

Voluntary Sustainability Standards

Sustainability Agenda and Developing Countries: Opportunities and Challenges

5th Flagship Report of the United Nations
Forum on Sustainability Standards



A Platform of International Dialogue on Voluntary Sustainability Standards

Voluntary Sustainability Standards

Sustainability Agenda and Developing Countries: Opportunities and Challenges



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ABOUT THE UNITED NATIONS FORUM ON SUSTAINABILITY STANDARDS

The United Nations Forum on Sustainability Standards (UNFSS) is a platform created to analyse voluntary sustainability standards (VSS) and disseminate information about them. It is rooted in the mandates and activities of participating United Nations agencies. Its value lies in its pooling of resources, synchronizing of efforts and assuring policy coherence, coordination and collaboration in line with the “One UN” concept. UNFSS is coordinated by a steering committee consisting of the Food and Agriculture Organization of the United Nations (FAO), the International Trade Centre (ITC), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Environment Programme (UNEP), the United Nations Industrial Development Organization (UNIDO), and the United Nations Economic Commission for Europe (UNECE). UNCTAD is the Secretariat of the UNFSS. UNFSS works in partnership with the VSS experts representing civil society, producer associations, processors and traders, standard-setting organizations and certifiers, trade negotiators, consumers and researchers. It facilitates dialogue and knowledge exchange among intergovernmental actors, enabling them to communicate with each other and their target groups with a view to providing relevant information and influencing concerned stakeholders. For further information, see: www.unfss.org.

ABOUT THE UNFSS FLAGSHIP REPORT SERIES

UNFSS publishes its flagship report on diverse topics relating to VSS once every two years. It seeks to serve as an important tool for stakeholders in both the public and private sectors to gain impartial and substantive information about VSS systems throughout the world. The topics covered in these reports are collectively identified by national platforms, which are national initiatives for VSS. These platforms are created and shared by stakeholders under each country's designated coordinating body, and aim to provide a neutral forum for information exchange on VSS. Given the specificities of the topics relevant to the activities carried out by the national platforms, the information and analyses provided are intended to serve as a basis for policy dialogues leading to action for sustainable development appropriate to different countries' respective needs, conditions and levels of development.

In 2013, UNFSS published its 1st Flagship Report,¹ which presented an array of salient VSS and public policy issues, and developed an inventory of some of the leading initiatives relating to VSS. The report elucidated tensions at the nexus of VSS and public governance. In September 2015, the United Nations Member States adopted the 2030 Agenda for Sustainable Development which identified a set of Sustainable Development Goals (SDGs) and stipulated that those goals “are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.” Accordingly, governments, businesses and civil society were encouraged to promote synergies between their actions.

The 2nd Flagship Report,² published in 2016, further dissected the interplay between VSS and public governance by identifying the optimal dynamics between public policy processes and VSS to ensure that sustainability objectives would be effectively met. The report discussed the implementation of VSS within the public sector. It also identified the economic, environmental and social benefits of VSS, as well as the rationales for public sector engagement with VSS.

In 2018, the 3rd Flagship Report, titled *VSS, Trade and the SDGs*³ highlighted the role of private actors with an emphasis on global trade. The report sought to promote an understanding of VSS either as an enhancer or a facilitator of global trade, and examined the direct and indirect impacts of VSS on an economy. It also provided a benchmarking analysis for identifying the links between VSS and the SDGs. The result revealed strong linkages with SDG 8: Decent Work and Economic Growth, SDG 12: Responsible Production and Consumption, and SDG 15: Life on Land.

The 4th Flagship report,⁴ published 2020, explored the role of government as a vehicle to drive the uptake of VSS, thereby serving as a powerful tool to help achieve the SDGs and other public sustainability commitments. It also showed that the effectiveness of VSS to contribute to sustainable development depends partly on their degree of uptake by economic operators. It suggested that governments could play a significant role in boosting VSS uptake by integrating VSS into public procurement and trade policy.

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The UNFSS Secretariat organized a series of webinars, together with the [UNFSS Academic Advisory Council \(AAC\) members](#) during the first quarter of 2021, which led to the selection of the theme for this UNFSS 5th Flagship Report. Three round tables on sustainability standards were organized, which focused on (i) environmental concerns, (ii) social concerns, and (iii) economic concerns respectively. The aim of these round tables was to foster debate on the potentials and limitations of sustainability standards as tools for achieving environmental, social and economic sustainability goals. Through knowledge and information exchange and policy dialogues, the round table discussions aimed to provide inputs and lay the groundwork for further debate and action.

Further discussions around the selected theme for this report took place at the [annual Academic Advisory Council meeting](#) held on 4-5 November 2021 at the European University Institute, Florence, Italy. Members of the [UNFSS National Platforms Network](#) also provided further inputs to discussions on the report.⁵ The UNFSS Steering Committee presented an outline of the proposed report.

This report has benefited from the comments and guidance provided by the AAC Co-chairs: Mercedes Aráoz Fernández and Bernard Hoekman. Santiago Fernandez de Cordoba (UNCTAD) is the coordinator of the UNFSS Secretariat and a co-editor of this publication, together with Axel Marx (University of Leuven). Niematallah E. A. Elamin (UNCTAD) and Charline Depoorter (University of Leuven) are the assistant co-editors.

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List of Abbreviations

ARSO	African Organisation for Standardisation
CmiA	Cotton made in Africa
CSR	Corporate Social Responsibility
EMA	ECOMark Africa
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FMP	Forest Management Plan
FSC	Forest Stewardship Council
GAP	Global Animal Partnership
GDP	Gross Domestic Product
GMP	Good Manufacturing Practices
GVC	Global Value Chain
HRDD	human rights due diligence
IISD	International Institute for Sustainable Development
ILO	International Labour Organization
ISPO	Indonesian Sustainable Palm Oil (scheme)
ITC	International Trade Centre
LDC	Least Developed Country
mHRDD	Mandatory Human Rights Due Diligence
MSMEs	Micro, Small and Medium-Sized Enterprises
MSPO	Malaysian Sustainable Palm Oil (certification scheme)
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
PEFC	Programme for the Endorsement of Forest Certification
PPP	Purchasing Power Parity
RSPO	Roundtable on Sustainable Palm Oil
RTRS	Round Table on Responsible Soy Association
SDG	Sustainable Development Goal
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNFSS	United Nations Forum on Sustainability Standards
UNGP	United Nations Guiding Principles
UNHRC	United Nations Human Right Council
UNICEF	United Nations International Children's Emergency Fund
UNIDO	United Nations Industrial Development Organization
VSS	Voluntary Sustainability Standard(s)
WTO	World Trade Organization

Executive Summary

To achieve sustainable and inclusive growth, it is vital that sustainable business practices are adopted throughout entire global value chains (GVCs). Companies are increasingly placing voluntary sustainability standards (VSS) at the centre of the sustainability approaches governing their GVCs. So much so that VSS have been proliferating over the past few decades. They have emerged as important tools to address sustainability challenges such as biodiversity loss, climate change, pollution and human rights violations.

By establishing standards for sustainable consumption and production practices, VSS can help achieve environmental, social and economic sustainability. It is expected that the implementation of VSS will contribute to mitigating environmental crises, and to improving social and economic sustainability, fostering food security and improving livelihoods, as well as helping to improve the goals of job creation and poverty alleviation, among others. Compliance with VSS requirements could also increase market access and generate trade opportunities for producers in developing countries.

However, VSS also generate challenges for developing countries, particularly for small producers in those countries. In some cases, they can increase production costs and restrict the integration of smallholders and producers from developing countries into GVCs through exclusionary effects. Barriers linked to governance gaps, lack of access to finance, lack of incentives and sociopolitical resistance to VSS, among others, can prevent their adoption and hence producers' access to higher value markets. Recent policy developments make these exclusionary effects even more significant, necessitating an improved understanding of the effects of VSS, especially for developing countries and least developed countries (LDCs).

Against this background, this report discusses the role of VSS in advancing the sustainability agenda in developing countries, and assesses the opportunities and challenges associated with VSS uptake in those countries. The report aims to:

1. Examine the opportunities VSS offer for developing countries, and their role in advancing the environmental, social and economic sustainability agenda in those countries;
2. Present the challenges developing countries face with regard to VSS uptake and use; and
3. Distil policy implications that could provide guidance to both policymakers and researchers.

Chapter 1 begins by providing an overview of VSS in developing countries. It introduces VSS as a governance tool, and describes their evolution and uptake in different countries. The chapter documents an increase in the number of VSS over time and their diffusion across the globe, especially in key tropical commodity sectors (section 1.2). It also highlights the uneven uptake of VSS across countries, and shows that the level of economic and institutional development in a country is an important factor in influencing the degree of uptake and use of VSS (section 1.3). Several barriers to VSS uptake, especially in developing countries, are identified, including costs related to certification, lack of incentives to seek and obtain certification, sociopolitical resistance to VSS, and lack of inclusion of developing countries' representatives in VSS governance structures.

Chapter 2 takes stock of the current evidence on the impact of VSS and their role in fostering environmental, social and economic sustainability in developing countries. For each of these key dimensions of sustainability, the chapter provides an overview of the current state of research on the impact of VSS based on a selected number of studies. Section 2.2 presents empirical evidence on the effects of VSS on environmental outcomes such as pollution abatement, biodiversity protection and halting/reducing deforestation. Section 2.3 explores research on the contribution of VSS in improving social outcomes, including those relating to income, poverty alleviation, managerial practices, education and gender equality. Section 2.4 focuses on the economic (trade-related) effects of VSS, and highlights the channels through which VSS can act either as catalysts or as barriers to trade. Overall, studies find a positive impact of VSS on the different sustainability dimensions. However, effects remain mixed and highly context-specific. In addition, the current state of research on the impacts of VSS highlights trade-offs in sustainability improvements across sustainability dimensions. To further understand the varying

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effects, section 2.5 explores the factors that contribute the most to compliance with standards, assuming that better compliance generates more significant positive sustainability impacts. Several potential drivers for compliance are discussed, of which the presence of price premiums seems to be the most important, especially in developing countries.

Chapter 3 focuses on the broader policy context in which VSS operate. It explores some important challenges and recent policy developments that affect VSS, and their potential to contribute to sustainability in developing countries. The chapter also examines the governance context in which VSS operate, their complementarity or competition with newly established national standards, their link(s) with new due diligence legislations, and their integration into broader policy mixes. Concerning the governance context, section 3.2 highlights the importance of VSS compatibility with existing governance institutions in order to create an impact. Section 3.3 discusses the emergence of new national standards, with a specific focus on palm oil standards in Indonesia and Malaysia and ECOMARK in Africa, and explores possible complementarities between national standards and VSS. Section 3.4 highlights the implications of new human rights due diligence regulations for VSS and for producers in developing countries. Finally, the chapter discusses the increasing integration of VSS into national public policies and their interactions with other regulatory initiatives, as well as the implications thereof (section 3.5).

Chapter 4 concludes the report by presenting policy recommendations to harness the opportunities provided by VSS to overcome the challenges confronting developing countries. Recommendations include advancing transparency and research on VSS and their impacts; reducing market imperfections to support certification and reduce exclusionary effects; harnessing private sector initiatives to complement public policy; establishing cooperation and mutual recognition among VSS and fostering dialogue; and preparing for continuous new policy developments in the field.

The following are the main takeaways from the report.

Developing countries continue to face significant challenges to engaging in certification

The main challenges include the costs involved in obtaining certification, the lack of incentives to adopt VSS, sociopolitical resistance to VSS, the lack of inclusion of actors from developing countries in VSS governance structures, and the prevalence of governance gaps between developed and developing countries.

Evidence of the environmental, social and economic impacts of VSS is incomplete and case-specific

Overall, studies revealed a positive impact of VSS on the different sustainability dimensions. However, effects remain mixed. In some cases, and on some sustainability parameters, studies found a positive impact of VSS, while in other cases they found no impact, and in some cases even a negative impact. In addition, the current state of research on VSS impacts highlights trade-offs in sustainability improvements, as some studies found a positive impact on environmental outcomes but not on social or economic outcomes, or the other way around. It was also found that better compliance generates more significant positive impacts. This suggests the need for more research on the impacts of VSS, and for actions to reduce VSS-induced sustainability trade-offs.

VSS can play a significant role in public policies and new policy developments

The recent emergence of human rights due diligence (HRDD) regulations constitutes an important development in public policy that can potentially impact VSS significantly. HRDD regulations require firms to govern their value chains in conformity with human rights criteria and can drive the adoption of VSS as management tools for value chain governance. More generally, governments are expected to play a key role in addressing sustainability concerns, and VSS are increasingly used to support government action. The interaction between VSS and governments could lead to the latter supporting VSS or controlling VSS, or to VSS supporting governments. Each of these interactions would result in different forms of public-private policy mixes. However, the integration of VSS into new public development policies have potentially challenging implications for developing countries that need to be better understood and addressed.



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INTRODUCTION

VOLUNTARY SUSTAINABILITY STANDARDS SUSTAINABILITY AGENDA AND DEVELOPING COUNTRIES: OPPORTUNITIES AND CHALLENGES

Over the past few decades, voluntary sustainability standards (VSS) have emerged as important tools to address key sustainability challenges such as biodiversity loss, climate change and human rights violations. Indeed, an increasing number of firms are putting those standards front and centre of their sustainability approach. As a result, VSS are proliferating, often as part of corporate social responsibility (CSR) or risk management initiatives. And there is growing recognition that to achieve sustainable and inclusive development, responsible business practices need to be implemented throughout the entire global value chain (GVC). Moreover, those standards are likely to become even more prominent in the coming years as several new regulatory initiatives impose due diligence requirements on firms.

