political split and a fundamental lack of consensus on the definition and role of private standards within international trade.

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Negi (2020) concludes that the WTO's identity as an intergovernmental organisation fundamentally limits its ability to regulate private standards. The organisation's reluctance is also due to concerns outlined by Meliado (2017), including a lack of clarity on the problem, fears about setting precedents that could influence future disputes, and a disproportionate focus on the potential downsides of private standards.

Thorstensen and Vieira (2016) argue that when governments effectively mandate private standards, they should be scrutinised under the WTO's TBT and SPS Agreements. This would ensure that such standards are transparent and fair, preventing them from becoming barriers to trade. To improve the governance and operation of private standards within the WTO framework, several options have been proposed:

1. Creating a joint SPS–TBT transparency mechanism for private standards: This would involve increasing transparency around creating and implementing private standards, ensuring they are not used to create unfair trade barriers.
2. Establishing a public–private cross-pollination mechanism under the Agreement on Government Procurement could facilitate better cooperation and understanding between public and private entities, potentially leading to more harmonised standards.
3. Launching a work program on sustainability-related Public-Private Partnerships (PPPs) within the framework of the Trade Facilitation Agreement would encourage collaboration between the public and private sectors to promote sustainability in global trade practices.

These proposals aim to bridge the gap between public and private standards, enhancing the governance of private standards while respecting the WTO's intergovernmental nature. However, the challenge remains to find common ground on incorporating private standards into the global trading system without undermining the principles of free and fair trade.

International trade has the potential to significantly bolster markets for sustainable goods, mainly if it addresses the trade restrictions and distortions that hinder producers from exporting these goods. Ensuring that sustainability standards are transparent, non-discriminatory, and aligned with World Trade Organization (WTO) principles is crucial for opening up new trade opportunities. This is especially important for small and medium-sized producers in developing and least-developed countries, who often face significant barriers to entering global markets.

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Authors advocating for the coordination of public and private initiatives and the global governance of the green transition argue that while international trade can support sustainable development, it can also exacerbate environmental degradation. This occurs when trade drives the over-exploitation of natural resources or when companies relocate production to countries with less stringent environmental regulations. Such practices, driven by a desire to attract foreign direct investment (FDI), can lead to a "race to the bottom," where countries compete by lowering environmental standards, resulting in "carbon leakage" or "environmental leakage" at the global level (Papendieck & Elverdin, 2021). This phenomenon undermines global efforts to reduce environmental impact and combat climate change, as emissions and environmental degradation are shifted from one region to another rather than being reduced overall.

To counter these negative effects, the integration of robust, transparent, and fair sustainability standards into international trade agreements is essential. These standards must be designed to promote environmentally responsible practices without imposing unnecessary trade barriers. Additionally, there is a need for greater coordination between public and private initiatives to ensure that the green transition is globally managed to prevent environmental degradation and support sustainable development.

The challenge lies in balancing promoting sustainable trade practices with avoiding creating new forms of protectionism or trade distortions. By fostering global governance that encourages the adoption of high environmental standards across all trading partners, the international community can work towards a more sustainable and equitable global trading system.

3. VSS contribution to SDGs

The question of how the SDG and VSS may work together has been approached in the literature. Scholz (2015) defines the 2030 Agenda for Sustainable Development as a global action and transformation plan to profoundly improve people’s lives and keep the planet healthy. Negi (2020) states that “Agenda 2030 and the SDGs as the guiding framework for all international activity, including international trade, global governance frameworks, including the WTO, need to adjust their capabilities to ensure the optimal use of sustainability standards.”

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According to (Marx et al. 2023), “the SDGs provide a shared blueprint to bring peace and prosperity to all people in the world by 2030” (p .15).

There is the possibility that VSS will be instruments for implementing the 2030 Agenda and, hence, the SDGs (UNFSS, 2020). This is because “beyond their direct relevance to SDG 12 (Responsible Consumption and Production), VSS align with a wide range of policy targets included in some of the other SDGs, such as food security, gender equality and climate action among others” (Marx and Depoorter 2021; Marx et al. 2023, p. 15).

Researchers have looked at the concordance between SDGs and VSSs. Using data from the ITC Sustainability Map, Bissinger et al. (2020) “conducted a systematic analysis of the interlinkages between 232 VSS and the 17 SDGs and their targets. The result indicates that the three SDGs most widely covered by VSS are SDG 8 (Decent Work and Economic Growth), SDG 12 (Responsible Consumption and Production) and SDG 2 (Zero Hunger). Moreover, they found that more than 200 VSS are linked with each of these goals. The standards are also relevant to other SDGs, including SDG 16 (Peace, Justice and Strong Institutions), SDG 15 (Life on Land), SDG 5 (Gender Equality), SDG 9 (Industry, Innovation and Infrastructure), SDG 7 (Affordable and Clean Energy) and SDG 10 (Reduced Inequalities).” (Marx et al., 2023, p. 17).

A content analysis of 16 VSS requirements, 169 SDG targets, and 244 SDG indicators shows that on average, the 16 standards include a significant number of requirements and processes corresponding to each of the SDGs, albeit to varying degrees (figure 6)

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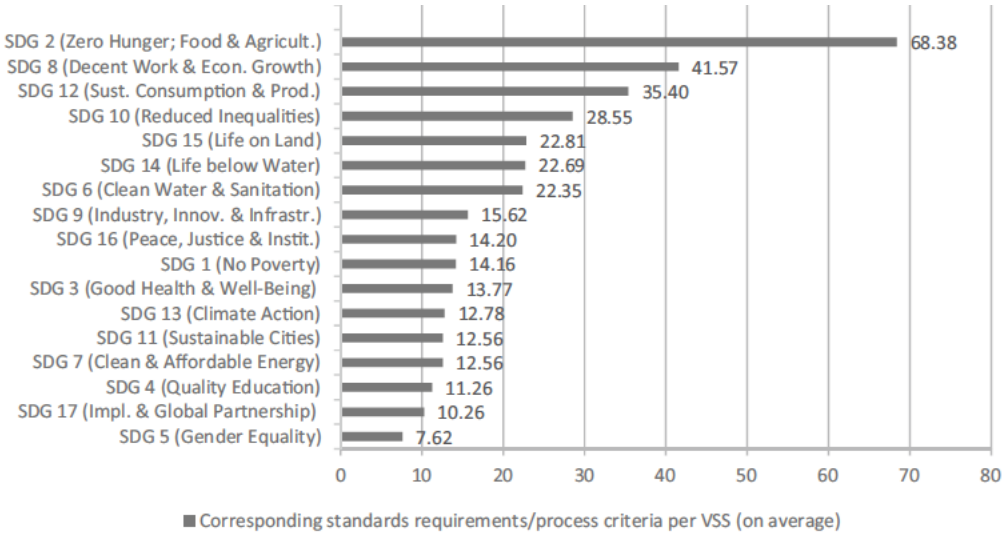

Figure 6: Average number of standards requirements/process criteria per VSS scheme corresponding to each SDG (Blankenbach, 2020)

According to this formal analysis and the ranking chart, 68.38 formal requirements and process criteria per individual VSS are in line with SDG 2 (Zero Hunger; Food Security & Sustainable Agriculture), whereas only 7.62 requirements/process criteria per VSS correspond to SDG 5 (Gender Equality).

An extensive survey of 270 VSS in the ITC Standards Maps conducted by Verma (2021) shows that almost 50% do not mention SDGs on their website. Results also show that some SDGs present high linkages (12, 8 13 et 15), some others medium linkage (1,2, 3,5,6,10, 14,17), and some are poorly linked to SDGs (4,7, 9,11,16). VSS are more connected to SDGs concerning production and consumption activities, but we can see that VSS evokes some social dimensions.

Another question that has been addressed is VSS organisations' changes in the specification to include SDGs since 2015. The results from the survey indicated that 21 out of 54 (38.88%) respondents had changed the standard requirement in some way to better align with the SDGs or take into account the SDGs

However, Blankenbach (2020) is skeptical of VSSs as he states, “as long as voluntary certification provides a fig leaf for perpetuated human rights abuse in global value chains that goes unnoticed due to unreliable audits, it is at least in some contexts part of the problem rather

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than the solution." He also notes where VSS and SDGs are less or not aligned "poverty reduction, climate change, health as well as gender, where VSS are thin on concrete requirements even on paper. Like many others covered by the SDGs, most of these issues directly relate to human rights" (Blankenbach, 2020).

The motivation to align is driven by the need for VSS to collaborate with internal and external stakeholders and achieve goals together and with meta-governance initiatives like ISEAL. Besides that, the advantage of such meta-governance institutions is that they can address coordination issues and increase harmonisation (Schleifer et al., 2022), advancing collaboration for achieving the SDGs.

Voluntary Sustainability Standards (VSS) can be crucial in the SDGs and SDG 17. They can act as enforcement mechanisms for these goals since they share similar objectives with the SDGs (WWF 2017) and contribute to fostering partnerships since they operate globally and connect the Global South to the Global North through value chains (Ponte 2019). Authors highlight some challenges to be addressed to align better VSS and SDGs (Marx & Depoorter, 2020).

The credibility of Voluntary Sustainability Standards (VSS) is a critical concern, as highlighted by various studies. Marx (2013), in his analysis of 426 VSS, points out significant variations in these standards' design and enforcement mechanisms. Many VSS lack a robust enforcement architecture, which undermines their effectiveness. Some standards have demonstrated a positive impact, contributing to sustainable development goals (SDGs), while others have shown limited or even negative effects (Oya et al., 2018; Mitiku et al., 2017; Loconto and Dankers, 2014).

The proliferation of VSS has led to a crowded and fragmented governance landscape, where numerous initiatives often operate independently with little coordination or cooperation. This lack of alignment among various standards dilutes their overall impact and creates confusion and inefficiencies in the market. Broadening their adoption and strengthening their credibility is essential to enhancing the effectiveness of VSS.

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Greater coordination and cooperation between the existing VSS initiatives could significantly increase their collective impact on achieving the SDGs. These standards could provide a more coherent and unified approach to sustainability by aligning their goals, methodologies, and enforcement mechanisms. Such efforts would help ensure that VSS are not just labelled but genuinely contribute to sustainable practices across global value chains.

In summary, VSS's credibility and impact are contingent on rigorous enforcement mechanisms and greater coordination among initiatives. Strengthening these aspects could enhance VSS's role in promoting sustainable development and addressing global challenges like environmental degradation, labour rights violations, and inequality.

4. Effectiveness of VSS: impact on sustainability dimensions

The agri-food sector faces pressing environmental challenges, including climate change, deforestation, and biodiversity loss. Similarly, social problems, including malnutrition, working poverty, child labour, and poor labour conditions, plague the sector, which employs a large share of the world's most vulnerable populations.
Literature highlights the complex relationship between global supply chains and human rights, with negative and positive impacts. The negative consequences are particularly evident in poor countries as multinationals often exploit these regions, leading to a range of problems such as environmental degradation, loss of access to resources, health problems due to contamination and human rights abuses, including forced labour and child labour (Vargas-Murilo et al., 2023).

The global food production system has set up many different certification body standards to address the negative features underlying global food supply chains. From Organic, Biodynamic, UTZ Certified, Child Labour Free, Animal Welfare Approved, and Fairtrade, standards and certifications cover almost every ethical issue involved in food production, such as environment protection, health, social justice, and animal welfare (ITC, 2017; Potts et al., 2014). The proliferation of sustainability standards is attributable to their promise to promote environmentally friendly production while lifting poor producers out of poverty by linking them to lucrative (export) markets. Various studies analyse whether sustainability standards deliver on their promise, with mixed results (Meemken, 2020). In a systematic review,

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Meemken (2020) examined whether Voluntary Sustainability Standards (VSS) - such as Fairtrade, GlobalGAP or Organic - may contribute to economic sustainability and has been subject to vigorous debate over the past decades. Results show that some studies suggest that sustainability standards help poor farmers improve their production and livelihoods (Jones and Gibbon, 2011; Kleemann et al., 2014; Qiao et al., 2016). Other studies suggest that standards keep farmers in a vicious cycle of poor yields, low prices, low investments, and low profits (Beuchelt and Zeller, 2011; Jena et al., 2017; Valkila, 2009, Boonaert and Maertens, 2023; UNCTAD, 2023).

The most widely analysed impacts in the literature are those linked to socio-economic aspects. Few studies have examined the impact of VSS on the environment. Environment impacts are generally related to some case studies, such as Takahashi and Todo (2013; 2014) in coffee certification in Ethiopia or Carlson et al. (2018) in RSPO-certified palm oil plantations in Indonesia. Traldi (2021) summarised the findings of 45 studies on the environmental impacts of VSS certification: 47 per cent reported positive impacts, another 47 per cent reported no difference between certified and noncertified groups, and 6 per cent reported negative environmental impacts (UNCTA, 2023).

Oya et al. (2018) conducted a systematic review to analyse the effectiveness of agricultural certification. They examined almost 200 studies published between 1990 and 2016 in different languages, focused on low and middle-income countries. The review included a quantitative effectiveness question focused on intermediate (e.g. prices, wages) and endpoint outcomes (e.g. household income). They included the main VSS used in the global food value chain (figure 7).

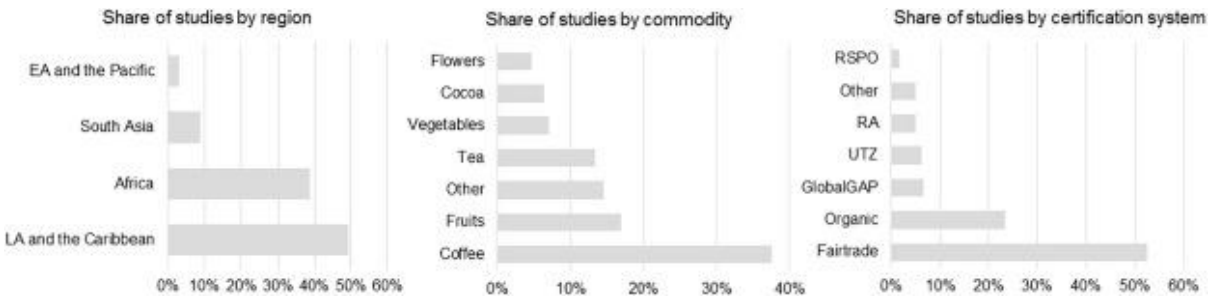

Figure 7: Distribution of included studies by geography, commodity type, and certification system, Oya et al., (2018)

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The results show positive effects on price, income, and schooling, but the effects on household income and wages for farm workers remain insignificant and are highly dependent on the study's context.

These results are confirmed by Meemken's (2020) systematic review of Fairtrade and organic standards.

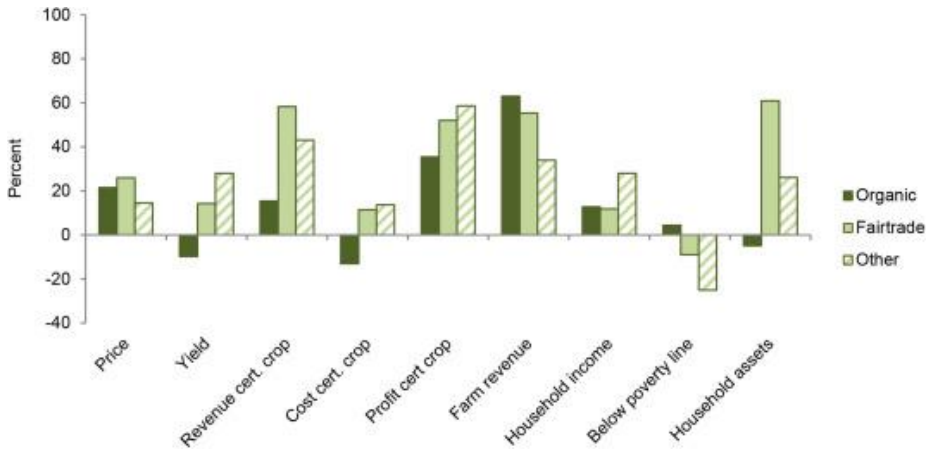

Figure 8: Median effects of standards on socioeconomic outcomes by standard. Note: Median percentage differences between certified and non-certified farmers are shown (Meemken, 2020)

Based on the tropical global value chain (Bananas, Coffee, Cocoa, Tea, Palm oil) and its economic, social, and environmental impacts, DeFries et al. (2017) analysed 24 studies to identify the positive and negative impacts of VSS (Fairtrade, organic, Rainforest Alliance, UTZ Certified, GlobalGap, Roundtable for Sustainable Palm Oil). Results show that overall impacts are not significant.

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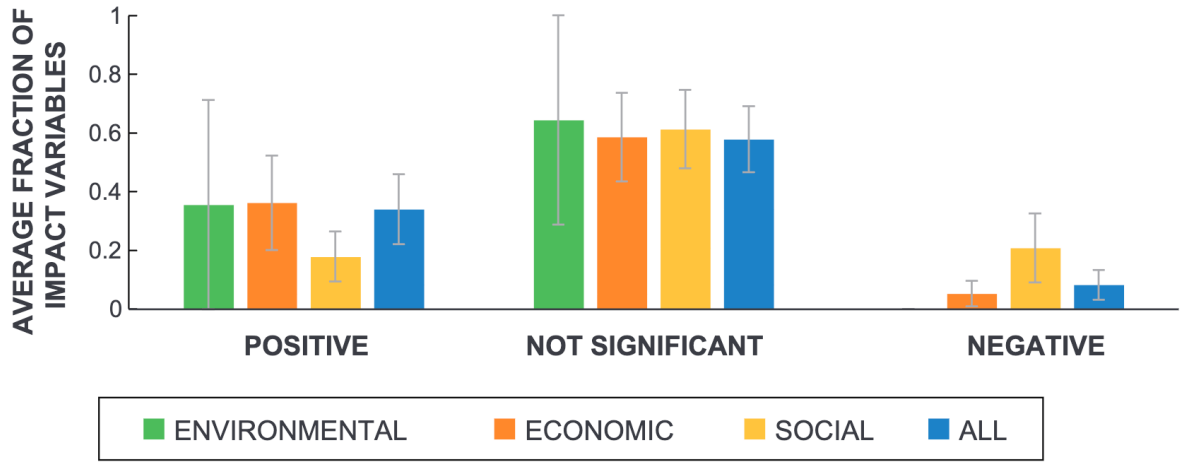

Figure 9: Average fraction across 24 cases of environmental, economic, social and all response variables (excluding those categorised as 'other') that are positive, not significant and negative for certified (treatment) and uncertified (control) producers. Error bars indicate 95% confidence intervals (DeFries et al., 2017)

Based on studies that rigorously compare certified and non-certified producers, the authors conclude that voluntary certification programs for tropical commodities generally lead to positive impacts (on average 34% of response variables), with most impacts (on average 58%) showing no difference between certified and non-certified producers.

We can see that the primary literature on standard impacts highlights the mitigated effect on farmer socio-economic variables. Research differs according to the variables used, the standards analysed, the regions and the products. Benefits derived from participation in certified supply chains might also change over time. From a policy perspective, Meemken (2020) suggests that original studies often ignore specific cost components, such as certification fees. This is because external actors usually cover such fees. It remains an open question whether and which farmer organisations can sustain their certification status when such external support is withdrawn.

In a systematic review of the evidence for agricultural sustainability standards, Traldi (2021) analysed 45 peer-reviewed articles and highlighted a mismatch between what is certified and what is studied. Results show that economic indicators are the most frequently evaluated when measuring success, and only 20% of studies analyse economic, social, and environmental

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indicators simultaneously. When grouped by case, the indicator results tend to be positive on average (51%), followed by no difference (41%) and negative (8%) outcomes. There are no significant differences among sustainability pillars regarding the average proportion of positive and negative results (figure 10).

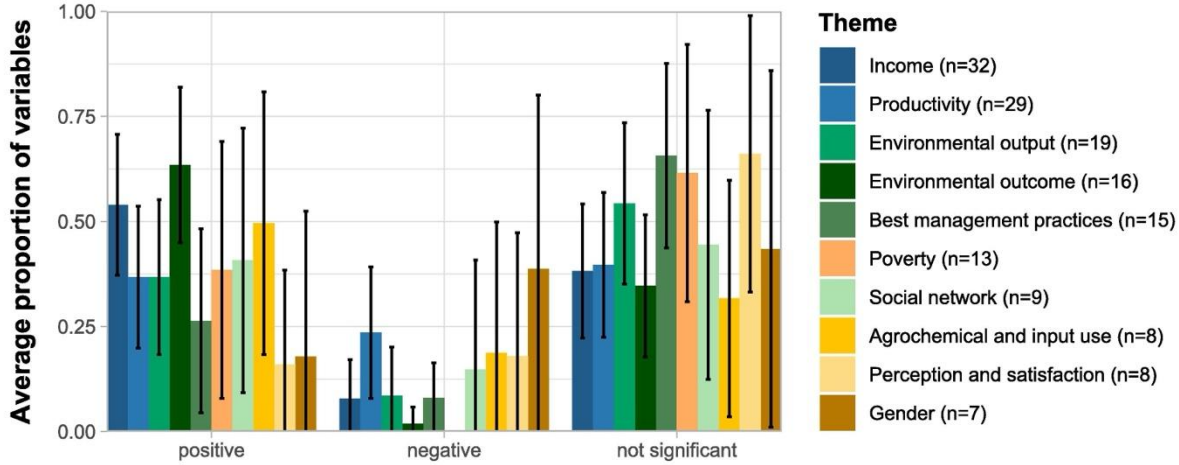

Figure 10: The average proportion of positive, negative and no difference results between certified and uncertified participants, when grouped by case, for selecting sustainability themes (Traldi, 2021).

The remaining question about VSS is if they work and fulfil their task, meaning that key sustainability dimensions are impacted. In trying to answer this question, Marx et al. (2022) put forward the works of the International Trade Centre (ITC), the Food and Agricultural Organization (FAO), the Meridian Institute (MI), the work of Oya et al. (2018) and data emanating from two platforms *Evidensia* (Evidensia 2021) and *Mongabay's Conservation Effectiveness* (Mongabay 2021). These works geographically focus on Sub-Saharan Africa and South America, as well as on agricultural commodities and forestry. Results do not always succeed in improving the situation. While looking at the impact of VSS on conservation and the environmental effects of farming, forestry and fisheries, they noted that an improvement only happens in 50% of the cases, meaning that there is no impact in the other 50% of the cases. Oya et al. (2018) see that prices, incomes from certified production and schooling are positively impacted, but the effectiveness is not homogenous across VSS. According to Marx et al.

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(2022), Oya et al. 2018 findings suggest that "the mechanism used to influence the price paid to the producer […] is determining for VSS impact" (p. 21).

Work has also focused on smallholders. Loconto and Dankers (FAO) 2014 that exporters and farmers are not automatically compliant with VSS, meaning that to enter a VSS-regulated GVC, certain levels of capacity and persistence are required from each farm. Hagen and Alvarez (ITC) (2011a) note that VSS facilitates access to a GVC but makes it harder for smallholders, and the distribution of revenue is unequal. They also point to the importance of political and environmental policy. They suggest that embedded VSS, compatible with the local context, is more efficient as there is cooperation between public authorities, the private sector and standard setters.