In theory, compliance with VSS requirements eventually contributes to mitigating environmental crises and improving social and economic sustainability in terms of improved livelihoods and poverty alleviation, among others. In addition, VSS can work as a trade-enhancing tool that can contribute to the integration of producers from developing countries into GVCs. They can push the frontier of best practices for sustainable production and help build trust in those practices among consumers and other stakeholders. However, they can also present challenges for developing countries, particularly for their smallholders and producers, who cannot afford the information and production costs of VSS certification. This can result in their exclusion from global trade. In addition, the governance gaps between developed countries, where standards are usually designed, and developing countries, which face difficulties implementing them, make it harder for developing countries to employ such standards. Moreover, the proliferation of standards adds further challenges. Thus, VSS can be viewed as powerful market-based tools to scale up sustainable development only if the challenges facing developing countries' smallholder producers as well as their concerns relating to these standards are adequately addressed.

Against this background, this 5th Flagship Report aims to study the role of VSS in advancing the sustainability agenda in developing countries. First of all, the report aims to create an understanding of VSS, how they have grown over time and what they seek to achieve. Hence, chapter 1 provides an introduction to VSS, including their definition, scope and rate of uptake over time. Second, it aims to inform policymakers and practitioners of the possibilities and limitations VSS offer as an international governance tool for sustainable development and their potential contribution to achieving the SDGs. Therefore, chapter 2 takes stock of the current evidence on the role of VSS in advancing the socioeconomic and environmental sustainability agendas in developing countries. It also provides an overview of the effects of VSS on trade performance. Research shows that VSS can make a positive contribution to sustainable development but this is context-specific. Several studies find a positive impact on the three dimensions of sustainability, but also a significant number of studies do not. Third, the report explores the broader regulatory context in which VSS operate and how this can influence such standards. Consequently, chapter 3 focuses on the broader policy context in which VSS operate, and explores some important challenges and recent policy developments that affect VSS, their uptake, and their potential to contribute to sustainability in developing countries. This chapter highlights the importance of existing governance institutions for VSS effectiveness, and describes the proliferation of national standards as well as the emergence of due diligence legislations around the world. Finally, the many different interactions between VSS and public policy are examined, including how VSS are increasingly integrated into public policies. The report concludes with chapter 4, which presents policy recommendations to harness the opportunities provided by VSS to help developing countries overcome numerous sustainability challenges and achieve the SDGs.



CHAPTER 1

VOLUNTARY SUSTAINABILITY STANDARDS: *AN OVERVIEW*

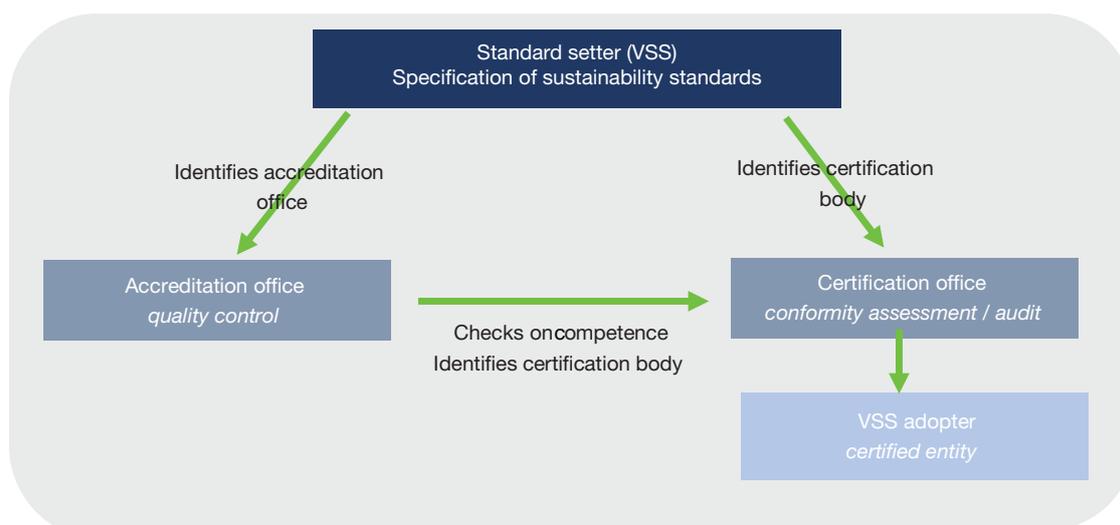
1.1 VSS: Definition, scope and how they work

The UNFSS (2013: 3) 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 basic human rights, worker health and safety, the environmental impacts of production, community relations, land use planning and others”.

VSS start with developing a general mission and set of principles, often based on existing international commitments, to foster sustainability in GVCs. These principles form the basis for developing specific standards and criteria that enable compliance assessment. They then develop a set of indicators for each standard that allow standardization and comparisons of conformity assessments.

Since they are voluntary governance tools, any actor along a GVC can apply to a VSS and commit to implementing its sustainability standards. Upon application, an initial conformity assessment is conducted based on a management plan submitted by the applicant, which outlines how conformity with the specific standards will be achieved. Monitoring or verification of the implementation of these plans is usually carried out by independent certifiers (UNCTAD, 2021). If the applicant complies with the VSS, a certificate is granted. Figure 1 provides an overview of the certification process.

Figure 1 VSS certification process



The validity period of VSS certificates varies from one year up to five years, depending on the VSS. At the end of the validity period, the certificate can be renewed, conditional upon passing a re-certification conformity assessment. In addition, during the validity period of the certificate, complementary conformity assessments (i.e. annual “surveillance audits”) are usually carried out to ensure continuous compliance with the standards.

1.2 VSS TRENDS OVER TIME: SUPPLY AND DEMAND

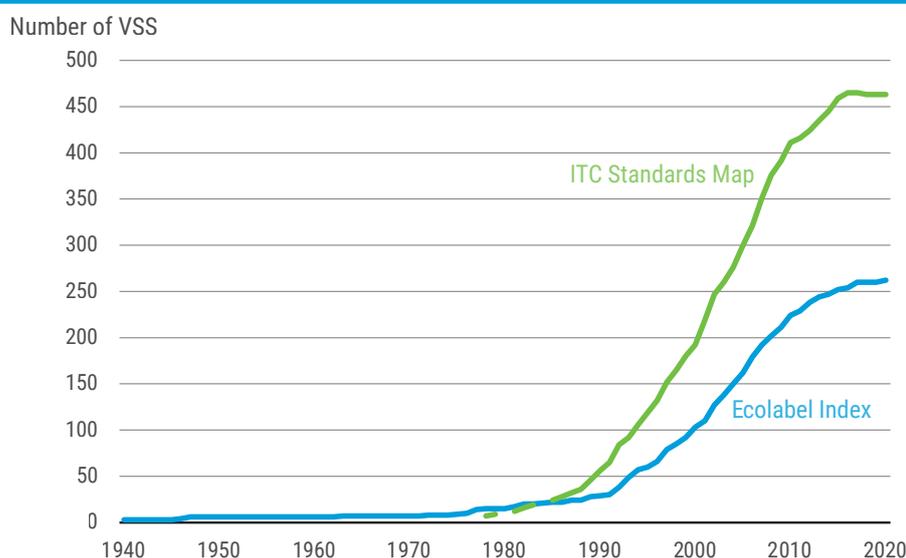
Since the 1990s, VSS have gained increasing importance as governance tools for sustainable value chains. This can be illustrated by trends in different variables, including (i) the number of VSS in existence and (ii) the certified area and certified share of production of selected commodities.

Number of VSS

The number of VSS has increased significantly over time. In July 2022, there were around 318 VSS in existence according to the ITC Standards Map, and around 456 ecolabels according to the Ecolabel Index, compared to around 50 VSS in 1990 (figure 2).⁶ Figure 2 shows that VSS truly proliferated in the 1990s, largely due to increased consumer awareness of sustainability issues, an increase in public regulations, boycotts and campaigns by non-governmental organizations (NGOs) targeting firms that permitted or indulged in harmful production practices, and the competition between VSS with different stakeholder configurations (industry versus NGO standards) (Marx and Depoorter, 2021).

The number of VSS continued to rise, although at a slower pace, until the 2010s, but has been stagnating since 2017. This stagnation appears to have been driven largely by (i) mergers and alliances, (ii) saturation in some economic sectors, and (iii) difficulties of establishing VSS in other economic sectors (UNFSS, 2020).

Figure 2 Evolution in the number of VSS, 1942-2022



Source: Author's calculations based on the ITC Standards Map and the Ecolabel Index.

Note: The numbers are based on the reported date of establishment of the VSS schemes, and only include those still operational in 2022.

Despite the recent stagnation in their number, VSS have become prominent sustainability tools through the expansion or consolidation of some leading VSS organizations. They are used in GVCs in various sectors and industries such as agriculture, mining, forestry and fisheries. The most frequently certified products are agricultural products, followed by processed foods. In the agricultural sector, the number of VSS has risen markedly since the early 1990s (Elamin and Fernandez de Cordoba, 2020). Over the past two decades, global markets have seen growing supply and demand for food and other sustainably produced agricultural products that possess specific quality characteristics linked to composition, origin, production method or terms of trade (Loconto and Dankers, 2014).

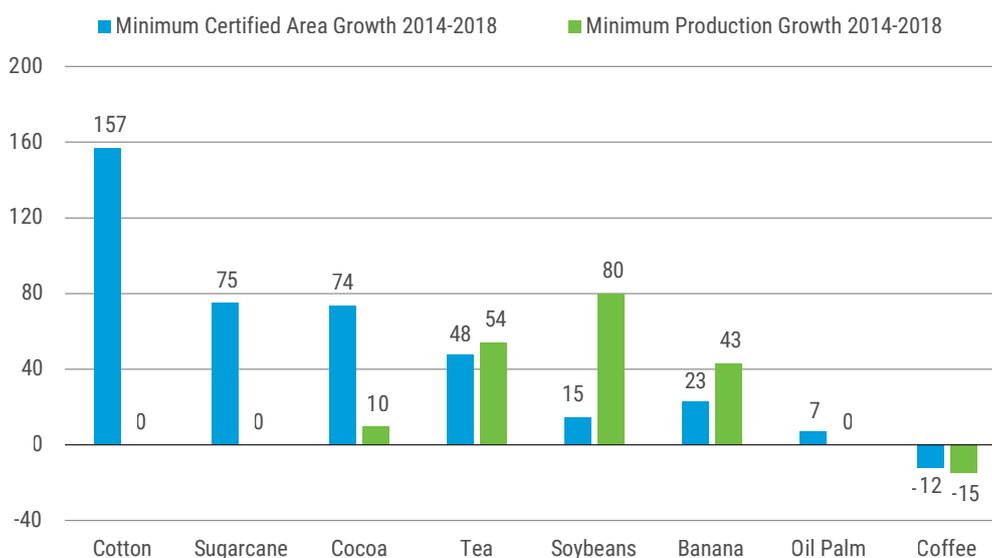
Certified area and production of selected commodities and VSS

The growth in certified production areas also attests to the increasing importance of VSS in GVC governance. To illustrate this, the State of Sustainable Markets report (ITC, et al., 2021) provides insights into VSS coverage based on 12 major VSS (4C, Better Cotton Initiative, Bonsucro, CmiA, Fairtrade, GLOBALG.A.P., IFOAM – Organics International, ProTerra, Rainforest Alliance, RSPO, RTRS and UTZ)

that certify some major agricultural commodities, including cotton, sugarcane, cocoa, tea, soybeans, bananas, palm oil and coffee. The report provides data on individual VSS coverage and on the area under certified production of individual commodities, as well as their evolution over time. It uses minimum certification areas and shares to avoid overestimates resulting from double certification.⁷

The data show a growth in certified areas (ha) and certified production (metric tons) of major agricultural commodities. In particular, there has been a vast expansion of areas certified for the production of some commodities such as cotton, sugarcane and cocoa. Figure 3 shows the growth rate of certified areas (in hectares) and certified production volume (in tons) during the period 2014–2018. The highest growth rate of certified area was for cotton production (157 per cent), followed by sugarcane (75 per cent), cocoa (74 per cent), and tea (48 per cent). On the other hand, there was slower growth in the areas certified for the production of bananas (23 per cent), soybeans (15 per cent) and palm oil (7 per cent). With regard to certified production by volume, soybean production registered the most rapid growth, of 80 per cent, followed by tea and bananas at 54 per cent and 43 per cent, respectively. The data for some of the categories in minimum certified production growth are missing, such as cotton, sugarcane and palm oil. Coffee, on the other hand, experienced negative growth in terms of both certified areas and certified production volume. The decrease in certified coffee can mainly be explained by (1) the decrease in coffee production area globally (hence a decrease in both certified and non-certified production), and (2) the decrease in 4C uptake, which is the largest VSS for coffee.

Figure 3 Growth rate of certified area and production of selected major agricultural commodities and major VSS, 2014–2018 (per cent)



Source: Author's calculations based on ITC (2020).

1.3 VSS UPTAKE IN DEVELOPING COUNTRIES

The potential for VSS to contribute to solving sustainability issues partly depends on their level of uptake. Broadly defined, VSS uptake refers to the degree to which different economic actors engage with VSS, including producers and other actors along the value chain such as traders, manufacturers and retailers, as well as end-consumers and governments. The UNFSS 4th Flagship report (2020) provided an overview of the different ways to measure VSS uptake based on different units of analysis. In particular, the report analysed the number of active VSS in all countries, and showed that countries with open economies diversified economic sectors and exports, relatively well-functioning governments and at a certain level of development are more likely to participate in VSS schemes. Generally, there tend to be fewer VSS active in developing countries. These findings are in line with the academic literature on VSS uptake that has often

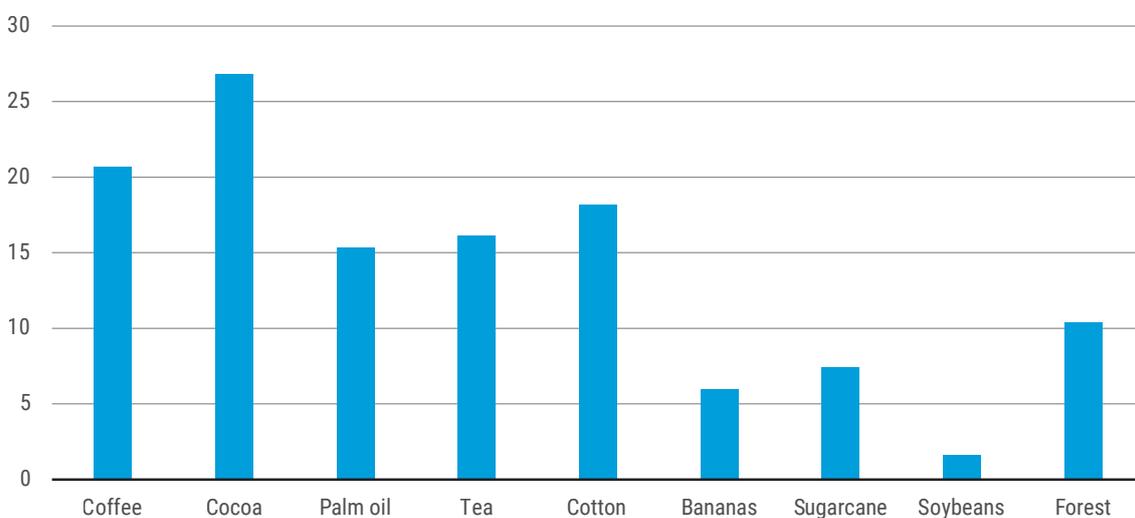
highlighted a gap in degree of certification between developed and developing countries. This section explores the link between certification and income level in more depth, and identifies the obstacles faced by developing countries in adopting VSS. It also analyses the issue of maintaining certification over time, which is essential to realize the long-term sustainability improvements that VSS can generate. Finally, it presents the latest efforts by VSS schemes to enable or encourage their uptake in developing countries.

1.3.1 Certification and development level

The literature has highlighted that VSS uptake correlates with income levels of countries: developed countries tend to take up more VSS than developing countries. This is because the capabilities — financial, technical, institutional and regulatory — of economic actors in developing countries tend to be weaker with respect to compliance with sustainability standards (Auld et al., 2008, 2015; Marx and Wouters, 2015).

Nevertheless, there are significant certification dynamics in developing countries, as they have a substantial tropical agricultural sector in which most VSS are active. These countries account for a major share of global production of commodities that are extensively certified, such as bananas, coffee, cocoa, cotton, palm oil, sugarcane, soybeans and tea (see figure 4). Over half of all producers of these commodities are located in developing countries. Moreover, apart from the fact that agricultural production is the backbone of many of these economies, it is also a hotspot for sustainability, as the sector remains a major contributor to deforestation and climate change. This is a major reason why VSS initiatives have aimed to improve production practices in the agricultural sector in developing countries.

Figure 4 Share of certified production in total production, by selected commodity, 2020 (per cent)



Source: ITC (2020).

However, several shortcomings persist with regard to certification in developing countries. In particular, Tayleur et al. (2018) studied where certification is active within production regions, and found that while it is present in areas most important for biodiversity conservation, it is not present in areas most in need of poverty alleviation. This shows the continued prevalence of an income effect, which generates self-selection in certification. As a result, VSS fail to deliver benefits to those most in need. In addition, in sectors other than tropical agricultural commodities, such as in forestry, there is a clear discrepancy in certification between developed and developing countries, with the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) being mostly active in developed countries (Depoorter and Marx, 2022; Marx and Cuyppers, 2010; Pattberg, 2005).

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On investigating whether certification effectively reaches the lowest income countries (i.e. those most in need of poverty alleviation), data on the following were analysed: production area for major agricultural commodities (bananas, cocoa, coffee, cotton, palm oil, soy, sugar and tea) for each producing country (FAO, 2022); forest area by country (FAO, 2021); aggregated certification data from the major VSS schemes in these sectors (ITC, 2021) and producing countries' income levels (gross domestic product (GDP) per capita at purchasing power parity (PPP)) (World Bank, 2022a) for the year 2019. The VSS initiatives studied were: 4C, Better Cotton Initiative, Bonsucro, CmiA, Fairtrade, GLOBALG.A.P., IFOAM – Organics International, ProTerra, Rainforest Alliance, RSPO, RTRS and UTZ for agricultural commodities; and FSC and PEFC for forestry. Minimum certification areas and shares were used to avoid overestimates resulting from double certification.

Table 1 shows the relationship between the share of production area certified and income levels, among (1) all producing countries, and (2) producing developing countries only, in order to determine whether there is an income effect in certification (i.e. whether countries with higher income are more extensively certified), and whether this income effect holds even among developing countries. The relationship between the minimum certified share of production area and income level using Pearson correlation coefficients can indicate whether or not lower income countries are more intensively certified than higher income countries. Using shares of production area certified in total area under production allows controlling for differences in countries' size and production area. The Pearson correlation coefficient is a measure of linear correlation between two sets of data which can range between -1 and 1. A value of 0 signifies no association between two sets of data; and a value close to 1 or -1 signifies a strong (positive or negative) association between two sets of data. These coefficients provide an illustration of the relationship between two variables, but should, nonetheless, be interpreted cautiously, as they only reflect linear relationships.

When comparing across all producing countries together (table 1, column 1), it can be observed that for cocoa, coffee, cotton and tea, certification is, to a degree, negatively correlated with income level (i.e. the lower the income, the higher is the share of certified production area). This implies that, to some extent, VSS manage to reach developing countries, and that those countries are not excluded from certification dynamics. For forest and soy, the opposite holds, with higher shares of production area certified in total production area being associated with higher income levels.

Table 1 Relationship between minimum share of certified area and income level per commodity (Pearson coefficients)

	(1) r(min. share of certified area; GDP per capita, PPP) for all producing countries	(2) r(min. share of certified area; GDP per capita, PPP) for lower-middle-income and low-income producing countries
Bananas	0.07	0.07
Cocoa	-0.17	-0.27
Coffee	-0.17	-0.09
Cotton	-0.11	-0.18
Forests	0.45	0.33
Palm oil	0.02	0.03
Soy	0.23	-0.15
Sugar	-0.01	-0.07
Tea	-0.25	-0.26

Source: Author's calculation based on FAO, 2021 and 2022; ITC, 2021; and World Bank, 2022. (Data assembled by Janne Bemelmans, University of Leuven.)

In addition, to understand whether, among developing countries, certification reaches the lowest income level countries or if an income effect persists, one can look at the relationship between the minimum share of certified production area and income level (GDP per capita, PPP) for lower-middle-income and low-income countries only (table 1, column 2) using Pearson correlation coefficients. It can be observed that for cocoa, cotton, soy and tea, there is a potential negative correlation between certification and income, meaning that among developing countries, certification is more intensive in the lowest income countries, whereas for forest certification, the opposite holds.

Hence, certification seems to reach countries with lowest income in terms of share of production area certified in the cocoa, coffee, cotton and tea sectors. In the forestry sector, however, there appears to be a strong income effect: not only are the high-income and upper-middle-income countries more certified, but also among developing countries, those at higher income levels have larger shares of certified forests. For soy, the results seem somewhat contradictory: while an income effect can be observed when analysing certification among all soy-producing countries, this income effect is reversed when focusing on developing countries alone. This suggests that soy certification better targets higher income producing countries in general, but that among developing countries, it better targets the lowest income countries. These correlations may be influenced by the size of production, with certification being more attractive for countries producing larger volumes.

Overall, developing countries continue to face significant challenges to engaging in certification. The next section investigates the main barriers to VSS uptake.

1.3.2 Challenges to VSS uptake

From the academic literature it is possible to identify several challenges facing developing countries relating to the uptake of VSS. The main ones are the costs involved in obtaining certification, the lack of incentives to adopt VSS, sociopolitical resistance to VSS, and a lack of representation of actors from developing countries in VSS governance structures, as discussed in detail in this subsection.

Certification costs

A major challenge to VSS uptake concerns the costs involved. There are two types of costs linked to VSS: certification costs and compliance or implementation costs (Auld et al., 2008; Fiorini et al., 2019; Schleifer et al., 2019). Certification costs relate to the implicit and explicit costs incurred in the different steps of the certification process. First, the applicant needs to invite an auditor from a certification body, who conducts a feasibility study to assess whether certification is possible. The applicant also needs to elaborate a management plan to ensure compliance with the standards. Second, an audit is conducted to assess conformity. This step can result in a detailed list of required corrective actions that are necessary to achieve certification. The applicant then needs to resolve issues of non-conformity, after which an additional audit is then conducted to verify that the applicant fully complies with the standards. All these steps entail costs for the applicant. An initial cost relates to the cost of audits, which have to be paid by the applicant. A second cost is linked to the certification decision. Some VSS organizations, although not all, charge a fee for their certificates. These costs can deter producers who do not have prior financial capacity. There are also implicit costs in the certification process. Management plans and audits require large investments in time and efforts for data provision. For both, the applicant needs to collect and provide relevant data linked to all the requirements, which often are not readily available, especially in developing countries. In addition, there are compliance costs that producers incur to make their production practices compliant with VSS requirements. These costs can be high. Besides, in some cases, producers lack the technical knowledge for making their practices compliant with the VSS requirements. They may therefore need to engage external expertise, which can also be costly. The efforts and resources required to be certified can therefore constitute an important challenge for VSS uptake, especially in developing countries.

Lack of incentives to obtain certification

A second challenge relates to the lack of incentives for certification. The costs involved to obtain certification need to be covered, to a degree, by additional revenue. Economic benefits provide an important incentive

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for producers to become certified, but when expectations of those benefits are uncertain, incentives for VSS uptake decrease. The economic benefits linked to certification can take two forms: a price premium and/or increased access to (export) markets, but these are not always guaranteed (Auld et al., 2015). First, some VSS schemes, such as Fairtrade, guarantee a price (or income) premium for producers of certified commodities, resulting in direct additional income for producers. This can incentivize them to adopt that particular VSS. However, many VSS schemes do not guarantee such a price premium. Producers might hope that consumers will be willing to pay more for certified products, but this is not always the case. Besides, even when consumers are willing to pay more, the price premium does not automatically trickle down to the producers; producers need to negotiate price premiums with their buyers. Typically, small-scale producers, especially in developing countries, who are less able to negotiate price premiums are therefore discouraged from adopting VSS. A second important incentive concerns the ability of VSS to facilitate trade by enabling access to markets. The effectiveness of this incentive, however, depends on the degree to which countries export products for which VSS are available, and the markets to which they export. If exports remain limited, or if there is a limited or no market for the certified products, the incentive to certify will remain low.

Sociopolitical resistance to VSS

Third, some authors also identify sociopolitical resistance as an obstacle to VSS uptake. They report that VSS are sometimes viewed as mechanisms that reinforce existing power relations, especially by lead firms in GVCs, which are often located in developed countries. These firms define sustainability according to their perspective and interests, and require all their suppliers to conform to their approach. This can generate resistance to the use of VSS, since some producers in developing countries might believe that developed countries' standards are being imposed on them. Such resistance to VSS can come not only from individual producers, but also from governments. This kind of tension or divide between developed and developing countries can constitute a disincentive to adopt VSS, and instead foster the uptake of alternative, more localized institutional arrangements. One example is the creation of the Indonesian Sustainable Palm Oil (ISPO) national standard as a response to the Roundtable on Sustainable Palm Oil (RSPO) international standard, which this report further explores in section 3.3.1.

Lack of inclusion of developing countries in VSS governance structures

A fourth challenge to VSS uptake in developing countries involves the lack of inclusion of actors from developing countries in standard-setting and decision-making bodies of international VSS initiatives. Although VSS bodies (sometimes also referred to as "multi-stakeholder initiatives" (MSIs)) are often assumed to have multi-stakeholder governance structures that include producers, and although many VSS bodies try to bring together representatives of different interest groups, research has highlighted persistent shortcomings in terms of the lack of inclusion of actors from developing countries in VSS structures. In particular, Bennett (2017), who analysed the composition of 33 socially-oriented VSS structures, found a democratic deficit in two thirds of them, in that producers from developing countries are absent from their governance structures.