According to Marx et al. (2022), Evidensia has put into place databases to monitor research on the impacts of VSS more systematically and by doing so, they have developed Visual Summaries that "provide information on the environmental and economic impact of certification by several VSS applied to the agricultural and forestry sectors" (p. 18). The regions they focus on are primarily Latin America, Africa (East, Central and West Africa) and Asia (East, South and Southeast). Through Evidensia, Marx et al. (2022) found 447 impacts, of which 173 graded are positive, 175 neutral or 28 negative, with hotspots in Nicaragua, Colombia, Ethiopia and Uganda. They found implications for Ghana (two positives, seven neutral and zero negatives) and Vietnam (four positives, two neutral and zero negatives). There are no impacts recorded for Tunisia. The three VSSs with the most impact on the database are FSC, RA, and UTZ—64% concern coffee (130 positive, 130 neutral, 21 negative). Cocoa has 32 impacts (12 positive, 19 neutral, 1 negative). No impacts are recorded for olive oil (Marx et al. 2022).

These results are in line with Bemelmans et al. (2023) work based on an innovative database of country-level VSS coverage for five tropical commodities, seven VSS observed for seven years, and use a multi-country, -sector and -standard augmented gravity analysis to estimate the trade effects of VSS adoption. They confirm that VSS adoption can positively impact countries' _commodity exports and show that these export-enhancing effects differ between

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sectors, which justifies the multi-sector approach. They found the most substantial effect on bananas, coffee, and tea but no significant impact on the cocoa and palm oil sectors.

While sustainability standards such as Fairtrade, Organic, and Rainforest Alliance aim to address these issues, research shows mixed results regarding their effectiveness. Some studies suggest these standards help improve farmers' incomes and production, while others argue they trap producers in cycles of low yields and profits. Environmental benefits are similarly inconclusive, with roughly half of studies reporting positive impacts and the rest showing no significant difference between certified and non-certified producers. Systematic reviews highlight that VSS have a moderate effect on prices and schooling but a limited impact on wages and household incomes, often depending on local contexts. Furthermore, VSS can facilitate market access but pose barriers for smallholders due to compliance costs and certification requirements. Despite their potential to improve trade and sustainability, their impact varies by commodity and region, emphasising the need for stronger governance, context-specific policies, and better enforcement mechanisms to maximise their contribution to sustainable food systems.

The literature review highlights the proliferation of VSS, the diversity of sustainability indicator requirements, inconsistencies in certification and audit procedures, and the limited or negligible impact on producers' incomes.

However, a significant gap remains in understanding the functioning of local commodity chains and the governance of value chains at the regional level.

Addressing this gap requires a field survey to capture the perspectives of producers and key stakeholders involved in these value chains.

In the context of this study, collecting primary data is essential to addressing gaps and limitations in existing research on Voluntary Sustainability Standards (VSS) in the agri-food sector. Furthermore, primary data collection allowed for a deeper understanding of farmers' experiences, challenges, and perceptions and enhanced the credibility and relevance of findings for policymakers, standard-setting organisations, and businesses.

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5. Empirical findings

As stated in the Grant Agreement, the results deriving from WP4.2 should have been used to answer the research question of WP4.3 by identifying the impact of Voluntary Sustainability Standards on the cocoa value chain in Ghana and the coffee value chain in Vietnam. However, during the organisation of WP4.2, we concluded that being the coffee value chain overstudied and already investigated in WP2 (Task 2.2), focusing on different value chains, such as the tea, rice and dragon fruit ones, could contribute to the project with more interesting insights. That's why WP4.3, to be consistent with the Grant Agreement, will not only derive conclusions from the field evidence of WP4.2 (cocoa value chain in Ghana) but also from WP4.4 (coffee value chain in Vietnam). Hereafter, the two methodologies were used to build and disseminate the quantitative questionnaires in Ghana and Viet Nam.

Furthermore, several analytical methods were employed to understand better the main opportunities and challenges arising from adopting VSSs in the cocoa and coffee value chains. Specifically, a mixed-methods approach was used: quantitative data were collected from cocoa and coffee farmers and traders through a survey. In contrast, qualitative data were gathered from representatives of cocoa farmers' organisations and policymakers through in-depth interviews.

These complementary approaches offer valuable insights into the role of VSS in promoting sustainability within these critical agricultural value chains.

5.1. Methodology

5.1.1 *WP4.2. Quantitative and qualitative questionnaires - Cocoa Farmers and stakeholders in Ghana*

The WP4.2 quantitative and qualitative questionnaires were implemented in Ghana to gather the opinion of small-holder cocoa farmers, farmers' organisations representatives and policymakers on how international trade and governance tools such as Voluntary Sustainability Standards can help foster sustainability in the cocoa value chain. To do so, all the key SDGs relevant to the value chain were first identified. From these, SDG 15 and SDG 17—those most closely linked to Voluntary Sustainability Standards—were selected. Their targets and

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indicators were then used to develop a specific section of the WP4.2 questionnaires to address the objectives of WP4.3.

The quantitative questionnaire was then compiled by a sample of farmers producing cocoa in the East Region, one of the top three cocoa-producing areas in Ghana, precisely in five communities of this region: Yokuhe, Tei-Mensah, Kokotesua, Pinto, and Amanhyia. The communities were randomly selected.

Cooperative membership lists per community were obtained, and cocoa farmers were randomly selected to constitute a sample of 321 farmers following a probability proportional to size approach.

For the data analysis of WP4.3, only the subgroup of the 200 certified farmers was considered, as they were the only ones who could answer the certification-specific section of the questionnaire. Furthermore, the qualitative questionnaire was administered to policymakers within the cocoa value chain in Ghana (Table 3) and to several members of farmers' organisations (Table 4).

Table 3: List of interviewed policymakers of the cocoa value chain in Ghana

Role in the organisation (e.g. Head of Department, Director, Farmer, etc.)	**Stakeholder typology 1(farmers' organisations, cooperative members, policy makers, researchers, NGOs)**	**Stakeholder typology 2**
Programme Manager: Sustainable Agriculture & Cocoa; Programme Officer: Macro-Economic & Trade Section	Development Partners	Development Partners
Senior Policy Analyst and Private Sector Development.	Researchers	Civil Society Organization
Deputy Director of Research	Policy makers	Cocoa Regulator
Researchers	Policy makers	All tradable goods
Director, Women in Agriculture	Policy makers	General agricultural value chains

Source: author's elaboration

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Table 2: List of interviewed representatives of cocoa farmers' organisations

Full organisation name	Role in the organisation (e.g. Head of Department, Director, Farmer, etc.)	Stakeholder typology (farmers' organisations, cooperative members, policy makers, researchers, NGOs)
Community Advisory Committee, Israel	Member	Community group
Cashew Buyers' Association	Chairman	Cashew buyers Association
ABOCFA, Tei-Mensah	Chairman	Cooperative member
ABOCFA, Kokotesua	Secretary	Cooperative member
ABOCFA, Tei-Mensah	Secretary	Cooperative member
ABOCFA, Yokuhe	Chairman	Cooperative member

Source: Authors' elaboration

5.1.2. WP4(Task4.4) Questionnaire for Coffee Farmers and Traders in Viet Nam and Cocoa Traders in Ghana

As stated in the introduction, data collected as part of Work Package 4.4 (WP4.4) in the Trade4SD project was also included in this analysis as some survey responses produced valuable insights towards deliverable 4.3. The WP4.4 trader questionnaire was implemented in both Ghana and Vietnam. This survey focused on gathering the reactions of small-holder traders responsible for gathering coffee (Vietnam) and cocoa (Ghana) from farmers at the local level. The questionnaires used in both countries were identical. These surveys were carried out in the highest coffee-producing regions of Vietnam (Dak Lak and Lam Dong) and one of Ghana's leading cocoa-producing regions (Eastern Region).

The sampling technique employed for gathering the respondents was purposive and snowball, whereby Trade4SD partners in Vietnam and Ghana utilised their networks in their respective value chains to contact village leaders/ co-operative leaders and through coffee/cocoa trading organisations to provide contact details of purchasing clerks. The snowball method was employed as additional respondents were identified from traders who had previously been interviewed. These methods were used until Trade4SD partners had exhausted their networks.

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62 traders were sampled for the Vietnamese study, and 24 cocoa license-buying clerks (traders) were surveyed in Ghana.

5.1.3. WP4(Task4.4) Questionnaire for Coffee Farmers

Data collected as part of WP4.4 also involved a separate questionnaire given to farmers operating in the coffee value chain in Vietnam. This questionnaire was constructed as part of a lab-in-the-field experiment and focused on revealing the attitudes of smallholder farmers and behavioural factors towards a decision to invest in more sustainable production techniques. The method of obtaining these data was identical to the trader's questionnaire data collection. However, this task involved gathering groups of approximately 15 coffee farmers per individual surveyed village. 18 villages were sampled throughout data collection, and 310 coffee farmers made up the sample. A mix of households was selected, both with and without standard certification for coffee production. These coffee producers were also sampled from the same top coffee-producing regions in Vietnam (Dak Lak and Lam Dong).

5.2. Main Results

Quantitative data were analysed using descriptive statistical tools, while stakeholders' discourses were manually examined through thematic analysis. The key issues identified in the discussions with farm organisations and policymakers are highlighted.
We first present the statistical analysis of farm surveys conducted in Ghana and Vietnam, followed by an analysis of traders' data. Then, stakeholders' perspectives will complement and contextualise the quantitative findings.

5.2.1. Ghana - Cocoa Value Chain

5.2.1.1. Cocoa Farmers

Out of the 321 Ghanaian cocoa farmers considered in the sample, 62.31% of them (200 respondents) are certified.
It is important to note that this proportion does not represent the entire cocoa sector, where the percentage of certified farmers is significantly lower, as indicated in the literature review. Therefore, the following results are specific to this case study and should not be generalised.
More than half of the sample's certified farmers (52,22%) are both certified Fairtrade and Organic, while 47,29% are only certified Organic.

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Recent literature shows that Ghana's share of organic cocoa production is 0.6%, while the Dominican Republic's share is 79.7% (Obeng, 2022). The main barriers to converting producers from conventional to organic cocoa farming are related to livelihoods, finances, the environment, the quality of support, and relations in the value chain (Glin et al., 2015). For Obeng (2024), organic cocoa production is perceived and promoted as a 'niche'. He indicates that in emerging economies that solely depend on raw material production output to generate revenue for development, governments may not push through policies that encourage cocoa farmers to convert from conventional to organic cocoa production due to economic considerations.

The high share of organic production in our sample is probably due to the area of survey where many producers are engaged in organic production.

When the certified farmers were asked to specify the main benefit deriving from their adherence to VSSs, 45,41% of them selected "Increased profit", followed by "Better extension services provision" (35,75%), "Increased yield" (8,21%), "Environmental protection" (3,38%) and, lastly, "Increased health" (0,97%). All certified cocoa farmers were allowed to elaborate on the answer. Of the 13 people who chose this option, 5 revealed they received no benefit from adhering to VSSs, while two respondents claimed to be able to access a loan thanks to adopting VSSs.

As Figure 11 shows, differentiating results by kind of implemented VSSs, the organic certified farmers claim the main benefit is better access to extension services. At the same time, the organic farmers who also adopted the Fairtrade certification scheme asserted that the main benefit was increased profit (51,89%). This result aligns with the fact that Fairtrade guarantees a minimum production price (2,400 USD/MT) and introduces an additional price premium per metric ton (240 USD/MT). Furthermore, the combined adoption of Fairtrade and Organic also seems to have a higher yield (11,32% for Organic and Fairtrade vs. 5,21% for only Organic).

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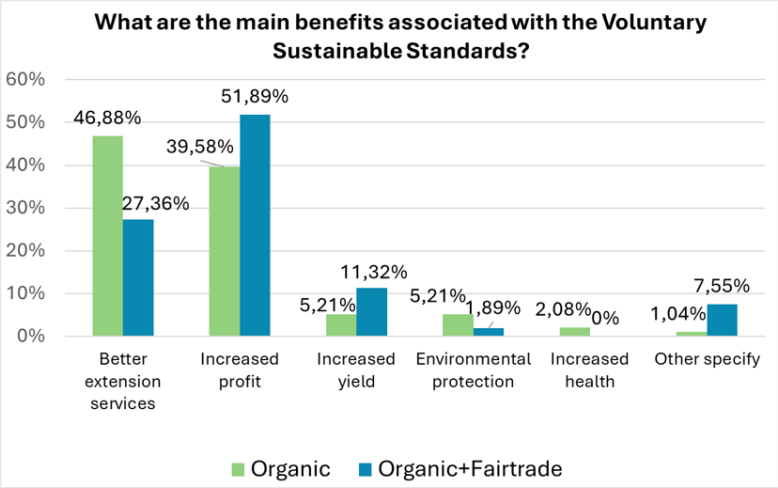

Figure 11: Main benefits associated with VSSs

Source: Authors' elaboration on primary data

On the other hand, the main challenge associated with VSSs was declared to be compliance with sustainable production standards, such as limiting the use of pesticides and fertilisers and increasing the use of manure (selected by 58,45% of the respondents).

The new EU regulation on deforestation creates a great dilemma for farmers caught in a challenging situation: they can't expand their land to increase production, so they must rely on higher inputs (fertilisers, pesticides, etc.) to boost yields. However, these inputs come at a high cost, often provided by cooperatives or suppliers that take a share of the farmer's revenue. Furthermore, 17,87% of the farmers stated that the main challenge of VSSs is compliance with labour standards, such as providing formal contracts to their employees and guaranteeing the non-involvement of children in farm activities.

As shown in Figure 3, the perception of the main challenge associated with VSSs varies depending on the respondent's age. Even if compliance with sustainable production standards seems to be the main challenge for farmers who are only certified organic and farmers certified Fairtrade and Organic, this answer was predominant among farmers under 50 years of age who are certified only Organic. It was indeed selected by 65,12% of the respondents who are part of this category.

On the other hand, farmers over 50 years of age perceive compliance with environmental standards (such as afforestation practices, creation of buffer zones, and avoidance of slash-and-burn practices) as the main challenge to implementing VSSs.

When Fairtrade is adopted, compliance with labour standards is more challenging for both age ranges, which is in line with the social and ethical nature of the certification scheme.

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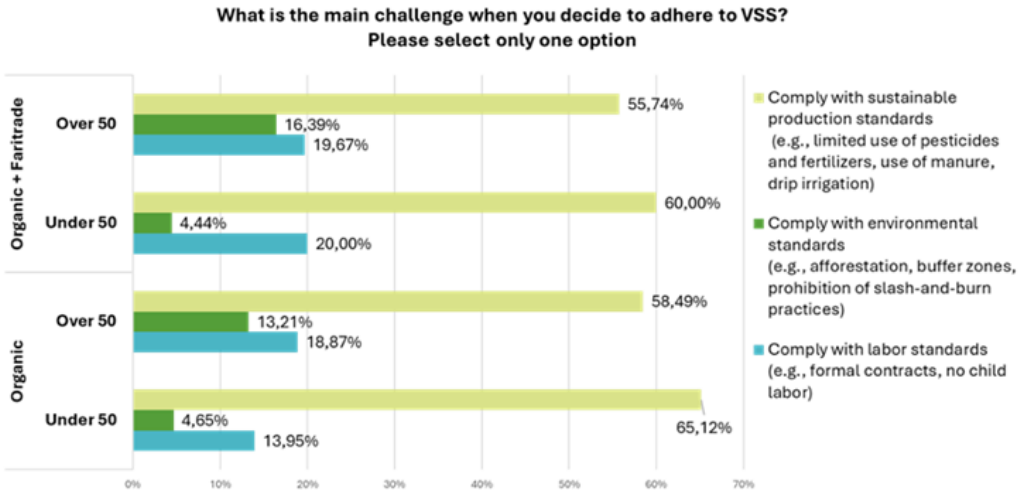

Figure 12: Main challenges associated with VSSs

Source: Authors' elaboration on primary data

When respondents were asked if they think international trade could help reduce disparities between men and women, 45,62% of them affirmed that it could have a positive effect.

Despite this result, out of 99 interviewees who answered the question positively, only 20 people were able to suggest a way international trade could help achieve gender equality.

Table 5 shows the answers divided into 4 macro categories of topics raised by the farmers when they were asked the following question: "How do you think international trade can help reduce disparities between women and men?"

These responses suggest that, according to farmers, trade can promote gender equality in the cocoa value chain primarily by ensuring women's inclusion in decision-making, improving their access to inputs and economic resources, and strengthening government support.

Table 5: Farmers' opinion on how trade could help reduce disparities between men and women

4) Inclusion of women in decision-making processes
"We have to encourage women and involve them in decision-making and cocoa production."
"We should motivate women to compete with the men? Ensure fair representation of men and women in organisations"

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4) Access to opportunities and inputs
"What men can do, women can also do. We just have to work together"
"Women are equally knowledgeable and as such, they need to be given the opportunity when the need be"
"They should help the women with inputs to make their work easy"
"Women should given opportunities"
"We should encourage women into cocoa farming"
"Women are equally competent, so they should be encouraged"
"It will provide both male and female farmers with enough money to cater for themselves and families"
4) Role of the government
"Government allocated some of the trade profit to support female farmer"
"When the government provide the needed support for cocoa farms"
"It depends on the leaders having the interest of the farmers at heart"
4) Other
"Women should be helped and encourage by men"
"It's all about understanding each other"
"Everyone has a say regardless of their gender"
"We should motivate women to compete with men? Ensure fair representation of men and women in organisations"
"I just believe they can help but I can't suggest a way"
"We have to help each other"
"It depends of the organisations"
"Both genders should respect each other's views and opinions"
"What men can do women can also do so women should have equal opportunities as men"

Source: Own Composition

When respondents were asked if they thought international trade could help raise farmers' bargaining power, 62,21% affirmed that it could positively influence it. Despite this result, out of 135 interviewees who positively answered the question, only 22 were able to suggest a way international trade could enhance their bargaining power. These

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findings align with existing literature, which frequently highlights the weak role of small producers in VSS governance (Bemelmans et al., 2023).

Table 6 shows the main topics raised by farmers when asked how international trade could increase their bargaining power.

Overall, the responses indicate that Ghanaian cocoa farmers view international trade as a means to enhance their bargaining power, but only if supported by structural reforms, fair pricing, and more substantial representation. They regard cooperatives as key intermediaries that can advocate on their behalf and emphasise the need for greater government involvement in price regulation and fair compensation. Additionally, many farmers strongly desire increased participation in decision-making processes.

Table 6: Farmer's opinions on how trade can help increase their bargaining power

6) Role of cooperatives
"Through Abofa who can speak on our behalf"
"They should that with our Cooperative leaders"
6) Role of the government
"They should compel the government to buy the cocoa beans from farmers at a certain fixed price"
"They should compel the government to increase the price when necessary"
"The government must be compelled to increase the prices"
"The LBCs should be the best people to help"
"Government will demand more cocos"
"It depends on the leaders having the interest of the farmers at heart"
"When the government provide the needed support for cocoa farms"
6) Farmers' representation in decision-making processes
"Farmers should have one voice"
"They should listen to our plea"
"They can speak on our behalf"
6) Valorisation of the quality of Ghanaian cocoa
"We the farmers need to produce quality cocoa beans"

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"The farmers need to produce quality cocoa beans"
"They should look at the quality of the cocoa we produce"
"They should look at the quality of the cocoa we produce and pay as accordingly"
6) Market dynamics
"They should inform the stakeholders of our hard work for them to increase the price"
"It depends on the buyers"
"They have to look at the demand at the world market and reward us accordingly"
"It will help us determine our own price for the cocoa sale"
6) Other
"We the farmers should work hard"
"They should look at how hard we are working and increase the price for us"
"They should look at our hard work and do that for us."
"They should consider our hard work"

Source: Own Composition

When respondents were asked if they think international trade could favour environmentally friendly practices, 79,72% of them affirmed that it could positively influence it.
Numerous studies have examined the links between international trade and sustainability (Baylis et al., 2021; Brandi et al., 2020). Economists acknowledge that global trade can exacerbate the negative effects of weak or non-existent environmental regulations. The assessment of trade impacts on sustainable development generally relies on a combination of quantitative, qualitative, and hybrid methods, which complement each other to provide a comprehensive analysis. However, the literature shows that the results of these studies vary significantly depending on the context and methodologies used.

When asked how international trade could promote environmentally friendly practices, cocoa farmers provided more suggestions than other topics discussed. Many highlighted that trade supports adopting sustainable agricultural methods, such as reducing chemical fertiliser use, utilising organic inputs, and implementing intercropping to protect the environment and mitigate climate change. Farmers also emphasised the importance of education and training programs to raise awareness and strengthen their capacity for sustainable farming. Additionally, they advocated for stricter regulations, including enforcing sustainability

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standards and regular inspections. Financial incentives were also seen as a key motivator, with farmers noting that higher premiums for organic cocoa and support for eco-friendly inputs encourage adopting sustainable practices.

Table 7: Farmer's opinions on how trade can promote environmentally friendly practices

6) Implementing sustainable agricultural practices
"Not applying chemical fertilisers"
"We will apply chemical fertilisers"
"Desisting from using chemical fertilisers."
"We won't use chemicals on the land"
"We will not use chemical fertilisers but use organic systems."
"Not applying chemical fertilisers"
"We will use organic fertilisers"
"It will help to practice intercropping"
"We will use organic fertilisers"
"It will help affect climate change positively"
"They force them to use methods that don't harm the environment"
"Rules and regulations on how to farm sustainably"
"Because we sell to the international people, we will be forced to use environmentally friendly practices"
6) Providing Training
"Through Education"
"Through training and education"
"Through teachings and training"
"They should educate farmers to stop"
"Through training and education"
"Through training and education"
"Training"
"Training"
"Training"

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"Through Education"
"They should improve on the training and education on the need to protect the environment"
6) Role of regulation and monitoring
"They should place embargo on the importation of those chemical fertilisers"
"Offenders of bad environmental practices should reported and sanctioned"
"Rules and regulations on how to farm sustainably"
"Inspection on regularly basis and educate farmers"
6) Assistance
"They should help the farmers in their farming activities"
"They should provide help to the cocoa growing areas"
"Get support from the government to plant trees within the cocoa farm and provide proper seedling."
"They should help with inputs with less negative impact on the environment"
"They should help us with the needed inputs and train us on how to use them"
6) Economic advantages of sustainable production
"Farmers will get more money to practice the organic system."
"We will receive more money to invest into our farms, buy organic fertilisers and environmentally friendly chemicals."
"They should count and moment the number of trees in the farms and pay a premium to farmers who keep theirs."
"Because they pay more for the organic than the other ones, people will be incentivised to use good practices"
6) Other
"It all depends on the government"
"It helps in keeping farmers healthy"

Source: Own Composition

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5.2.2. Cocoa traders

The questionnaire presented to cocoa traders gathered the proportion of license-buying purchasing clerks and the standards they use to buy their cocoa. There were 24 cocoa traders in total included in this sample, with 4 cocoa traders (16%) claiming not to purchase any cocoa produced to a sustainable production standard. For the remaining 20 farmers, in Figure 5, the distribution of standards practised was 38% Organic, 33% Fairtrade, 4% Rainforest Alliance, and 25% claimed to purchase towards another standard. Other standards put forward by cocoa traders were FEDCO, PBC, Adom, and Satisfied Cocoa.

The trader questionnaire asked whether the cocoa purchasing clerks believed consumers would be willing to pay a higher price for sustainably certified cocoa. Of the 24 cocoa traders, 54.17% think consumers would not be willing to pay a higher price for sustainably sourced cocoa. When we segregate the analysis by the type of certification the trader purchases, 78% of organic cocoa traders believed that consumers would be willing to pay extra for sustainably sourced cocoa. Most Fairtrade traders (75%) thought consumers would be willing to pay extra for sustainable cocoa.