The limited, if any, representation of developing countries' actors in VSS governance structures not only has implications for the legitimacy of VSS, but also for its uptake in developing countries. First, it results in a lack of fit between VSS requirements and the capacities of producers to implement standards on the ground (Nava and Tampe, 2022). Inclusion in VSS governance structures, and more specifically in VSS standard-setting bodies, allows interest groups to influence the content of standards that need to be implemented by producers. The absence of developing-country producers' representatives from these bodies means that standards and requirements might not be appropriate to the local context in which the producers would implement them. Moreover, it may cause a lack of acceptance of the VSS (Nava and Tampe, 2022). It may also result in sociopolitical resistance towards the VSS, as previously mentioned. Section 3.3 of this report introduces national and regional standards as alternatives developed in response to the lack of fit and lack of acceptance of international VSS schemes, and provides examples of such standards from developing countries.

Box 1. Barriers to VSS adoption in developing countries: The case of Peru

With the opening up of markets through free trade agreements (FTAs), Peru's agricultural exports have flourished. The government has provided assistance to local producers to observe sanitary and phytosanitary (SPS) measures and overcome technical barriers to trade (TBTs). However, these are not the only challenges they face for market access; private standards may become the new "non-tariff" challenges particularly for smallholder producers. According to Curzi et al. (2020), regular SPS measures can enhance trade, but private standards (specific trade concerns, as they call them) can significantly reduce the ability to export, and more so for smaller firms than for the larger ones. In addition, their study shows that the more widespread the use of private standards, the greater is the reduction of export volume and firms' exit. Other studies, however, show inconclusive results. Nonetheless, it is interesting to analyse VSS adoption dynamics in Peru, and explore whether other developing countries experience similar dynamics.

The Government of Peru, has not included VSS in its development agenda. For example, a representative of the fishery association complained in an interview that the government was not responding to their demands for information on how to fulfil required certification processes. A representative of AGAP, the agribusiness association, similarly complained that the Government should realize that the fulfilment of certification requirements goes beyond domestic laws, and covers areas such as labour and environmental standards as well. Therefore, if a firm achieves these compliance requirements, domestic authorities should use them as much as possible to facilitate their regulatory procedures, thereby reducing the cost of VSS.

Different VSS have different aims and objectives, although sometimes they overlap, duplicating the requirements of other certification schemes, which makes them more costly, especially for smaller and new firms. Some certification processes are repeated annually, and sometimes they involve changes in requirements and adjustments from the point of view of the buyer, without taking into consideration the specificities of the country's industries. Besides, certification does not necessarily yield a price premium or other benefits. Hence, producers have to conduct a cost-benefit analysis of their annual investments in deciding whether or not to use VSS. Larger firms can overcome these difficulties, but smaller or new firms might not. Associations of producers may be an interesting way to reduce transaction costs, but they are not common in Peru. Another possible solution may be harmonization and mutual recognition of VSS. This way, the cost of undergoing the processes can be reduced and access for more users increased; it may also improve the national legislation.

One way to enhance VSS adoption and ensure continued certification over time is related to VSS governance. The participation of producers in the governance structures of VSS may help reduce unnecessary costs related to the fulfilment of VSS goals. In Peru, for example, GlobalG.A.P. and AGAP formed an alliance to adjust the design, implementation and promotion of the audit process among domestic producers, incorporating criteria that take into account the domestic conditions of the country's agricultural sector.

Cooperation with domestic associations may extend beyond the regular issues involved in the audit process. It may also involve support for formalization of many agricultural units in the value chains, awareness-raising about the benefits of VSS compliance, and provision of training to smallholder farmers and producers to enhance their skills and knowledge, thus improve their ability to comply. Considering the limited financial resources of smallholder producers, there is potential for microfinance, and VSS compliance might act as a signaling mechanism of good payment for a microfinance institution. Hence, working with the financial sector might be an interesting approach. Finally, as data on certification and its impacts are limited, cooperation with governments should also be promoted in order to gather statistics on the compliance behaviour of family firms or small production units in terms of social, environmental and economic standards in order to better measure the impacts of VSS.

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A final challenge to VSS uptake that developing countries typically face is the so-called “governance gap”, explored in section 3.2. All the above-mentioned challenges thus contribute to excluding developing countries from global markets. This is a concern, as VSS are becoming de facto mandatory, and are increasingly used by lead firms as market access tools and as proofs of due diligence in GVCs (see also section 3.4). The case study of Peru in box 1 further explores the challenges that developing countries face in adopting VSS.

1.3.3. Enabling uptake in developing countries: “Continuous improvement” approach

To improve access to certification by smallholder farmers and other actors with lower prior capacity in developing countries, many VSS are developing smallholder-adjusted standards, while also adopting a “continuous improvement” approach (Grabs, 2020: 188). Such an approach allows for gradual compliance, with initial certification being granted based on compliance with a reduced set of core requirements, and additional requirements being made mandatory in subsequent years. As the shift to a “continuous improvement” approach is relatively recent, research is warranted to determine whether such an approach enables a gradual implementation of standards and supports the certification of producers previously excluded.

In conclusion, as VSS aim to contribute to improving sustainability, especially in developing countries, there remain challenges to the uptake of certification in these countries. This calls for a more targeted approach to certification. VSS structures need to exert greater efforts to reach the producers most in need, jointly with other supporting actors such as governments, NGOs and donor agencies. In addition, supportive measures, such as technical and financial assistance, should be provided to ensure that certification can be maintained over time so that the potential long-term benefits of certification accrue to the producers.



CHAPTER 2

VSS AND DEVELOPING COUNTRIES: *OPPORTUNITIES*

2.1. INTRODUCTION

GVCs have become a dominant feature of international trade, involving developed, developing and least developed countries (LDCs). Today, around 70 per cent of international trade involves GVCs, where parts and components are exchanged across countries before being incorporated into final products (OECD, 2020). Although this has brought economic and societal benefits across the globe, owing to the complexity and expansion of GVCs, sometimes their adverse social and environmental impacts fail to be addressed.

Although GVCs enhance developing countries' ability to exploit their comparative advantage, some of them, and especially LDCs face various disadvantages that exclude them from GVCs. Moreover, producers from developing countries are often located at the initial stages of GVCs, providing primary goods and raw materials for the more advanced, knowledge-intensive and profitable intermediate production steps undertaken in developed countries (Dietz et al., 2020). In addition, most of the developing countries' economies largely depend on agriculture, which remains a major cause, but also a victim, of various sustainability issues. The sector contributes substantially to climate change via emissions of methane and nitrous oxides. It is also responsible for 70 per cent of projected losses in terrestrial biodiversity due to widespread land conversion, pollution and soil degradation, and sometimes it is associated with child labour and other labour rights violations. On the other hand, the agricultural sector in developing countries is also adversely affected by the climate crisis, increased pollution and biodiversity loss.

These challenges pressurize and threaten the sustainability of the local agricultural and industrial base in developing countries and LDCs. Thus, it is vital to ensure that cross-border value chains are inclusive, equitable and sustainable; and in this way contribute to achieving the Sustainable Development Goals (SDGs). Although balancing economic growth and other sustainability goals linked to GVCs is challenging, VSS can serve as a mechanism to make this potentially attainable. Box 2 identifies the different links between the SDGs and VSS.

This chapter investigates whether VSS effectively generate fundamental changes towards sustainable practices. Based on currently available evidence, it explores the extent to which these standards improve economic, social and environmental performances in developing countries, with particular reference to the agricultural sector.

Section 2.2 examines the role of VSS in addressing environmental sustainability concerns, including deforestation, pollution and biodiversity preservation. It presents case studies, along with the lessons learned, relating to the environmental impact of VSS, and examines the conditions influencing the environmental effectiveness of VSS on the ground.

Section 2.3 focuses on the social sustainability of VSS. It addresses the inclusion of smallholder farmers in the VSS-certified food supply chain and the social impacts of VSS uptake. It examines the monetary and social impacts of VSS, focusing on farm productivity, income growth and poverty reduction, as well as the non-monetary social impacts on health, child schooling and gender.

Section 2.4 focuses on the role of VSS in fostering economic sustainability by enhancing sustainable trade. It investigates VSS as a catalyst for international trade, and provides insights into how VSS could contribute to greater inclusion of smallholder farmers and producers in GVCs. It also presents a literature review of the empirical evidence on the trade impact of VSS.

Finally, given that compliance with VSS is a prerequisite for the environmental and socioeconomic effectiveness of the standards, section 2.5 presents conceptual issues related to compliance.

Box 2. VSS and the Sustainable Development Goals

The most systematic study, which comprehensively maps the landscape of VSS against the 17 SDGs and their targets (Bissinger et al., 2020), finds that the three SDGs for which VSS are the most relevant are SDGs 8 (Decent Work and Economic Growth), 12 (Responsible Consumption and Production) and 2 (Zero Hunger). There are more than 200 VSS linked with each of these goals. VSS can make important contributions to achieving some of these SDGs in two ways. First, there are some opportunities to leverage the synergies between VSS goals and targets and those of the relevant SDGs. Bonsucro, for instance, contributes to achieving SDG 8 by ensuring workers' safety, evidenced by the fact that it has the lowest recorded number of farm accidents. The Forest Stewardship Council (FSC) contributes to SDG 12 by encouraging consumers to buy sustainably produced timber for construction and furniture; specifically it contributes to the achievement of SDG targets 12.2 ("efficient use of natural resources") and 12.6 ("encourage sustainable practices of transnational corporations"). Overall, there are many interlinkages between VSS and the SDGs, although VSS have greater complementarity with or relevance for some SDGs than for others (Bissinger et al., 2020; Marx and Depoorter, 2020; UNFSS, 2018; WWF and ISEAL Alliance, 2017). However, there are also many instances where no linkages can be found between VSS requirements and the SDGs. Second, VSS certification can also serve as an indicator of progress on some SDGs (UNFSS, 2018).

Focusing more specifically on developing countries' perspective, it is important to note that the contributions that VSS can make towards achieving the SDGs tend to be uneven across regions and across sectors. The reason is that SDG-relevant VSS are not evenly adopted across countries, and they are not evenly active across sectors. For example, for SDG 8 (Decent Work and Economic Growth), the number of linked voluntary standards is particularly high in North America and Western Europe. In contrast, there tend to be fewer voluntary standards relevant to this goal operating in Africa and West Asia (Bissinger et al., 2020). Agriculture is the sector most covered by SDG-relevant VSS. This is followed by textiles and garments, consumer products and processed foods. Within these sectors, VSS coverage of certain products is particularly strong, such as soy, coffee and cocoa in agriculture (Bissinger et al., 2020). At the same time, despite the variation of VSS across countries and sectors, and although many VSS emanate from developed countries, these standards can, nonetheless, be seen as a tool to help developing countries make progress towards achieving the SDGs. For instance, their very existence contributes to the achievement of SDG 17 by contributing to revitalizing strong global partnerships for sustainable development.

2.2 ROLE OF VSS IN FOSTERING ENVIRONMENTAL SUSTAINABILITY IN DEVELOPING COUNTRIES

2.2.1. The environmental crisis: The role of VSS

Economic activities coupled with environmental degradation have aggravated the triple planetary crises of climate change, biodiversity loss and pollution. The consequences of these crises are not limited to environmental impacts alone; they are also causing huge economic and social distortions and hardship. Climate change affects global food production and widens the inequality gap in food supply between developing and developed countries, and particularly the LDCs. The 40 poorest countries in the tropical and subtropical zones will suffer the most, from both droughts and periodic floods (Miyani, 2015). Moreover, agriculture, which is a significant source of income and trade for most developing countries, is seen as both a cause and a victim of various environmental problems. It contributes substantially to climate change via emissions of methane and nitrous oxides, and is also responsible for 70 per cent of projected losses in terrestrial biodiversity due to widespread land conversion, pollution and soil degradation (IISD, 2017a; FAO 2021). On the other hand, climate change is expected to affect agricultural production dramatically.

VSS can be part of the solution to the environmental sustainability crisis, as VSS require producers and suppliers to comply with standards related to environmental sustainability, such as pollution control and biodiversity protection. This process is termed environmental upgrading through GVCs. Ponte (2019: 142) refers to environmental upgrading through trade as “a process of improving or minimizing the environmental impact of GVC operations, including production, processing, distribution, consumption and disposal, reuse and recycling” (see also De Marchi et al., 2019). In other words, environmental upgrading may be defined as the process by which actors modify or alter production systems and practices that result in positive (or reduce negative) environmental outcomes. VSS can thus contribute to environmental upgrading by prescribing standards for sustainable production and through conformity assessments.

The literature identifies three drivers that shape environmental upgrading trajectories in GVCs. First, there are drivers that are external to the firm, which include environmental movements, international goals (e.g. the SDGs) and consumer choices. Second, lead firms in GVCs can also act as drivers as they can eventually enforce environmental upgrading by their suppliers along the chain. Finally, there are drivers that are internal to the firm, which involve upgrades that improve within-firm upgrading, such as promoting environmental awareness in the organization, integration of environmental considerations within the company’s strategic objectives, and other upgrades on similar lines. These drivers help to structure the sustainability process through GVCs.

VSS can play a vital role in addressing environmental concerns through GVCs and facilitating environmental upgrading. The standards can assist private firms in their attempts to improve their own environmental performance as well as that of their suppliers along the chain. This involves ensuring adherence to standards, facilitating corporate social responsibility activities, and fostering knowledge and technology transfer (Bush et. al, 2015). What do we know about the impact of VSS on environmental outcomes?