Table 8: Traders opinion on the benefits of VSSs

Do you think sustainability standards for cocoa…	**Yes**	**No**	**Don't Know**
Improve the condition of the environment.	**96%**	4%	-
Increase my profits from selling cocoa.	4%	**96%**	-
Decrease the overall supply of cocoa I can buy.	**88%**	8%	4%
Improve the quality of the cocoa supply.	**100%**	-	-
Decrease opportunities for me to sell cocoa.	13%	**83%**	4%

Source : Own Composition

Table 8 details the opinions of these cocoa traders towards different aspects of sustainability standards. The traders remained optimistic about cocoa standards improving the environment

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and the overall quality of the cocoa supply. Most cocoa traders (96%) believe that sustainability standards for cocoa production will enhance the environment where the cocoa is produced, and 100% of traders agree that the quality of the cocoa will be increased. 83% of the traders believed sustainability standards would increase their opportunities to sell cocoa.

Lastly, some of their opinions were quite negative regarding sustainability standards, with 96% of Ghanaian cocoa traders believing that sustainability standards will lead to a general decrease in the profits traders generate from trading the cocoa they buy. Furthermore, most cocoa traders (88%) also believed that sustainability standards for cocoa would decrease the overall supply of cocoa they can trade.

5.2.3. Qualitative analysis of the cocoa value chain

FOs in Ghana claim a certain degree to adhere to voluntary standards, especially those related to organic farming and fair trade. These standards are essential in managing cocoa production where organisations such as ABOCFA and Cocoa Life are present. These organisations are critical to the sector as they provide specific training for farmers' needs. Through this intervention, farmers can understand the economic conditions and social and environmental implications of VSS, which can significantly improve the financial condition of cocoa farmers. In addition, producer organisations recognise the importance of trade relations with EU countries because they enable them to adopt organic standards that reduce the use of plant protection products in agriculture. Respondents agree that greater awareness of benefits such as high product value and increased technical assistance could lead farmers to join cooperatives. Table 9 tries to highlight the similarities and differences based on interviews:

Table 9: Similarities and Differences between FOs and Pos opinions

Aspect	**Farmers' Organisations (FOs)**	**Policy Makers (PMs)**
VVSs	Concentrated on organic farming and fair-trade certifications.	Emphasised certifications like Rainforest Alliance, though adoption is limited.
Standard Implementation	Managed through entities like ABOCFA and Cocoa Life (cocoa sector).	Promoted through national policies and regulations.
Perceived Benefits	-Increased incomes. - Environmental and social awareness.	- Improved product quality. - Sustainability and compliance with regulations.

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Barriers Identified	Limited adoption among farmers due to lack of awareness or training.	Certifications have limited reach and impact; direct policy intervention is needed.
Role of Training and Support	Training provided by NGOs and trading companies to enhance awareness.	Policies aim to complement certifications with additional support for farmers.
Trade Opportunities	See increased EU trade as a driver for expanding voluntary standards.	Regulations (e.g., EUDR, Supply Chain Due Diligence Act) shape market access.
Impact on Farmers	Farmers joining cooperatives are expected to increase as the value of standards becomes evident.	Acknowledged limited immediate impact on farmer livelihoods but stressed long-term benefits of compliance.
Gender gap	Not specifically highlighted in interviews.	Greater gender diversity was observed among PM representatives.
Key Challenges	- Need for more technical assistance. - Market entry barriers.	- Limited certification adoption. - Ensuring compliance with emerging regulations.
Emerging Regulations	It is seen as a pathway to expand market opportunities for sustainable products.	Essential for market access; focus on deforestation, labour rights, and sustainability.
Innovation	Use standards to improve product value and technical assistance.	Highlighted business differentiation and unique product experiences.

Source: Author's elaboration based on qualitative interviews

The FOs and PMs aim to promote sustainability and improve opportunities driven by international trade relations. However, there are differences: The FO focuses on practical implementation and impacts at the farm level, while the PM emphasises regulatory compliance and systemic interventions. These differences highlight the need for a coordinated approach to linking policymaking and implementation on the ground.

Challenges of adoption

The FOs stress the need for training courses to implement and develop voluntary standards. On the contrary, PMs point out that certifications such as the Rainforest Alliance have limited reach and impact. They support direct policy interventions to improve the effectiveness of such certifications.

Commercial and regulatory compliance

The FOs claim that increased trade with the EU allows them to strengthen and adopt voluntary standards, especially for organic products. However, PMs stress the importance of regulatory

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compliance, citing frameworks such as the EU Deforestation Regulation (EUDR) and the German Supply Chain Due Diligence Law as essential to maintaining market access.

Representation and structural differences

Although gender representation is not a priority theme in FO discussions, PMs note greater gender diversity among their representatives, with women often occupying leadership roles. This difference reflects the more significant structural variations between the two groups.

Impact of Voluntary Standards

The FO points out that voluntary standards promote collective action, providing greater cooperative participation when farmers recognise their benefits. The foreign ministers acknowledge that the certifications aim to improve income and environmental performance but note their limited impact.

Qualitative interviews show that FOs and PMs have different opinions on sustainability, standards, and trade. The key challenges are in disseminating standards and business opportunities. Voluntary standards can have a desired effect, but only if accompanied by a more integrated strategy to align policy efforts with practical implementation.

If we look at the farmers' organisations and policymakers' discourse, we can see that they answered three main questions:

- **Are you experiencing specific challenges (productivity issues, low resilience to infestation of pests and diseases, loss of quality) in your sector**

According to farm organisations, cocoa trees are facing many challenges linked to some specific pests and impacts of climate change.

"the main challenge here is money. If you have the money to use on the farm you won't be affected by any issues on the farm, and if you use the land too much or too much fertilisers on the land it will lose its strength".

This statement could pose significant challenges in the future due to the EU Deforestation Regulation (EUDR), adopted in May 2023. This regulation has two main objectives (European Union, 2023): to reduce the EU's contribution to deforestation and forest degradation worldwide, thereby helping to limit global deforestation and to decrease the EU's impact on

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greenhouse gas emissions and biodiversity loss. The exact geolocation of the farm or plot where production occurred is expected for imported commodities. The absence of deforestation can then be verified by comparing satellite images of the current forest cover at that location with images from on or before the 2020 cut-off date.

Two impacts will result from this regulation:

1. Complex and costly controls may lead to unintended side effects, favouring some supply chain participants over others.
2. Increased input use by farmers to maintain production levels and income.

Although one manager stressed the importance of having enough money to face the challenges, he did qualify the harmful effects of over-fertilisation, which can weaken soil quality.
Traditional production methods deplete the soil. But growers can no longer abandon their depleted land, which has become more or less acidic, because virtually no forests remain, and many countries have introduced anti-deforestation legislation. Fertilisation remains an effective way of improving the productivity of cocoa trees as long as the various nutrients are controlled.

"We have some pests on the farm that attack certain cocoa crops and destroy the beans within the pod. We also have the black pods that affect the cocoa trees. If you have an area where cocoa pods are burned and it is dark and damp, it can cause the growth of black pods on the trees. Additionally, the climate change that occurred last year resulted in a lack of rainfall during the expected time, leading to reduced cocoa production. Therefore, weather is also a significant factor".

Farmers are aware of the impacts of climate change on cocoa trees' health. To mitigate these challenges, they use phytosanitary products in cocoa farming to fight repeated attacks by pests and diseases affecting cocoa trees. However, this use has an impact on farmers' health. The results of the study by N'Guessan (2023) show that almost 80% of applications of phytosanitary products present a high health risk for those responsible for applying them.
Organic production is a way to protect

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- **How much Voluntary Sustainable Standards (Fairtrade International, Global G.A.P) are spread across your sector?**

A quantitative survey shows that the main challenge associated with VSSs was compliance with sustainable production standards, such as limiting the use of pesticides and fertilisers and increasing the use of manure (selected by 58,45% of the respondents). Furthermore, 17,87% of the farmers stated that the main challenge of VSSs is compliance with labour standards, such as the provision of formal contracts to their employees and the guarantee of the non-involvement of children in farm activities.

"As a member of ABOCF we respect the Fairtrade and Organic standards. We also have Cocoa Life here in addition to ABOCFA, and they have the standards that they follow. We are made aware of the various VSS standards during training seminars".

Farmer's organisations consider that small farmers are reluctant to adopt VSS requirements because they cannot perceive the benefits.

"At first, farmers didn't see the benefits that ABOCFA gives to its farmers but now they know and on top of that the price for organic cocoa is different from the conventional ones that they have been doing. As people identify the benefits, they will be motivated to join the organic groups because of the high premiums that we receive".

This discussion highlights the low premium prices received by farmers who adopt particular Voluntary Sustainability Standards (VSS). The literature review shows that certification does not lift small producers out of poverty (Bemelmans et al., 2023; Marks et al., 2024; Jena and Grot, 2023; Boysen et al., 2021).

Despite major chocolate manufacturers promoting their Corporate Social Responsibility (CSR) programs to showcase their commitment to environmental and social sustainability and differentiate themselves in consumer markets, small producers do not benefit from consumers' willingness to pay a premium price.

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- **In your opinion, how increased trade opportunities with the EU would impact on the diffusion of Voluntary Sustainable Standards**

"It would encourage more people to join the cooperatives if they see the benefits. As the trade expands, so would our cooperative, resulting in increased income".
"Yeah, because they will see that if they join the cooperatives, they gain a lot of benefits".
"I used to be part of OLAM Ghana, but I did not receive any benefits, and the premiums were different from OLAM to Organic. When I realized that Organic was better, I moved to the Organic side. If people find out that many farmers are joining a specific cooperative and receiving benefits, they will also try to join to get those benefits. Everyone likes free benefits, so they will choose the option that benefits them the most".

Respondents consider that farmers should belong to cooperatives to benefit from VSS. We see above that all VSS work with small producers through cooperatives. However, sometimes, cooperative governance is not transparent and may not distribute premium prices fairly.

"I think I've already stated that the supply of inputs and other things are all coming from the government. Making sure that we have, what do you call it, organic... As I have already stated, they are coming in, flowing like that. Now I have about 10 phyto, all fertilizers, organic ones, here now. Tomorrow that will go to farm. We'll take some there and ensure that justice is done to the crops as far as fertiliser is concerned. Me, I am very much interested in the organic way because sometimes before you even damp down or you apply that sort of fertiliser, it has been drained off. It can be even washed away. If you are not lucky and it rains heavily, everything will be washed away. But for the organic, it gets attached to the crops and the leaves and everything. And that is all. They get stayed there for some time".

The role of cooperatives is also illustrated here by the supply of organic inputs, which seem more resistant to climatic events.
Certifications, including Fairtrade, depend on partnerships with small cooperatives and local communities to support sustainable livelihoods. However, cooperative governance remains opaque, and the conditions are not yet favourable for the collective and democratic management of profits from so-called "sustainable development" labels, whose credibility has been increasingly questioned (Ruf et al., 2019; Gboko & Faure, 2018).

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"What was the other part of the question? As for the child labor, I've ruled it out already". "You see, there was this group of people who came down. We have extension officers around. They will go to your farm, make sure they take the measurement of the farm. And then they put it there. And then anything that you need, you must know the acreage of your farm".

The certification standards sometimes require many controls, such as the exact dimension of the farm, to trace the origin of cocoa.

5.2.4. Vietnam - Coffe Value Chain

5.2.4.1. Coffee farmers

Figure 4 illustrates the proportions of VSS practised by the sampled coffee farmers who reported farming to at least one standard. We can see that the main VSS adopted belongs to NGOs (Fairtrade and Rainforest Alliance), but the most important is proposed by big trading companies (4C).