2.2.2. Empirical evidence on the impact of VSS on environmental outcomes

Traldi (2021) provides a review of studies on the impact of agricultural sustainability standards on economic, social and environmental outcomes. The review does not cover all VSS, but provides a good synthesis of VSS focusing on agricultural commodities. The author concentrates on studies which compare certified areas/producers with non-certified areas/producers on a number of environmental parameters. The evidence from the studies produces mixed results. Almost half of the studies (47 per cent) reviewed found a positive impact (certified producers performed better than non-certified producers) and an equal percentage of the studies did not find a significant difference between certified and non-certified producers. The review cautions that the findings should be interpreted carefully, as 75 per cent of the evidence is from coffee certification, and impacts are highly case dependent.

Table 2 provides a snapshot of the selected literature on the impact of VSS on environmental outcomes, including on forestry indicating that different studies find different results.⁸ Miteva et al. (2015) focus on evaluating the performance of the FSC’s forest management certification programme in Kalimantan, Indonesia. They find a reduction of deforestation by 5 percentage points and of air pollution by 31 per cent, largely due to the performance of FSC-certified timber concessions compared to non-certified logging concessions. However, the study finds no significant impact on fire incidence and an increase in forest perforation. Tritsch et. al (2020) study a forest management plan (FMP) in the Congo Basin which has made logging concessions mandatory. Since logging concessions with FSC certificates are more likely to implement the FMP, the study estimates the impact of FSC as well. It finds that FMP concessions in the region reduce deforestation by 74 per cent. In their study on FSC certification in Mexico, Blackman et al. (2018) find no significant impact of FSC certification in terms of reducing deforestation. Using the Global Forest Change dataset to examine the impact of FSC certification in Cameroon, Panlasigui et al. (2018) find that FSC certification has led to little additional reduction in the rate of forest loss compared with the uncertified concessions.

Rueda and Lambin (2015) study the Rainforest Alliance certification programme in Colombia. They find that certified coffee production farms have gained significantly more tree cover compared to non-certified

farms. Blackman and Naranjo (2022) have also studied coffee farms in central Costa Rica to estimate the impact of organic coffee certification. They find that certification reduces the use of pesticides, chemical fertilizers and herbicides, and increases the uptake of environmentally friendly management practices.

Carlson et al. (2018) evaluate the impact of certification by the Roundtable on Sustainable Palm Oil (RSPO) on deforestation in Indonesia. They find that certification reduces deforestation in high tree cover areas and primary forests compared to non-certified plantations, and a 33 per cent reduction in deforestation due to RSPO certification. There is some positive evidence from other certification schemes such as those of the Rainforest Alliance, the Roundtable on Sustainable Palm Oil (RSPO), and organic certifications, but the evidence is limited and context-specific.

Recent reviews have evaluated the impact of VSS in addressing environmental problems (DeFries et al., 2017; Garrett et al. 2021). These reviews conclude that the impacts of VSS in promoting environmentally responsible commodity production have been mixed, so far; levels of compliance with conservation requirements vary across commodities and places. Contextual factors influence the effectiveness of VSS, including agricultural practices (i.e. monoculture versus agroforestry) and associated commodity yields, characteristics of the producers, monitoring systems in place, public sector involvement, and the role of NGOs in the diffusion of sustainable practices and capacity-building among farmers (Garrett et al., 2021). The main achievement of VSS has been in raising awareness such as on key socioeconomic and environmental sustainability issues linked to production, such as child labour, and deforestation.

Table 2 Impact of VSS on environmental outcomes: selected studies

Authors	Outcome variable	Certification/ programme	Result: Impact of certification on the environment	Main outcome(s)
Miteva et al. (2015)	Deforestation, air pollution	FSC	Mixed	<p>Studies the performance of the FSC Forest Management certification programme in Kalimantan, Indonesia.</p> <p>It uses a causal triple difference approach to evaluate the performance of FSC-certified timber concessions compared to non-certified logging concessions.</p> <p>It finds a reduction in deforestation by 5 percentage points and air pollution by 31 per cent. However, there is no significant impact on fire incidence and an increase in forest perforation.</p>
Carlson et al. (2018)	Deforestation	RSPO	Positive	<p>Evaluates the impact of RSPO certification on deforestation in Indonesia.</p> <p>It finds that certification reduces deforestation in high tree cover areas and primary forests compared to non-certified plantations. Also, there is a 33 per cent reduction in deforestation due to RSPO certification.</p>
Tritsch et al. (2020)	Deforestation	FSC	Positive	<p>Studies the FMP along with FSC in the Congo Basin, which has made logging concessions mandatory.</p> <p>It finds that logging concessions with FSC certificates are more likely to implement their FMP. It estimates that FMP concessions lower the rate of deforestation by 74 per cent, but finds no statistically significant difference in deforestation between concessions with and without FSC certificates.</p>

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Authors	Outcome variable	Certification/ programme	Result: Impact of certification on the environment	Main outcome(s)
Blackman et al. (2022)	Use of pesticide, fertilizer and herbicides	Organic coffee certification	Positive	<p>Studies coffee farms in Central Costa Rica to estimate the impact of organic coffee certification. It uses propensity score matching to estimate the causal impact.</p> <p>It finds that certification reduces use of pesticides, chemical fertilizers and herbicides, and increases adoption of environmentally friendly management practices</p>
Blackman et al. (2018)	Deforestation	FSC	No impact	<p>Studies FSC certification in Mexico.</p> <p>It uses a matched difference-in-differences approach to identify the effect.</p> <p>It finds no significant impact of FSC certification on deforestation.</p>
Norden et al. (2015)	Conservation	FSC	No impact	<p>Studies the effects of FSC and PEFC certification, respectively, in Sweden.</p> <p>It uses fixed effect regression and propensity score matching to evaluate the impact.</p> <p>It finds no impact of either of the programmes on reducing non-compliance with regulations in high conservation value areas in Sweden.</p>
Panlasigui et al. (2018)	Deforestation	FSC	No impact	<p>Studies the impact of FSC certification in Cameroon using the Global Forest Change dataset .</p> <p>It uses panel regressions to evaluate the impact.</p> <p>It shows that, to date, FSC certification has had little effect in terms of additional reduction of forest loss rates, compared with the uncertified concessions.</p>
Milder et al. (2016)	Biodiversity	Training program	Positive	<p>Studies the effects of a tourism sustainability standard and an associated training programme on threats to biodiversity.</p> <p>Differences between the baseline and post-intervention conditions were understood to represent changes attributable to the Rainforest Alliance training and verification system.</p> <p>Its findings indicate that a voluntary sustainability standard and training programme can serve both to recognize existing good actors and to drive incremental improvements in enterprises whose activities were previously less sustainable.</p>

A key issue in fostering VSS effectiveness for sustainability is transparency and traceability. Several initiatives are being developed to enhance transparency. Box 3 below describes the Sustainability Pledge Initiative, which aims to enhance transparency and traceability for sustainable value chains in the garment and footwear industry.

Box 3. The Sustainability Pledge Initiative

The garment and footwear industry is one of the most polluting sectors on the planet, and can therefore play a vital role in reducing greenhouse gas emissions. The typically complex and opaque textile and leather value chains, with production facilities scattered all over the world, make it very hard to obtain accurate information about where, how and by whom our clothes are made. Improving traceability and transparency has therefore become a priority for the industry. Accordingly, the United Nations Economic Commission for Europe (UNECE) and the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), jointly with key industry stakeholders, launched a [global framework initiative – The Sustainability Pledge](#) – implemented with the International Trade Centre (ITC), and supported by the European Union, to enhance transparency and traceability for sustainable value chains in the garment and footwear industry. Over the period 2019–2023, the project set up a multi-stakeholder policy dialogue platform, and developed [Policy Recommendation No. 46](#), which included implementation guidelines and traceability standards, as well as a capacity-building component. A key activity of UN/CEFACT is the development of e-standards which are available free of charge for use by different industries and government authorities. In this context, UN/CEFACT experts developed the [Business Requirement Specification \(BRS\)](#) to provide businesspeople and software developers with a comprehensive description of data requirements for business processes.

The UN/CEFACT BRS and data model contain a business process analysis for [textiles](#) and [leather](#) as a reference. This is intended to help managers to better understand the data flows within each process, identify relevant activities/events, actors and sustainability risks, and collect the required data to support traceability and transparency. The exchanged traceability data can be treated as event data, answering questions on who, what, why, where and when.

The textile and leather data model makes use of existing standardized reference data models derived from the UN/CEFACT Core Component Library. This creates opportunities to bridge across industries using similar data, and enhances semantic interoperability of IT systems that support traceability and transparency among industries and governments. It is thus ready to be used for new technologies, such as blockchains. For instance, companies representing the entire cotton and leather value chain (cotton cooperatives and farmers, tanneries, manufacturers, brands) tested this UNECE traceability standard in a blockchain environment to trace the origins and sustainability performance (use of chemicals, social/environmental criteria, organic and recycled content, animal welfare) of various items (e.g. shirts, jeans, bags, shoes, socks, T-shirts) to assess the technology's role in supporting responsible sourcing and production. The increased tracking and tracing of goods throughout the value chain provides producers and brands with the information they need to make verifiable sustainability claims that consumers, governments and regulators can trust.

While considering the digital divide, UNECE standards support the increasing visibility and connectivity of small-scale actors (e.g. micro, small and medium-sized enterprises (MSMEs), smallholder farmers and producers) in cotton and leather value chains, and make them more visible to the upstream segment of the chain. As a result, they support the improvement of working conditions through greater transparency in the hotspots. This can contribute to poverty alleviation in developing countries, including those in the Asia-Pacific region where 75 per cent of all garment sector workers worldwide are employed. It also creates market access opportunities, for example by providing reliable information on a product's origin, content and quality which could help fetch a higher and fairer price. Traceability and transparency also have the potential to further support market access by proving compliance with international and regional standards.

2.3. ROLE OF VSS IN FOSTERING SOCIAL SUSTAINABILITY IN DEVELOPING COUNTRIES

Smallholder farmers and farm workers are among the most vulnerable actors in the food system, and social sustainability implies an improvement in their well-being. The focus on social sustainability varies across VSS. Some VSS initiatives, such as Fairtrade, aim at improving the well-being of smallholder farmers by specifically targeting them and encouraging them to make VSS uptake and certification decisions themselves. Others, such as the Ethical Trading Initiative (ETI) include explicit labour requirements that have a direct impact on workers on the farms and in the agro-industries that adopt the VSS. Yet other VSS initiatives (e.g. GlobalG.A.P.) have a less direct or a weaker focus on social sustainability, but may nevertheless affect the social well-being of the farmers who adopt them or the workers hired by certified farms and companies. In this section, we first focus on the social impact of VSS on smallholder farmers, distinguishing between monetary and non-monetary welfare measures, before turning to the social impact of VSS on workers.

2.3.1. Social impact of VSS on smallholder farmers

VSS uptake can have an impact on smallholder farmers through:

1. Bringing about changes in production and managerial practices that improve farm productivity and farmers' health;
2. Providing training and capacity-building as part of certification schemes;
3. Market interventions, such as price premium and quality-based price differentiation, that improve earnings from certified production; and
4. Provision of additional services that are linked to certification schemes, such as pre-financing, technical assistance or a social premium.

The available empirical evidence shows that VSS do not always have beneficial impacts on smallholder farmers who adopt them. It should be noted that there is a bias in the available evidence towards coffee certification, and Fairtrade certification, and towards studies on specific countries in Africa and Latin-America. Moreover, some crops (e.g. cocoa, cotton, sugar, soybean and palm oil), some VSS (organic certification) and some countries (e.g. Brazil, Côte d'Ivoire and Malaysia) are underrepresented in comparison to the certified area they account for (Traldi, 2021). In this section, a distinction is made between effects on income-related monetary measures, and effects on non-monetary social welfare measures.

Monetary impacts: Farm productivity, income and poverty reduction

There is ample evidence concerning the impacts of VSS uptake on farm productivity, farm income and poverty among smallholder farmers. In a meta-analysis on the socioeconomic effects of smallholder certification, Oya et al. (2018) conclude that the estimated effects vary considerably, depending substantially on the specific VSS, the specific product and the specific context. They find that the uptake of VSS among smallholder producers has, on average, no significant effect on yields of certified crops, significant positive effects on producer prices for certified crops, significant positive, but small, effects on farm income from certified crops, and no significant effects on the total income or poverty status of the farm household. Positive yield effects are more prevalent for VSS focusing on GlobalG.A.P., while Fairtrade and organic VSS are more likely to have negative yield effects. Price effects are stronger for higher value products, especially fresh produce, than for tropical commodities. They are also stronger for VSS that apply a system of quality-based price differentiation (e.g. GlobalG.A.P.) than for VSS that apply a price premium or a floor price (e.g. Fairtrade and UTZ). Other review studies confirm that VSS uptake in agri-food supply chains has a variable and often weak impact on crop yields, crop revenues and farm household incomes (Bray and Neilson, 2017; DeFries et al., 2017; Meemken et al., 2021; Schleifer and Sun, 2020).

While studies mostly focus on single VSS initiatives in a given setting, those on coffee certification in eastern Uganda (Akoyi and Maertens, 2018; Vanderhaeghen et al., 2018), central Uganda (Chiputwa et al., 2015; Meemken et al., 2017), Ethiopia (Mitiku et al., 2017) and Nicaragua (Beuchelt and Zeller, 2011; Ruben and Zuniga, 2011) allow for comparisons across countries and VSS (the results of which are summarized in table 3). In Nicaragua, Ethiopia and eastern Uganda, Fairtrade (or double Fairtrade-Organic) certification is found to have no impact on farm income or poverty because a small positive effect on producer price is offset by a negative yield effect, or is not sufficient to create a real income gain. But in central Uganda, a strong positive poverty-reducing effect is found for Fairtrade-UTZ certification but not for UTZ-Organic certification. In Nicaragua, eastern Uganda and Ethiopia, Rainforest Alliance certification is found to have a positive effect on income and poverty reduction, but in Ethiopia, this impact results from higher producer prices while in Nicaragua and eastern Uganda the impact results from yield improvements. This shows that a single VSS can have divergent socioeconomic effects across regions and countries, that within the same context effects can vary across different VSS, and that the channels of effects vary. In addition, effects vary among producers. For example, GlobalG.A.P. certification in fresh produce sectors in Chile, Kenya, Madagascar and Thailand is found, on average, to increase yields, prices and incomes for smallholder producers, but less so for the smallest farms and the least educated farmers. Presumably, this is because the latter face larger costs that are not compensated by higher yields or higher prices, and because they lack the technical and managerial skills to correctly implement the standards (Beghin et al., 2015).

Table 3 Impacts of coffee certification: Summary of case-study findings

Authors	Country / region	VSS	Main finding
Akoyi and Maertens (2018); Vanderhaeghen et al. (2018)	Eastern Uganda	Fairtrade- Organic	<ul style="list-style-type: none"> Higher producer prices Decline in land and labour productivity No effect on farm income and poverty
		UTZ-Rainforest Alliance-4C	<ul style="list-style-type: none"> Increase in land and labour productivity Increase in farm income Reduction in poverty
Chiputwa et al. (2015); Meemken et al. (2017)	Central Uganda	Fairtrade-UTZ	<ul style="list-style-type: none"> Positive effect on household consumption expenditures Negative effect on poverty
		Organic-UTZ	<ul style="list-style-type: none"> Positive effect on household consumption expenditures No impact on poverty
		UTZ	<ul style="list-style-type: none"> No impact on poverty
Mitiku et al. (2017)	Ethiopia	Fairtrade-Organic and Rainforest Alliance	<ul style="list-style-type: none"> Higher producer prices Positive effect on income
		Fairtrade	<ul style="list-style-type: none"> No effect on income
		Organic	<ul style="list-style-type: none"> Negative effect on income
Beuchelt and Zeller (2011)	Nicaragua	Organic and Organic- Fairtrade	<ul style="list-style-type: none"> Higher producer price No effect on farm income No effect on poverty
Ruben and Zuniga (2011)	Nicaragua	Fairtrade	<ul style="list-style-type: none"> Higher producer prices
		Rainforest Alliance and Café Practices	<ul style="list-style-type: none"> Higher yields

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In general, certification programmes that are implemented in association with effective horizontal or vertical coordination structures have a greater impact in terms of improving farm productivity, increasing producer prices, raising farm incomes and reducing poverty (Bray and Neilsen, 2017; Oya et al., 2018). The available evidence suggests that smallholder VSS uptake is less likely to boost productivity than increase prices, but such productivity effects are more effective in fostering upward income mobility and reducing poverty among certified farmers.

There are some particular problems that render price mechanisms in VSS less effective. First, over-certification, particularly Fairtrade and organic certification of coffee and tea, results in certification rents or price premiums becoming marginal when distributed among a large number of producers. Second, the distribution of certification rents in supply chains can be squeezed. Glasbergen (2018) reports that 80 per cent to 95 per cent of the economic rents generated by VSS in the coffee and palm oil sectors goes to processing companies, leaving the farmers with a very small share. Also, in group certification systems, problems are reported of elite capture of the social premium that is returned to a producer organization (Oya et al., 2018).

Selected non-monetary impacts: Health, child schooling and gender

Besides monetary impacts, various studies have focused on the social impacts of VSS uptake. (See table 4 for a summary of their findings.) Some studies document positive health effects of VSS uptake. For example, Asfaw et al. (2010) find that GlobalG.A.P. uptake among smallholder horticultural farmers in Kenya improves farmers' health through better and less hazardous pesticide use. Sellare et al. (2020) show that Fairtrade certification of cocoa farmers in Côte d'Ivoire, despite increasing agrochemical input use, reduces pesticide-related health problems for farmers (and farm workers). Another study, on coffee certification in Uganda and Ethiopia, finds positive effects on child schooling of Fairtrade certification but not of Rainforest Alliance certification. It concludes that prohibiting child labour in VSS is not sufficient in and of itself to improve child well-being (Akoyi et al., 2020). Schleifer and Sun (2020) review the literature on the food security implications of VSS, and conclude that there is a positive but weak impact that is, again, context-dependent. VSS can affect food security through their impact on farm incomes and gender equality. This is documented by Chiputwa and Qaim (2016), who show that in Fairtrade-certified farm households in Uganda, women have greater control over cash income from coffee production, resulting in better nutritional outcomes in these households.

Table 4 Non-monetary impacts of VSS: Summary of selected case-study findings					
Authors	Type of study	VSS	Country	Crop	Main finding
Asfaw et al. (2010)	Case study	GlobalG.A.P.	Kenya	Horticulture	Improved farmer health
Akoyi et al. (2020)	Case study	Fairtrade	Uganda and Ethiopia	Coffee	Increase in child schooling
		Rainforest Alliance			No impact on child schooling
Chiputwa and Qaim (2016)	Case study	Fairtrade	Uganda	Coffee	Positive effect on women's empowerment
					Positive effect on child nutrition
Schleifer and Sun (2020)	Literature Review	various	various	various	Positive but weak impact on food security Impact on food security is context specific
Sellare et al. (2020)	Case study	Fairtrade	Côte d'Ivoire	Cocoa	Improved farmer health

2.3.2. Exclusion and social sustainability

For VSS to have a positive social welfare impact on smallholder farmers, these farmers need to be included in VSS-certified food value chains. Evidence for this inclusion is mixed. Many tropical commodity sectors (e.g. coffee, cocoa) are dominated by smallholder farms, which are the sectors where VSS are the most widespread and inclusive. Millions of smallholder farmers in these sectors adopt VSS (Bissinger et al., 2020), often through horizontal coordination with agricultural cooperatives or associations, or through group certification schemes with farm assistance, or certification costs and auditing may be taken up at the level of a farmer organization or cooperative. However, in tropical commodity sectors that include a mix of smallholder and medium to large farms (e.g. tea, palm oil), VSS uptake is often biased towards the latter, as documented by Tayleur et al. (2018) with reference to the Round Table on Responsible Soy (RTRS) and RSPO standards.

In some fresh produce sectors in Africa and Latin America, VSS uptake is associated with the greater exclusion of smallholder farmers, who are unable to comply with stringent VSS requirements due to their lack of technical, managerial and financial capacities. Schuster and Maertens (2015) report that the spread of VSS, especially production standards, such as GlobalG.A.P. in the Peruvian horticultural export sector, resulted in decreased sourcing from smallholder farms. In the horticultural export sectors in Côte d'Ivoire, Kenya, Madagascar, Senegal and Viet Nam, VSS uptake is associated with a complete shift from contract-based smallholder farming to large-scale estate farming (Beghin et al., 2015). However, in several South and South-East Asian countries, as well as in some African countries, a large number of smallholder farmers supply fresh produce to VSS-certified exporters. In their case, vertical coordination through contract farming arrangements with the buyers is very important for smallholder inclusion in VSS-certified supply chains. Such arrangements allow them to overcome technical or financial constraints on compliance with stringent requirements.

2.3.3. Social impact of VSS uptake on farm workers

Besides affecting farmers, VSS uptake can have a positive impact on workers in VSS-certified food supply chains, through labour standards, including such requirements as minimum wages and freedom of association. Even in the absence of those requirements, they might still improve wages and employment conditions, for example through employee training and labour productivity increases. The available evidence shows that VSS are more effective in improving non-wage benefits for workers, such as fringe benefits, decent work conditions, employment security and worker empowerment, than in improving monetary wages (Oya et al., 2018). Schuster and Maertens (2016 and 2017) find that VSS uptake by horticultural export companies in Peru improves the empowerment of workers and the likelihood of their being paid the minimum wage but it does not affect the wage level. These effects are found to be much stronger for VSS whose main focus is on labour requirements (e.g. ETI, Fairtrade, SA8000). For example, Krumbiegel et al. (2018) find that Fairtrade certification of pineapple estates in Ghana improves the wages of workers and their job satisfaction. Wage workers in large-scale plantations or in farm cooperatives seem to benefit more from VSS uptake than those in smallholder or family farms, probably because VSS do not specifically target or enforce requirements for these latter workers. Meemken et al. (2019) find that Fairtrade certification in the smallholder cocoa sector in Côte d'Ivoire does not lift the wages of farm workers above the national minimum wage, and neither does it lift their families out of poverty, while wage workers in cocoa cooperatives do benefit from certification. They observe that the benefits of Fairtrade certification for smallholder farmers in terms of revenues and income are not large enough for those farmers to pay their workers decent wages.

To conclude, VSS are potentially an effective tool to improve the well-being of the most vulnerable actors in the food system. However, the empirical evidence shows that VSS do not always succeed in fostering social sustainability. They are most likely to accomplish lasting social welfare improvements among smallholder farmers through productivity effects and when implemented through supportive certification programmes that are adapted to local circumstances. They may help secure non-wage benefits for farm workers, but rarely improve their wages.

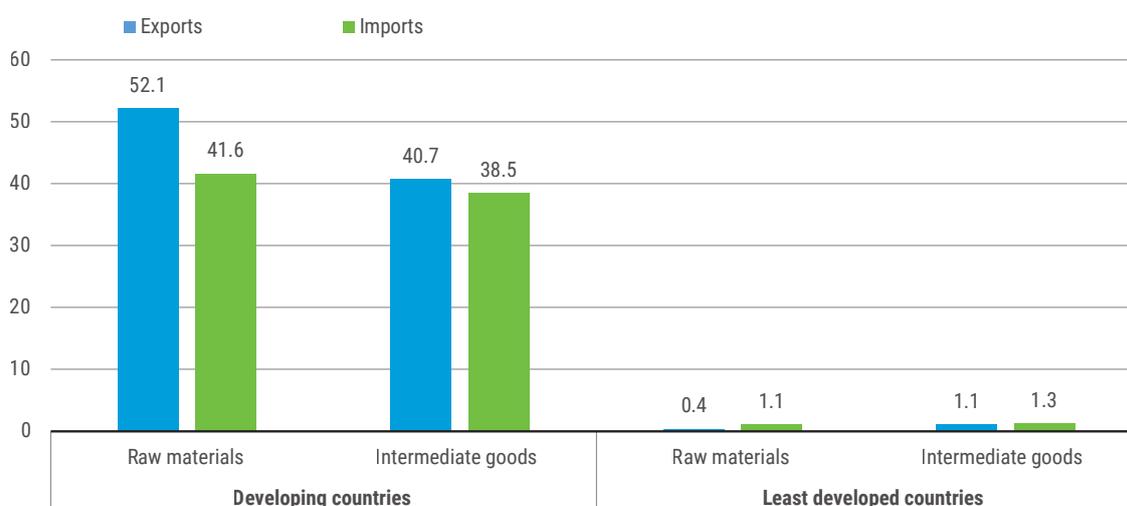
2.4. ROLE OF VSS IN FOSTERING ECONOMIC SUSTAINABILITY IN DEVELOPING COUNTRIES

Today, around 70 per cent of international trade is structured along GVCs, where parts and components are exchanged across countries before being incorporated into final products (OECD, 2020). GVCs can assist developing countries to diversify away from primary products to manufacturing and services, as they obviate the need to master all preliminary production steps and instead develop and exploit their comparative advantages. Also, it is through GVCs that VSS are able to diffuse social and environmental standards globally (UNCTAD, 2021).

The traditional approach to measuring GVC participation is to look at bilateral trade in intermediate goods.⁹ Intermediate goods represent almost half of the world goods trade, and accounted for about \$ 8.3 trillion of the world goods trade in 2018 .With consumer goods constituting about a quarter (\$4.8 trillion in 2018) of the world goods trade in 2018 (UNCTAD, 2019).

Between 1990 and 2020, the share of developing countries' exports and imports of intermediate goods grew by 77 per cent and 47 per cent respectively, which shows that developing countries are becoming heavily involved in GVCs. Figure 5 presents their share in total world trade of intermediate goods and raw materials in 2020.

Figure 5 Shares of developing countries' and LDCs' trade in primary and intermediate goods to world trade, 2020 (per cent)



Source: Author's calculations based on UN COMTRADE data.

The expansion of international trade and the complexity of GVCs have brought welfare benefits across the globe. However, they have generally failed to address their adverse environmental, social and economic impacts. It is therefore imperative that GVCs transform towards more sustainable value chains.

Developing countries, face various cost disadvantages that tend to exclude them from international trade and GVCs (as shown in figure 5). Kowalski et al. (2015) examined the participation of developing countries in GVCs, and found that structural characteristics of countries are the main determinants of GVC participation. As noted in the World Bank's World Development Report 2020, GVC participation is determined by fundamentals such as factor endowments, market size, geography and institutional quality (UNCTAD, 2021).