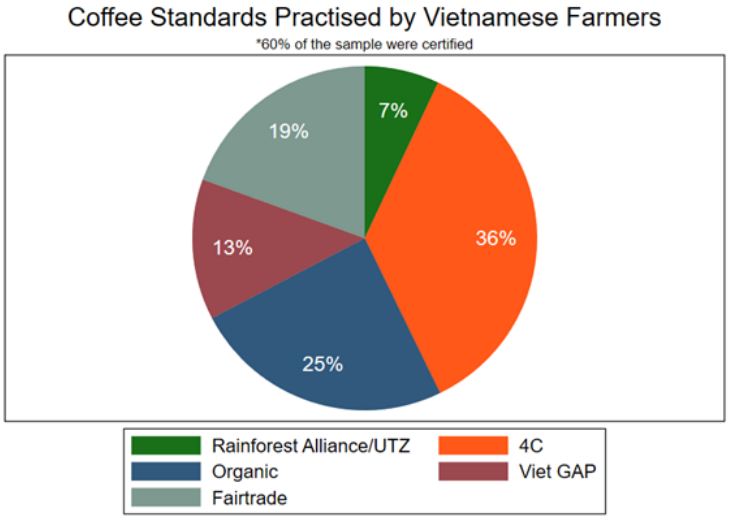

Figure 13: Coffee Standards Practised by Vietnamese Farmers
Source: Authors' computations based on primary data

Of the 186 Vietnamese farmers farming to a standard, the highest proportion (36%) claim to farm to the 4C standard. One quarter of these coffee farmers farm to an organic standard, with

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19% farming to Fairtrade certification. The remaining 13% ensure their coffee complies with the VietGAP production standard, leaving the smallest proportion (7%) farming to the Rainforest Alliance/UTZ standard.

In this coffee farmer survey, the respondents were asked whether they thought Vietnamese coffee farmers were not paid enough to farm coffee sustainably (for example, to an organic or fair trade standard). When separating the analysis by certification standard practised, we observe that approximately half of the respondents strongly to agree with this statement moderately and, therefore, believe that they are not sufficiently sustainably compensated for farming coffee. Uncertified farmers in the sample had a higher proportion of individuals agreeing with this statement, 58.5% of whom believed that the financial compensation for sustainable coffee production was too low. 44% of those practising Fairtrade and 54% of Organic farmers also agreed that the payment for sustainable production was too low. In the same way as Fairtrade-certified farmers, 4C-certified farmers had 44% agree with this statement. Between 25% - 28% of farmers across all certification types disagreed with this statement and believed that the compensation for farming coffee sustainably was satisfactory.

Furthermore, the coffee farmer sample was asked whether they felt consumers were willing to pay higher prices for sustainably certified coffee products. Across all certification groups and those who were uncertified, approximately 80% believed that consumers would be willing to pay a higher premium for sustainably sourced coffee. 87% of those farming to an Organic standard, and the same percentage of 4C-certified individuals believed consumers would pay the premium for sustainability. On the other hand, Fairtrade individuals had a marginally smaller share of this sentiment, with 79% believing that consumers would forgo additional money to ensure their products purchased had been sustainably produced.

The coffee value chain research highlights several sustainability challenges, including water pollution, biodiversity loss, soil erosion, agrochemical use, deforestation, waste generation and labour exploitation (Bager & Lambin, 2020). However, the incentives for farmers to transition to sustainable production remain insufficient.

Although Voluntary Sustainability Standards (VSSs) are promoted to improve smallholder farmers' livelihoods by securing higher prices and increased household incomes (Meemken, 2020), they are often criticised for primarily benefiting wealthier producers. These standards

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overlook the most vulnerable and marginalised smallholders, failing to ensure that price premiums reach them (COSA, 2013; Minten et al., 2018).

Lastly, coffee farmers were asked whether they had ever felt pressure from coffee traders to produce more sustainably (such as reducing chemical pesticides or choosing natural fertilisers). The key result from their responses was that farmers producing to Fairtrade standards unanimously disagreed with this statement and claimed that they had never felt pressure before from coffee traders to make more sustainably. Contrastingly, 53% of organic coffee farmers claimed they felt pressure to farm more sustainably, and 45% of 4C coffee farmers also felt pressure from their coffee traders to produce more sustainably. The uncertified farmers were divided on this question, with 49% claiming to have felt pressure from coffee traders to alter their production techniques to be more sustainable. The remaining half claimed they had never felt any pressure to farm sustainably from traders.

5.2.4.2. Coffee Traders

The identical questionnaire for cocoa traders was also administered in Vietnam with 62 small-holder coffee traders. Figure 6 illustrates the standards practised by coffee traders in the Vietnamese sample. Of the 62 coffee traders, 77% purchased coffee with at least one sustainable certification. Most (38%) of this sample traders claimed to buy coffee that satisfied the 4c standard. With 24% trading Fairtrade coffee and 22% trading Rainforest Alliance/UTZ-certified coffee. The remaining 10% purchased coffee with Viet GAP certification, and only 6% of traders buy organic coffee.

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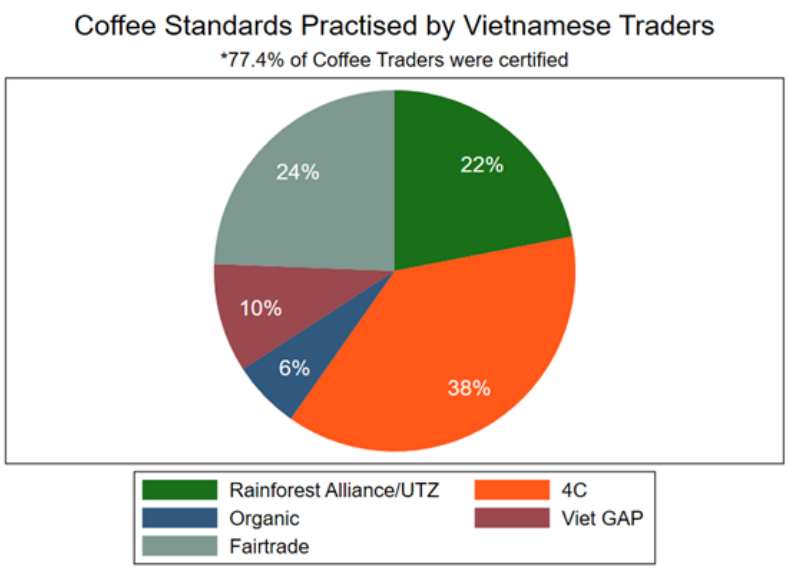

Figure 14: Coffee Standards Practised by Vietnamese Traders

Source: Authors' computation based on primary data

The coffee traders were also asked whether they believed consumers were willing to pay a higher price for sustainably certified coffee products. Both certified and uncertified respondents supported this, thinking consumers would be willing to pay a higher price to ensure their coffee was responsibly sourced. 95% of Fairtrade traders, 83% of 4C traders, and 72% of Rainforest Alliance traders shared this positive opinion. Of the 5 respondents who claimed to be trading Organic coffee, 60% believed consumers would pay this higher price.

Table 10: Coffee Traders' Opinions on Benefits of VSSs

Do you think sustainability standards for coffee…	**Yes**	**No**	**Don't Know**
Improve the condition of the environment.	**95%**	2%	3%
Increase my profits from selling coffee.	**76%**	10%	14%
Decrease the overall supply coffee I can buy.	24%	**61%**	15%
Improve the quality of the coffee supply.	**100%**	-	-
Decrease opportunities for me to sell coffee.	13%	**71%**	16%

Source : Authors' Composition

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Table 10 denotes the responses of coffee traders towards different statements regarding the impact of sustainability standards in the coffee value chain. The coffee traders were generally positive about sustainability standards, with 95% believing that they would improve the general condition of the environment and 76% stating that it could increase their profits from selling coffee. All coffee traders believed that sustainability standards would improve the quality of the coffee supply, and 61% thought that these standards would not decrease the coffee supply available for trading. Most coffee traders believed that sustainability standards would not reduce their opportunities to sell coffee.

Overall, the coffee traders appeared to be more favourable than the cocoa traders regarding sustainability standards in their respective value chains.

Concluding remarks

The world's production systems are now recognised as largely responsible for the negative impacts on the environment and human populations. Current production and consumption patterns far exceed the planetary limits of human activity, causing irreversible damage to the environment and the Earth system. These impacts of economic activity are, in principle, recognised today and manifest themselves in the form of key sustainability concerns. As a result, all public and private actors have committed themselves to the transition of economic systems towards more sustainable models. Several instruments have been proposed to support and assess progress and guide decision-making. Standards and regulations are among the most useful tools for achieving SD.

The Agenda 2030 highlights 17 sustainable development goals (SDGs), including issues related to full and decent employment, inclusive and sustainable economic growth (Goal 8), and responsible consumption and production patterns (Goal 12). To achieve these goals, a sustainable trade system plays a fundamental role since it can fully contribute to the overall concept of sustainable development.

Voluntary sustainability standards emerged in the 1990s with the aim of making globalised agricultural sectors (or global value chains) more "sustainable", i.e. more demanding in social and environmental terms.

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Standards are documents created by a consensus of experts and approved by a recognised body that provide guidance on the design, use or performance of materials, products, processes, services, systems or people. Standards are differentiated into voluntary and mandatory standards based on their intended implementation. Depending on the category of the organisation by which they are to be applied, standards are further divided into public and private standards. Public standards consist of international and national standards, whereas private standards are those set by associations, companies, and individuals. The implementation of public and private standards can be either mandatory or voluntary, depending on the government, market or region that enforces them.

Among the contemporary normative instruments of regulation, private and voluntary standards are growing alongside national legislation and international law, claiming to make up for their shortcomings. This rise in the power of standards has been accompanied by a shift in the responsibility for standardisation from nation-states to private organisations that are in no way linked to states and that are formed in particular from transnational sectors and value chains that meet considerable economic challenges.

VSSs are also subject to shortcomings as they are not able to address all sustainability problems.

According to Auld et al. (2008), there exists within the VSS systems that exclude the poorest countries. This is probably linked to VSS being built around pay-for-play mechanisms. Poorer countries, especially their smallholders, experience hardship in paying for VSS. Marx et al. (2022) go even further, explaining that "smallholders are typically discriminated against in the VSS market" (p. 23). Marx and Cuypers (2010) describe the "stuck at the bottom of the problem", explaining how compliance with VSS requirements is most complex for most countries that need it. This is related to the economic cost of transition and paying for certification.

In addition to the cost of VSS themselves, van Kooten et al. (2005) looked at elements other than GDP and exports of forestry products that impact the effectiveness of VSS. In doing so they analysed 117 countries to measure "country-level conditions that encourage the growth of a private regulatory environmental system to govern forests. […] they identified that political (size of government, structure of the economy and freedom to trade) and social (literacy rates

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and the degree of suppression of women) factors also play an important role in adoption" (van Kooten et al. 2005; Marx et al. 2022, p. 22). Loconto and Dankers (2014) go in a similar direction, considering compliance with VSS cannot be attained without support from national institutions.

VSSs are not impacting places that need it the most, i.e., the poorest countries. A particular type of wealth that can take different shapes is necessary for a VSS to succeed. This wealth can be in the product itself (any agriculture or forestry products), in the biodiversity to defend, and in the manpower (the level of education of people running government or business). VSS seem to rotate around, function with, and adhere to wealth, and without a minimum threshold, their implementation is unrealistic.

Negi (2020) put forward five points about why one should be concerned about private standards.

- Since VSS are private standards, we believe these concerns apply to them. Negi's first concern (2020) is that their massive proliferation complicates international trade: private standards, which first dealt with "agriculture, forestry, aquaculture and apparel, private standards are now found in almost all sectors" (p. 48). Thorstensen et al. (2015, p. 1) believe this proliferation is cumbersome, especially for smaller stakeholders.

- The second point put forward by Negi (2020) is that "the content of private standards is perceived as being much more rigid than public-sector standards and without scientifically established justification." He cites the works of Mbengue (2011), who believes that the way private standards are adopted lacks democracy and transparency.