In addition, VSS offer a potentially powerful tool to improve participation and power structures in GVCs. They can do so through different channels, for example by providing access to higher value markets where consumers are willing to pay premium prices for items produced sustainably (IISD, 2017).

It is nonetheless debatable whether VSS serve as catalysts or barriers to market access and trade. While standards could help boost exports, the expansion and increasing influence of VSS have become a growing concern for suppliers, particularly those in low-income countries. This section investigates the economic impacts of VSS by examining their effects on trade, GVC participation, and market access and structure. Also, their role in trade agreements is briefly discussed in box 4.

Box 4. VSS and trade agreements

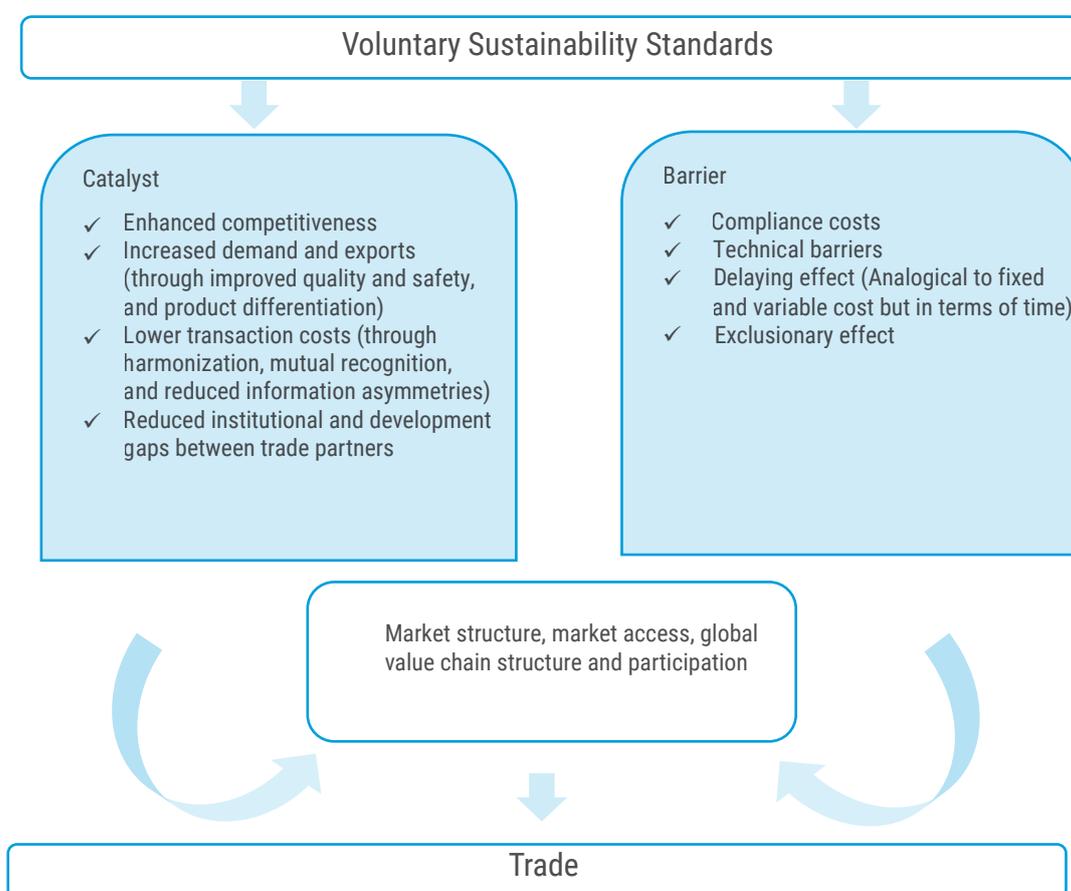
States increasingly use free trade agreements (FTAs) as a means to pursue non-trade objectives by including social and environmental provisions in them. These often draw upon existing international conventions, such as ILO conventions and multilateral environmental agreements. VSS potentially play a role here, as some of their standards also refer to similar international conventions and agreements. However, contemporary FTAs still do not place much emphasis on the role VSS could play in enforcing social and environmental provisions. First, only a few FTAs, primarily those involving the European Union, refer to VSS, and even those that do, use promotional language that does not include any measurable commitments. Thus there is considerable scope for further integration of VSS into FTAs, in particular those involving developing countries.

VSS may be incorporated in FTAs by several means. For instance, they may be introduced as differentiated tariffs for certified products versus non-certified products; or they may be suggested as a means of cooperation between the parties in chapters dealing with the environment or sustainability; or they may be recommended as a condition for government procurement. Regardless of the means, some of the potential implications of incorporating VSS in FTAs involving developing countries need to be discussed. First, including VSS in FTAs involving developing countries would target firms more directly. This would imply that States and firms share responsibility for complying with social and environmental provisions. Taking into account the different technical and financial capacities of firms in developing countries, several variations on implementation schemes might be explored. For example, small firms could be exempted, and/or different implementation timelines applied, starting with requiring only large firms to get certified and offering a different timeline for other firms. Accompanying measures, such as providing technical and financial support to firms, might also be considered. Secondly, the integration of VSS into FTAs involving developing countries could foster a ratcheting up of VSS design through a recognition system. Moreover, their integration would necessitate a distinction between credible VSS and greenwashing initiatives, with only the former being recognized as valid to fulfil the FTAs' related provisions. Some examples show how this could be achieved. Article 43 of the European Union Directive 2014/24/EU on public procurement specifies the following conditions to be met before a specific label can be used as a means of securing sustainable public procurement: "(a) the label requirements only concern criteria which are linked to the subject-matter of the contract ...; (b) the label requirements are based on objectively verifiable and non-discriminatory criteria; (c) the labels are established in an open and transparent procedure ...; (d) the labels are accessible to all interested parties; (e) the label requirements are set by a third party over which the economic operator applying for the label cannot exercise a decisive influence" (Marx et al., 2017: 84). Similar criteria for the recognition of credible labels and certificates have been proposed by UNEP and the ITC (2017). They propose 5 fundamental principles for VSS, namely reliability, relevance, clarity, transparency and accessibility. Developing a recognition system would enable economic actors in developing countries to distinguish credible VSS from non-credible VSS and would encourage the VSS to strengthen their design.

2.4.1. The debate on the trade impacts of VSS

Sustainability standards can serve as facilitators or barriers to trade (figure 6). On the one hand it is suggested that VSS can help to **increase demand and exports**, in terms of both volume and value. This is due to their ability to induce efficiency gains and quality improvements, as they provide **competitive advantage**, ensure high product quality, and certify sustainable production practices (Elamin and Fernandez de Cordoba, 2020). Moreover, standards could serve as a catalyst for trade by **reducing information asymmetries and transaction costs** (Henson and Jaffee, 2008), and modernizing the food GVCs through innovation and upgrading (Swinnen, 2007). Also, VSS uptake can partially **offsets the trade-inhibiting effect of governance distance** between countries and therefore increases the trade opportunities between countries (Fiankor et al., 2019).

Figure 6 VSS as catalysts and barriers to trade



On the other hand, if VSS become de facto mandatory for specific markets, small-scale producers, in particular, risk of being **excluded** from export value chains due to **high compliance** and **monitoring costs** (UNCTAD, 2008).

Some studies highlight the negative impacts of VSS on the competitiveness of domestic farmers, particularly in developing countries. Elder et al. (2021) investigate factors influencing access to VSS-compliant markets, and find that such access is negatively impacted by the cost effect, namely the costs of compliance or smallholders' and producers' limited access to financial resources. Other, non-financial, obstacles to farmers adopting standards include **low levels of education, knowledge and skills** and **technical barriers** to comply. Ponte (2019) observes that sustainability standards work well

for lead firms in GVCs but not as well for small suppliers in developing countries and LDCs. He adds that, although suppliers might capture long-term benefits, there exist short-term pressures and costs that need to be financed. According to Mangelsdorf (2011), standards reduce trade when the compliance costs outweigh the gains in transaction costs, and vice versa. UNFSS (2018) and Andersson (2019) suggest that the possible impact of VSS on trade depends on the institutional design of the standards themselves. For example, distributing the compliance costs of sustainability standards more equally among value chain players and increasing transparency are ways to reduce costs for smallholders and producers in developing countries and LDCs.

2.4.2 Empirical evidence on the trade impact of VSS

There appear to be only a few studies available on the trade impact of VSS, and they focus on only a small number of VSS schemes (mostly GlobalG.A.P. and other business-to-business standards). Table 5 provides a comprehensive review of 13 empirical studies that investigate the trade impact of VSS: 8 studies focus on the country level and 5 provide a firm level analysis.

Table 5 Trade impacts of VSS: Summary of the literature

Level	Authors	Number of exporting countries/ firms	Modelled variable	Standard/ scheme	Product and sector	Trade impact	Main outcome
Country level	Andersson (2019)	138 countries	Imports (by value) into European Union-15	GlobalG.A.P.	Fresh fruits and vegetables	Favourable	GlobalG.A.P. certification has a positive effect on both the probability of trading and import intensity. This holds for both high- and low-income economies, but is greater for low-income than high-income economies
	Masood and Brummer (2014)	74 countries		GlobalG.A.P.	Bananas	Favourable	The intensity of certification is associated with a higher value of banana imports into the European Union
	Fiankor et al. (2019)	134 countries	Exports (by value) to European Union/ European Free Trade Area	GlobalG.A.P.	Apples, bananas and grapes	Favourable	Non-certified producing countries, regardless of their level of development, have, on average, lower exports compared to their certified counterparts.
	Fiankor et al. (2020)	Global bilateral trade	Bilateral trade (by value)	GlobalG.A.P.	Apples, bananas and grapes	Favourable	The result confirms a trade-impeding effect of governance distance (i.e. the difference between countries based on 6 good governance indicators) on exports.
	Ehrich and Mangelsdorf (2018)	87 certified firms from different countries		IFS	Seven manufactured food products: eggs products, meat, fruits and vegetables, bakery products, dairy products and beverages	Conditionally Favorable	A 1 per cent increase in the number of certified firms increases exports by 0.147 per cent to 0.27 per cent, on average. However, this finding remains robust only for high- and middle-income countries
	Borsky and Leiter (2022)	27 exporters and 116 importers	Bilateral Trade flows	Kimberley Process Certification Scheme	Rough diamonds	Favourable	The scheme has worked as a catalyst for trade in rough diamonds, not only for exporter or importer hubs, but equally for smaller trade partners.

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Level	Authors	Number of exporting countries/ firms	Modelled variable	Standard/ scheme	Product and sector	Trade impact	Main outcome
	Grassnick and Brümmer (2021)	24 cocoa bean-producing countries	Export values	UTZ	Cocoa	Mixed	This certification enhances bilateral exports of cocoa beans and paste, but reduces exports of cocoa butter, and has mixed effects on cocoa powder exports
Firm level	Henson et al. (2011)	102 firms in 10 sub-Saharan African countries	Exports value to EU	GlobalG.A.P.	Fresh produce	Favourable	The high cost of certification is a profitable investment; certified firms, on average, have export sales revenue of around €2.6 million higher than they would have earned without certification.
	Schuster and Maertens (2015)	87 Peruvian firms	Exports volume and value to all trading partners	GlobalG.A.P. LEAF, GAP, BRC, GMP, and IFS	Asparagus	No effect	No evidence is found that certification to private standards, in general, and to specific individual private standards affects firms' export performance (in terms of either volume or value) to different markets.
	Latouche and Chevassus-Lozza (2015)	2 942 French firms	Productivity threshold to export to European markets	IFS BRC	Agrifood	Mixed effect	BRC-certified firms are found to be more export-oriented than non-certified firms. However, no export effect is found for IFS-certified firms. Also, when developing and estimating Chaney's model, it is found that firms certified by BRC face lower trade costs in accessing certain European countries.
	Colen et al. (2012)	72 mango exporting firms and 196 green beans exporting firms in Senegal	Export volume to EU	GlobalG.A.P.	Mango and bean	Mixed effect	Certified companies have higher market shares and larger export volumes to the European Union, both for beans and mangoes. However, the difference in growth rates of exports between certified and non-certified mango companies is not statistically significant. On the other hand, although bean exports have experienced a decline over time, the exports of certified companies have decreased less in percentage terms than those of non-certified companies, with the difference being marginally statistically significant.
	Schuster and Maertens (2013)	567 asparagus export firms		GAP, SQF1000, GlobalG.A.P., TESCO, LEAF, HACCP, SQF2000, GMP, BRC, IFS, BASC	Asparagus	Favourable	Certification to private standards increases vertical integration into GVCs. It also reduces sourcing from external producers, especially from small-scale producers.
	Lambert and Frenz (2021)	450 food business operators in a wide range of geographical locations	Sales growth	BRCGS	A wide range of products, including non-food.	Favorable	BRCGS certification is associated with expanded market opportunities and growth in both domestic and export markets (55 per cent). It helps drive competitiveness for a large proportion of food business operators, especially in export markets (60 per cent).