- Third, Negi (2020) questions how voluntary private standards and VSS are as he believes that they often "act as necessary conditions for market access." He puts a focus on the ones endorsed by the government that become de facto mandatory. In doing so, he cites the works of Marx (2017, pp. 3, 12) that question the relevance of the distinction between public and private standards because "when governments back private standards, they become a part of 'public' governance." Negi (2020) also cites

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Mavroidis and Robert (2016, p. 14), who find this worrisome because when the government backs a private standard, "… the rule becomes mandatory, but the process of developing the standard remains private."

- In his fourth point, Negi (2020) goes over how private standards may legally circumvent the WTO: "Since these standards do not fall within the normative purview of the WTO regime, a government could choose to support a private standard to avoid its WTO obligations instead of setting its own public standard which would need to be WTO compliant" (p. 49).

- Finally, the fifth point is that it is much harder for developing countries, and specifically their smaller producers, to comply with private standards and VSS, and thus, there is a higher risk for them being excluded from the market (Mbengue 2011; Thorstensen et al. 2015, cited Negi 2020).

Marx et al., 2024 identify at least 19 FTAs that refer to VSS in a promotional way to encourage sustainable transition in poor countries. For example, in the recent FTA between the European Free Trade Area (EFTA) and Indonesia, VSS-certified palm oil products are subject to lower tariffs than non-certified palm oil products.

To conclude, VSSs emerged as a response to global production systems' negative environmental and social impacts, which currently exceed planetary limits. These standards aim to improve sustainability in sectors like agriculture, supporting responsible consumption and production (SDG 12) and inclusive growth (SDG 8). However, while VSS provide market access and promotes sustainable practices, they pose challenges, particularly for smallholders in poorer countries struggling with certification costs. This "pay-to-play" mechanism can exclude those who need it most, reinforcing inequality. Additionally, the proliferation of VSS complicates trade, and despite being voluntary, many standards act as mandatory requirements for market access, especially when backed by governments or trade agreements. Effective implementation requires support to ensure VSS contribute to broader sustainability goals without exacerbating existing disparities.

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D4.3 Policy Brief
Assessment of sustainability effects of voluntary and ethical trade standards

1. Context to the study

TRADE4SD is a research and innovation project financed by the H2020 European program. The premise for this proposal is that trade has the power to produce positive outcomes when the policies that define the rules of the game are framed and designed to promote access to markets, fair prices, and standards of living for farmers, as well as alleviate rural poverty and ensure sustainable farming practices.

Over the last fifteen years, the EU has introduced sustainability chapters into its free trade agreements with developing countries, using a promotional rather than a coercive approach. However, the relatively modest effects of these agreements suggest that compliance with sustainability commitments needs to be stepped up.

Several sustainability standards generally assess sustainability in global agricultural supply chains. Certification standards are designed to improve workers' lives and encourage the widespread adoption of sustainable business practices. Standards support these objectives by defining rules, for example, for the use of environmentally friendly farming practices, price premiums, guaranteed minimum prices for commodities, and fair working conditions.

While the literature generally recognises the role of world trade in the ecological transition of production systems, the question of assessing progress towards sustainability remains. Numerous studies have sought to evaluate the impact of VSS certification on environmental, social and economic impact indicators, as well as on the issue of human labour. The results vary depending on the standard studied, the commodity chain and the country.

This study aims not to carry out yet another impact assessment of VSS but to summarise the already extensive literature and extract elements for reflection on public action at global (WTO), European, and local levels.

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2. Summary of findings

VSS are private initiatives driven by diverse stakeholders that include environmental, social and economic specifications. The proliferation of VSS has resulted in a certification and control market largely dominated by global trade players. The rise of VSS has led to increased public recognition of their role in broader policy approaches and instruments, and to greater institutionalisation. VSS have established themselves as proof of compliance with certain public regulations on sustainable development.

The integration of VSS into public policy can be seen in the regulation of market access (e.g., a ban on wood from deforestation in the Korean market), public purchasing, free trade agreements, and preferential trade agreements.

At the level of world trade governance, some authors consider that standards are a symptom of a change in the way the world economy operates, which calls into question the WTO's conceptual basis (Petros et al., 2016).

Incorporating a standard into public regulation makes it mandatory, but developing it remains private (Petros et al., 2016).

There is no regulatory framework to ensure that SSVs do not distort trade and provide environmental and social sustainability benefits, and there is no conclusive evidence of their effects on trade (Bemelmans et al., 2023).

The literature is unanimous on the low impact of VSS on various dimensions of sustainability: environmental (deforestation, biodiversity, chemical inputs), social (health, education, working conditions, child labour, women's rights), and economic (prices, income, poverty, level: barriers to trade, global governance).

The main reasons given in the literature:

2.1.Low price premium

Despite local government procedures for setting prices for producers, the premiums linked to certification are either non-existent or insufficient to affect incomes positively. Case studies in the literature show that certification does not lift small producers out of poverty (Bemelmans et al., 2023; Marks et al., 2024; Jena and Grot, 2023; Boysen et al., 2021).

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There are many reasons for this. First, regular prices fall on the world market, forcing growers to increase productivity by increasing inputs (fertilisers, pesticides, and child labour) (Ruf, 2021). As a result, production costs are higher, especially as many small-scale producers have to borrow money to pay for these inputs.

The second reason is the opaque way in which producer cooperatives operate, with only part of the premium paid by buyers being passed on.

In 2019, Côte d'Ivoire and Ghana jointly announced the Living Income Differential (LID) policy (FCC, 2019), which is a new attempt to capitalise on their collective market power to raise the farmgate price and, thereby, the share their farmers receive from the value of the global chocolate market, bringing them closer to an income that allows a decent standard of living (Boysen et al., 2022).

However, the initial results are still insufficient due to the sharp price fluctuations in the world cocoa market.

2.2.Lack of farmer's participation in VSS governance

Voluntary standards are based on the idea that a combination of positive incentives (e.g. price premiums for producers and/or provision of other services), training and awareness building, clear and consistent criteria for success, and a market-based approach can join forces to boost sustainability. Most voluntary standards outline social, economic, and environmental sustainability requirements, although the specific principles, criteria and indicators vary between the standards (Traldi 2021).

The technical specifications of the various VSS are too complex and require significant knowledge and skills that small producers do not have, which limits their real involvement.

Regarding VSS governance, the literature considers standardisation bodies to be independent political agents that seek to promote their own agenda independently of stakeholders' interests. VSS governance is criticised for not allowing all stakeholders a say in constructing indicators and certification procedures (Bemelmans et al., 2023). The role of small producers is often weak and does not affect the direction and operation of VSS.

Furthermore, certain stakeholders' involvement requires technical skills and knowledge to understand and amend documents, making it difficult for small producers and local NGOs to participate.

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2.3.Third-party certification opacity

Certification procedures: Tripartite certification implies a separation between owners, certifiers, and auditors to limit collusion. The proliferation of standards has created a certification market torn between the race for market share and the reality of VSS's impact. Standard specifications are being lowered to attract more candidates, and controls and audits are not strict enough (Marks, 2024; van der Ven, 2024).

Lack of transparency appears to be a key failure in the operation of several private standard schemes. Transparency can also be seen through the prism of participatory governance. The International Institute for Sustainable Development (2016) proposed an engagement index, "external stakeholder decision making in standard-setting process", to evaluate transparency and participatory governance. This indicator is essentially a benchmark for transparent and participatory governance, identified as a key determinant of a standard scheme's success and long-term sustainability.

2.4.Failing local government

Governments in producing countries often lack the resources to monitor social and environmental practices. VSS frequently helps to raise awareness of social and environmental laws and to ensure that they are respected, even though they are sometimes beyond the control of government officials.

Producing countries act on commodity chains by controlling exports through public agencies such as COCOBOARD in Ghana. In this case, the government is responsible for marketing on the international market, quality control, seed and plant production, the regulation of phytosanitary products, the dissemination of agricultural practices and material support for producers.

They play many roles, including controlling the access of private operators (national and international) to the various functions/trades in the industry, from field purchase (directly from the farmer) through processing and input supply to export. They also set benchmarks for prices and margins across the industry, finance expenditures in the common interest, and manage reserve funds to smooth prices for producers from one year to the next. Governments are not involved in the certification process. The major international traders (Barry Callebaud, Gargill, OLAM and Ecom) buy anticipated volumes directly from the states, whether certified or not, for their customers (Mondelez, Nestlé....). Still, their names are never known to the general public, so they run no reputational risk.

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Exporters work with the cooperatives for their supplies. The co-operatives receive technical and financial support, and in return, they guarantee exporters exclusive rights to their members' certified cocoa production.

The operation of local co-operatives in producing countries is very obscure. It poses problems of transmission of premium prices linked to certification to producers, and the rules of governance are not transparent.

Checks at the plot and cooperative levels raise doubts about certification audits. The specifications are too complex, with many unverifiable criteria; the conditions for becoming an auditor for certain VSS are too vague, and the number of auditors is too low for the audits to be credible.

Moreover, the costs associated with certification tempt cooperatives to cheat on the certified volumes bought from growers and sold to exporters.

The "mass balance" cannot be ignored. In the factories, setting up 2 production lines for non-certified and certified chocolate would be very costly. The companies have therefore negotiated the right not to separate them, but simply to adjust the volume of sales of certified chocolate to the volume of purchases of certified cocoa. In the end, the notion of traceability is just as fragile downstream in the chain as it is upstream (from the plot to the cooperative).

In conclusion, the progressive approach is understandable from an environmental, ethical, and traceability point of view. Still, the means and results of mass certification fall far short of the stated objectives. So, consumers do not buy the products they think they are buying. The final straw is undoubtedly the certification of plantations created in classified forests. Certification masks reality rather than confronting it. The political and media risks of cocoa certification are, therefore, immense.

3. Recommendations for public policy

3.1. Act on global governance

The literature suggests that governments are better placed than multinationals or even NGOs to deliver policy outcomes that would increase the well-being of society as a whole. Although voluntary sustainability standards (VSS) are recognised as transnational governance instruments that can be used to pursue sustainable development in global value chains, they are struggling to deliver on their promises. The many shortcomings in their design and implementation identified in the literature point to the need to foster greater international

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cooperation around these standards, in particular by exploring ways of updating existing governance frameworks.

Insofar as they function as barriers to trade, they must incorporate a certain number of regulations relating to transparency on SPS and TBT and Expand the work program of the United Nations Forum on Sustainability Standards (UNFSS) to officially include international, regional, and national standardisation bodies.

Public food quality and safety standards are regulated through the WTO SPS and TBT agreements to assure that the delivery of food quality and safety is not minimally distorting trade.

There is no similar regulatory framework to ensure that VSS effectively deliver environmental and social sustainability benefits without distorting trade (Bemelmans et al., 2023).

The International Trade Organisations appear to be the leading international players with both the means (global convening power) and the legitimacy (member governments responsible for their actions) to act collectively and impartially to compensate for the potential failings of private governance in sustainability. While negotiations within the WTO are struggling to reach an agreement on making certain sustainability requirements compulsory in commercial transactions because the owners of the standards are private entities and not States, other international organisations, such as the UNFSS, may have broader responsibilities for monitoring the application of specific compulsory minimum standards, such as the Codex Alimentarius.

3.2.Act on VSS governance

VSS are generally private standards that give their creator authority to set rules and guidance for their users to achieve a certain quality, mostly in regard to technical, social, or environmental aspects. The standard is guaranteed through monitoring.

The technical specifications of the standard are established through consensus mechanisms. However, some VSSs include very few producers in their governance and are often in a minority position when influencing standard requirements. The participation of small producers in the governance of VSS should be made compulsory.

Third-party certification seems to guarantee impartiality in the certification and awarding of VSSs. However, the authors consider that the proliferation and multiplicity of VSSs can cause failure when they lead to overlaps, contradictions, race-to-the-bottom situations, multiple audits, unjustified discrimination or unfair exclusions. Certains auteurs considèrent *"The*

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certification industry, including the accreditation business, that sets the norms and decides who may audit and certify according to the norm in question, is sometimes criticised for abusing its market power to exert anti-competitive practices, such as unfair pricing, inadequate inspections, and corruption. In addition, big certifiers often refuse to share their testing protocols, thereby impeding a move to greater harmonisation, mutual recognition or equivalence of standards" (IIS 2017, 27–28[1]).

Intense competition between VSSs, particularly in poor countries, leads to a downward trend in requirements and weak controls in the field. Audits are carried out every 3-4 years, and the duration of each audit is reduced to a minimum to increase productivity (see the case of cocoa in Ghana and Côte d'Ivoire). In addition, particular specifications, such as child labour, are challenging to assess in the field. In addition, the capacities and costs associated with certification, compliance and control make it difficult for some producers and smallholders to obtain certification, mainly when these costs are not offset by sufficient income and/or price premiums.

VSS specifications need to be made more transparent and easier to understand, the views of small-scale producers need to be taken into account when adapting the vocabulary and implementation, and investment needs to be made in training and skills for producers.

Action is also needed to address the gaps in the inclusion of low- and middle-income countries and smallholders in the VSS and the diversity of their systems regarding compliance promotion, which is essential in the context of possible complementarity with public and development policies.

Public policy needs to agree to a system that recognises credible and non-credible SSVs to improve their credibility. Examples include specific regulatory measures, such as the proposed EU directive on green claims, which includes requirements on environmental labels, and private organisations, such as the ISEAL Alliance, which requires compliance with codes of good practice in standard setting, assurance, and impact assessment. A final example has emerged recently in the context of the move towards due diligence measures.

[1] Institute of Social Science (IIS), University of Tokyo. 2017. *Private Standards and Global Governance: Prospects and Challenges.* ISS Research Series No. 62, Record of the 76th GSDM Platform Seminar held at Ishibashi Memorial Hall, Graduate School of Interdisciplinary Information Studies, University of Tokyo, 12 December 2016, edited by J. Nakagawa. Tokyo: IIS.

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3.3.Engage companies' and traders's responsibility in achieving sustainable development

The demand for cocoa that meets high sustainability standards in Europe is increasing and will continue to do so. Therefore, being a socially responsible producer and exporter is not only an ethical decision but also one that makes business sense. Farmer poverty, child labour, and gender-based discrimination are among the key issues that must be addressed. A wide range of interventions needs to be considered when addressing these challenges.

In parallel with the VSS, most major chocolate manufacturers have developed social responsibility (CSR) programmes concerning their supplies, enabling them to differentiate themselves in consumer markets. Examples include the Cocoa Life (Mondelez), Cocoa Horizon (Barry-Callebaut), Mars Cocoa for Generation (Mars Group) and Cocoa Plan (Nestlé) programmes. Amiel et al. (2019) analysed four large group programmes based on four variables: the reduction of child labour, the intensification of production, the development of agroforestry and the exclusion of farms guilty of illegal deforestation. An analysis of the content of these different programmes shows that they are very similar and focus on capacity-building for producers through training, access to credit for intensification (in particular, the purchase of inputs), distribution of cocoa and other tree seedlings, mapping of plots, access to education, and so on. These different programmes are illustrated by logos displayed on products, leading to confusion for consumers, and some multinationals in the sector are seeking to free themselves from other labels such as FT and RA.

Furthermore, the fact that these programmes work in silos and are superimposed on other certifications enables companies to differentiate themselves in the marketplace. This dilutes the impact they could have by operating in a coordinated fashion or under the umbrella of an independent organisation. However, recognising specific standards under ISO 34101 could change the situation (Carimentrand, 2020).

The role of companies in addressing social, economic and environmental issues has attracted the attention of European legislators and EU Member States.

On 23 February 2022, the European Commission adopted a proposal for a Directive on corporate sustainability due diligence[2]. The EU's Corporate Sustainability Due Diligence Directive (CSDDD) firmly embeds human rights and environmental requirements in corporate

[2] https://commission.europa.eu/business-economy-euro/doing-business-eu/sustainability-due-diligence-responsible-business/corporate-sustainability-due-diligence_en

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governance systems to ensure responsible business conduct along global value chains. The new rules will ensure that companies in scope identify and address adverse human rights and environmental impacts of their actions inside and outside Europe.

The rules on corporate sustainability due diligence will be enforced through:

- Administrative supervision: Member States will designate an authority to supervise and enforce the rules through injunctive orders and effective, proportionate and dissuasive penalties (in particular fines). At the European level, the Commission will set up a European Network of Supervisory Authorities that will bring together representatives of the national bodies to ensure a coordinated approach.
- Civil liability: Member States will ensure victims get compensation for damages resulting from an intentional or negligent failure to do due diligence.

Corporations have been using limited liability to avoid tort liability and externalise societal damages, as confirmed by economic theory and empirical evidence. In environmental and human rights protection, the CSDDD proposal could potentially ameliorate this situation by establishing civil liability for failure to carry out due diligence in the relationship with subsidiaries and business partners in the supply chain. Facing supply chain liability, companies could not avoid environmental harm or human rights violations simply by using subsidiaries or outsourcing harmful activities to remote business partners.

Some authors consider that companies could abuse this directive by choosing a favourable burden of proof regime or by making it more difficult for victims to claim damage caused by a lack of due diligence through the choice of incorporation or the design of complex supply chains (Mak, 2022).

One way for companies to comply with their duty of care is to rely on voluntary sustainability standards drawn up by third parties. In this respect, the European regulation specifies that: "certification or other third-party verification mechanisms may be used in the risk assessment procedure, but they must not replace the operator's responsibility for due diligence".

Companies' due diligence has led to the amendment of the specifications for the FT and RA labels to align with the new regulatory context.

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To make the tripartite logic of regulation, due diligence and labels effective, it is necessary to:

1- ensure product traceability. The current approach adopted by both Rainforest and Fairtrade for co-operatives is based on group certification procedures, including internal control systems. This approach does not seem sufficient in the context of the malfunctioning of cocoa cooperatives in West Africa (Ruf et al., 2019). About deforestation, efforts are being made to develop GPS referencing of farms and to use remote sensing of deforestation dynamics. In this respect, the development of mapping and geolocation will make audits more effective.
2- ensure that pro-environmental economic incentives are in place for producers and that producer cooperatives manage these premiums fairly. The European regulation does not include measures to regulate prices or increase producers' incomes to meet these requirements.

3.4.Act on local public policy

Producing countries act on commodity chains by controlling exports through public agencies such as COCOBOARD in Ghana. In this case, the government is responsible for marketing on the international market, quality control, seed and plant production, the regulation of phytosanitary products, the dissemination of agricultural practices and material support for producers.

In most producer countries, the government controls export volumes and prices but does not intervene in the certification process. Multinationals operating in these countries provide advisory services and technical support to producers to help them make the ecological transition.

Many authors have criticised the withdrawal of the State from. Advisory activities. A simple transfer of knowledge and technology is not enough to support farmers in their transition to more sustainable practices (Ingram, 2008), because this type of change is more than just a technical process; it is also a socio-cultural process that requires farmers to build up new knowledge (Vanclay, 2004). The contribution of capacity building through training sessions is a determinant of transition success (Dietz et al., 2021)

(Dietz et al., 2021). Technicians and farmers must work together to co-construct knowledge that is useful to farmers (Gboko, Faure, 2018).

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Certifications, including Fairtrade, rely on small cooperatives and communities partnerships to promote sustainable livelihoods. An analysis of 80 cocoa co-operatives in Côte d'Ivoire concerning the composition of management teams, management of the premium and the guaranteed minimum price shows that the majority of co-operatives are a simple "conversion" of the status of pre-existing private companies, without any real collective or adherence to co-operative values. The conditions are not ripe for collective and democratic management of the profits from so-called "sustainable development" labels, whose credibility has been shaken (Ruf et al., 2019; Gboko, Faure, 2018).

This study shows that:

- cooperatives" are set up by traders and trackers
- certification takes place at the cooperative level
- growers do not even know that they have been "enrolled" in a cooperative, let alone that they are Utz, Rainforest Alliance or Fairtrade certified.
- The management team is generally linked to the founder and includes a group administrator - ADG associated with Utz and Rainforest Alliance certifications.

Whether they are paid by the exporter or by the cooperative, their cost is deducted from the certification premium and is, therefore, under the exporter's control. They are, therefore, the "agents of the multinationals". They provide advice and support to the cooperative and the farmers but also play a significant role in reporting information on cooperative members and cocoa production. In addition to their stated role of managing the internal control system linked to group certification, by receiving heavy questionnaires from the exporter to pass on to the farmers, they feed the industry databases and the trade - and not the certification agencies.

The urgency is to systematically inform growers about the contracts signed between cooperatives and exporters under these "sustainable development" labels. One of the top priorities is the transparent management of premiums, which requires an innovative effort geared towards participatory management by growers.

Finally, there is the poor traceability of products and raw materials. Traceability is the ability to trace a product back to its origin. In commercial terms, a traceability system involves several levels of responsibility of the different actors in the global value chain to demonstrate, for

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example, that a product that makes a certain claim of conformity is not mixed with identical non-compliant products (Meliado, 2017).

Some new digital technologies are used to identify the producer's land position and to trace the product with blockchain technologies.

Conclusion

International trade is recognised as bringing economic prosperity for many countries (economic growth, increased income, job creation) but may also generate significant damages (overuse of land, biodiversity loss, labour rights violation, child labour, and increased inequalities) (UNCTAD, 2019; Irwin, 2020; Bradford, 2020).

International trade can significantly promote sustainable development (UNCTAD, 2021, WTO, 2022), engaging multinational corporations and GVCs to spread social and environmental standards. Sustainable standards are widely analysed in the literature as primary emerging forms of transnational regulation. Primarily, they aim to encourage practices that are more respectful of the health, the environment, the human and social rights, and sustainable development. The literature on voluntary standards has focused on their strategic use by stakeholders to serve various interests: NGOs use them to defend their causes, manufacturers use them to manage risks in their supply chains, comply with buyers' requirements, limit their costs and differentiate themselves on the market. Governments use them to regulate markets. At a more general level, various studies describe voluntary standards as forms of government. Due to the weak WTO capacity to evolve and integrate sustainable development in international trade, free trade agreements (FTAs) have increasingly been considered as an alternative governance framework for the links between trade, environment and labour. As an important export market, the EU include "Trade and Sustainable Development" (TSD) chapters and proposes a separate promotional model to regulate the links between trade, environment and labour in free trade agreements (FTAs).

However, TSD chapters have been increasingly questioned about their ability to effectively deliver on the promise to enhance global environmental and social governance.

Sustainability chapters comprise several environmental and labour standards. These standards fall into three groups: obligations based on existing international agreements, obligations related to existing domestic legislation, and more aspirational clauses referring to higher levels of protection.

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According to labour protection, the parties undertake to ratify and effectively implement the four core labour standards that are enshrined in the ILO Declaration on Fundamental Principles and Rights at Work. In addition, the parties further reaffirm their commitment to effectively implement the ILO Conventions that they have each ratified and to make efforts towards ratifying other ILO Conventions.

According to environmental standards, the parties simply reaffirm their commitment to effectively implementing the multilateral environmental agreements (MEAs) that they have each ratified in their domestic laws and practices.

The literature review highlights questions about the implementation and enforcement of TSD provisions and draws attention to compliance by the EU (and its Member States) (Duran, 2020) Should the EU, therefore, seek to put more of its market power behind its labour governance strategy? Such an approach could, in part, be realised by the most common suggestion for reform from European interviewees involved in the labour movement, namely to increase the enforceability of the TSD chapter by giving the EU the ability to withdraw preferential access to its market if labour standards are violated (Harrisson et al., 2019).

In global value chains in poor countries, TSD could be based on specific existing voluntary sustainability standards that are primarily binding on the international players that govern these chains. Transferring the promotion and control of the implementation of sustainable practices in production processes to private players through the due diligence approach could involve multinationals and make them accountable in a global process of social and ecological transition.

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