Note: BASC – Board of Ambulatory Surgery Certification; BRC – British Retail Consortium (standard); BRCGS – BRC Global Standard; GAP – Global Animal Partnership; GlobalG.A.P. (G.A.P. stands for Good Agricultural Practices); GMP – Good Manufacturing Practice; HACCP – Hazard Analysis Critical Control Point; IFS- International Food Safety; LEAF – Linking Environment and Farming; SQF – Safe Quality Food (SQF1000 code is an HACCP code for primary producers; an SQF2000 code is aimed at food manufacturers and distribution centres). TESCO - The Eastern Specialty Company; UTZ

Table 5 shows that the studies reveal mixed results, especially when data are disaggregated based on country income level. Andersson (2019), for example, finds that the positive trade effect of increasing certification coverage is higher for low-income than high-income countries. Ehrich and Mangelsdorf (2018), on the other hand, find that the trade enhancing effect of certification remains robust only for high- and middle-income countries, but that there is no effect for low-income countries. Fiankor et al. (2020) find that VSS certification has a positive impact on trade regardless of the development level of the exporting country. Thus, there is no clear answer either on the existence of VSS impact on trade or on the type (direction) of impact (catalyst vs. barrier).

2.5. COMPLIANCE WITH VSS

The environmental and socioeconomic effectiveness of VSS depends upon the degree of compliance of VSS adopters with their requirements. Compliance can be generally defined as “*an organization’s adherence to laws, regulations, guidelines and specification relevant to its business*” (Rouse, 2012). In the context of VSS, compliance measures the degree to which certified producers align with VSS requirements. Evidence on compliance is mixed: some studies show that producers seem to reliably implement certification requirements, while other studies have documented significant levels of non-compliance (Grabs, 2020).

So far, little research exists about the drivers of compliance in current certification systems. Compliance research starts from the assumption that there may be gaps between regulations on paper and regulations in practice, and that therefore regulators need a strategy to ensure compliance with rules in order to reach regulatory goals. In the past few decades, research on compliance has developed into a complex field spanning the disciplines of politics, law and economics. This section draws on some of the major insights developed by compliance theories in order to identify and discuss crucial factors in certification systems that may facilitate compliance with VSS. In addition, it presents some preliminary results from an empirical study on compliance with VSS by certified coffee producers in Colombia to test different compliance-related hypotheses.

2.5.1. Compliance with VSS: Conceptual issues

Several factors influence the degree of compliance with VSS, including price premiums, legitimacy beliefs, partnership structures between certification bodies and certified producers, and capacities.

Price premiums

The so-called compliance enforcement school is rooted in the tradition of rational choice theories. From this perspective, compliance is a consequence of rational calculation. The regulated actors balance the benefits and costs of compliance, and adhere to regulations when the sanctions avoided by compliance are larger than the rewards from non-compliance. Sanctions may focus on incentives for compliant behaviour (positive sanctions) rather than punishments (negative sanctions) for non-compliance (Becker, 1968). At their core, certification systems are built on the idea of positive sanctions (or potential rewards). The main incentive for producers to adopt and comply with VSS are price premiums (Cashore et al., 2004). Producers adopt environmental and social standards in order to gain access to standard-compliant markets when they are remunerated for their extra efforts with higher prices.

However, the premiums that current certification systems generate through the sales of certified products are too small to provide higher prices to all certified producers. For example, in the coffee industry, for many years there has been a growing gap between certified production volumes and certified sales volumes (Panhuysen and Pierrot, 2018). As a result, some producers may be forced to accept lower premiums or sell their certified products on conventional markets. The implicit deal inherent in certification (sustainable production in exchange for premium payments) is undermined by these developments. From the perspective of compliance, the central question is to what extent the unequal distribution of price premiums has an effect on compliant behaviour. If premium payments are too low or even non-existent,

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the motivation of producers to comply with VSS may decline. Following the logic of the enforcement school to compliance there are strong reasons to believe that price premiums are a major factor in explaining different levels of compliance in current certification systems.

Additionally, price premiums can only exercise their steering function if the implementation of environmental and social standards is reliably monitored; otherwise it might generate free-riding. In certification programmes, it is the task of compliance audits to monitor and assess the implementation of VSS at certified production sites. Hypothetically, stricter audits and certification requirements present another crucial variable for explaining compliance with VSS.

Legitimacy beliefs

Compliance with VSS may be influenced not only by external material incentives, but also by the internal values of the certified producers. Institutional scholars on compliance research argue that the more certification organizations and certified producers share a common set of social norms, the more likely it becomes that certified producers will consider the certifiers as legitimate rule-setters (Bernstein and Cashore, 2007). Positive legitimacy views of a standard-setting organization are widely believed to correlate with higher compliance rates. However, different producers might evaluate the legitimacy of certification systems differently. For example, producers who freely and deliberately join a certification scheme can be expected to share a more positive view on certifications than producers who have had certification imposed on them by powerful upstream value chain actors or government agencies. The reason to join certification may therefore present another interesting variable to explain different degrees of compliance by certified producers.

Two further common proxies to measure legitimacy beliefs towards a standard-setting organization are trust and satisfaction (Hough et al., 2010). Certified producers who have greater trust in or are more satisfied with certification organizations are likely to be more compliant than producers who have less faith in those organizations.

Partnerships between certification bodies and producers

Finally, theories of deliberative democracy and procedural justice (Dryzek, 2002; Tyler, 2006) suggest that the development of partnership structures between certification bodies and certified producers may have a significant impact on compliance rates. Theoretically, producers who participated more in the process of certification in terms of consultation and active participation during its implementation, are assumed to be more willing to comply with VSS than those who participated less actively.

Capacities

All approaches introduced so far have one thing in common: they frame regulatory compliance as a commitment issue. The so-called management school on compliance takes a different stance, believing it to be mainly a matter of capacities. Even fully committed agents may fail to implement a regulatory requirement if they lack the necessary resources and capabilities to do so. Ensuring compliance is therefore not only a motivational problem, but also a problem of capabilities. In this view, the capacity-building measures taken by producer organizations or certification bodies are expected to have a significant impact on the compliant behaviour of certified producers. Such capacity-building measures can include specific training, access to credit, services, or in-kind contributions. Especially in many developing and emerging economies, producers often lack the necessary technical resources and know-how to adopt certification, so that capacity-building measures may play a pivotal role to enable producers to meet certification requirements. Thus, producers who benefit more from capacity-building measures may be expected to show higher compliance rates.

2.5.2. Compliance with VSS: An empirical study

In order to test different hypotheses on compliance with VSS, the TRANSSUSTAIN Project at the University of Münster (Germany) conducted an empirical survey in 2019 and 2020 based on a sample of 188 producers who were certified by at least one VSS. Survey data were collected in partnership with three cooperatives from different departments within Colombia's coffee-belt: Antioquia, Caldas, and Quindío. All cooperatives were Fairtrade certified. Producers also had different combinations of additional certifications including from Starbucks Coffee and Farmer Equity Practices, Nespresso AAA, 4C and Rainforest Alliance. As a preliminary step, researchers investigated whether the farmers in the survey sample complied (yes/no) with 15 selected environmental standards. Table 6 below shows the share of compliant and non-compliant farmers for each of the 15 selected environmental standards. In addition, a set of hypotheses was derived from the theoretical literature (see table 7) to look for causal relations among factors that might drive compliance rates in current certification systems. The study used covariate balancing to ensure comparability between treated and control groups, as well as robust linear regression techniques.

Table 6 Compliance with environmental standards		
Environmental standards	Rate of compliance (per cent)	Rate of non-compliance (per cent)
1. Triple washing (chem. containers)	93	7
2. Soil cover	89	11
3. Buffer zone	88	12
4. Farm warehouse	87	13
5. Reusing organic matter	80	20
6. Covering soil with organic matter	77	23
7. Warehouse well organized	75	25
8. Shaded area over 25 per cent	68	32
9. Three shade strata	68	32
10. Organic methods before use of chemicals	61	39
11. Pruning for plant health	57	43
12. Coffee waste water treatment	44	56
13. Safe disposal of pesticide	44	56
14 Soil analysis for fertilizing decisions	33	67
15. Eight or more different shade species	26	74

Table 6 shows, in descending order, the extent to which the coffee producers in the sample comply with a selected set of 15 core environmental standards. For four types of standards (1-4), the table shows high compliance rates ranging from 93 per cent to 87 per cent. For seven types of standards (5-11), the table shows medium to high compliance rates: between 80 per cent and 50 per cent. And for 4 types of standards (12-15), the table shows relatively low compliance rates of less than 50 per cent. Overall, the results are mixed, which requires an explanation for these differences in compliance rates. Table 7 provides an overview of potential variables driving compliance with VSS.

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Table 7 Potential Drivers of compliance with VSS				
Drivers of compliance	Associated hypotheses	Enforcement	Capacities	Legitimacy
Price premium	<i>H1: Producers who benefit from certification-related premiums are more likely to comply with certification regulations.</i>	X		
Certification strictness	<i>H2: Producers are more likely to comply with certification regulations that are strictly enforced.</i>	X		
Training for producers	<i>H3: Producers who receive training are more likely to have internalized information about the rules, and will therefore be more compliant.</i>		X	
Help from certification bodies	<i>H4: Producers who receive assistance from the certification bodies are more likely to comply, since the presence of those bodies increases their reputation.</i>		X	
Help from cooperatives	<i>H5/6: Producers who receive help from cooperatives are more likely to comply.</i>		X	
Services from cooperatives	<i>H6: Producers who receive services (e.g. loans, financial support for education, technical support, subsidies for agricultural inputs) from cooperative are more likely to comply.</i>		X	
Trust in certifications	<i>H7: Producers who trust certifications are more likely to comply.</i>			X
Participation in the certification process	<i>H8: Producers who participated more during the certification process tend to comply more.</i>			X
Reason for joining certification (voluntarily, or other reasons)	<i>H9: The reason for joining the certification affects compliance rates: a producer who joins voluntarily will comply more than those who joined for other reasons.</i>			X
Satisfaction with certification	<i>H10: Producers who are more satisfied with certification are likely to comply more than those who are less satisfied.</i>			X

Among the potential drivers of compliance identified above and tested in the study, price premiums seem to have the greatest effect on compliance rates. According to the preliminary results of this empirical study, the price premium variable had a significant positive impact on compliance rates for 5 of the 15 types of the environmental standards selected. Interestingly, even relatively small price premiums seem to be sufficient to achieve an improvement in compliance rates. The payment of price premiums of less than \$50 per hectare and year had a significant positive effect on 4 of the 15 selected environmental standards. Further, the results are in accordance with the assumptions of the enforcement school on compliance, that stricter standards and audit procedures have a significant positive impact on compliance rates (5 of 15 selected standards). However, the preliminary results also show that, for 2 of the 15 selected standards, stricter audits had a negative effect on compliance. This is not an unusual finding. The literature on regulation and governance has reported many cases in which more flexible enforcement systems lead to better compliance rates (Levi-Faur, 2013).

A third significant result points to the comparatively high importance of capacity-building measures. Producers who benefited more from the services offered by their cooperatives showed improved compliance rates with respect to 4 of the 15 selected standards. In contrast, for the other potential factors related to the reasons for joining certification, including beliefs in the legitimacy of certification, such as trust and satisfaction, the results were ambiguous.

Box 5. Opportunities for and challenges to VSS-compliant markets: Survey results from six developing and least developed countries

UNCTAD, in collaboration with the IISD, undertook a field study in 2021 to investigate smallholder farmer access to VSS-compliant markets in the following six countries: Cambodia (rice), Colombia (avocados), Guatemala (bananas), Guinea-Bissau (cashews), India (cotton) and Rwanda (coffee) (see Elder et al., 2021, for more information). The study was based on information from interviews and surveys with the main actors in these countries' value chains. This included producers/producer organizations, government officials, VSS/certification bodies, NGOs, financial service providers and buyers.

The following are the main opportunities and challenges identified through the survey.

Opportunities:

Respondents identified **price premium** as the main advantages of complying with VSS, with 63 per cent of respondents referring to this as the main advantage, followed by access to training and improved farm practices. Overall, respondents who identified access to training as an advantage linked it to **improved technical knowledge and capacity, improved farm practices and acquiring quality inputs**. In addition, respondents mentioned that VSS facilitate **market access** and lead to **pre-established long-term contracts** that work as an assured purchase guarantee. Some respondents mentioned that certification secures selling their entire production due to the higher demand for VSS-compliant products. However, the significance of **market access and assurance** as advantages was viewed differently across countries and participant groups.

Challenges:

Analysis of both the open-ended and closed-ended interview data revealed five main categories of factors that limit smallholder farmer access to VSS-compliant markets, as follows:

1. A majority of respondents (77 per cent) highlighted the **time commitment** needed to become VSS-compliant as a limiting factor, explaining that access to VSS-compliant markets requires more rigorous **production practices and processes** not only **to meet VSS criteria**, but also to meet the **quality and volume** requirements of international buyers.
2. **Limited access to financial services** was identified as a major constraint, overall, by more than 79 per cent of respondents, and the main constraint in terms of access to resources.
3. Producer capacity to comply with quality, volume and VSS requirements is made more difficult by **environmental constraints**.
4. Smallholders often lack the financial resources needed to obtain and maintain certification. Thus it is no surprise that respondents across countries perceived the **cost of certification** as limiting smallholder access to VSS-compliant markets.
5. Three quarters of study respondents identified producers' **limited access to market information or traders/aggregators** as a constraint on access to VSS-compliant markets. This is due to the presence of too many intermediaries in the supply chain, as well as unfair buyer practices, including delayed payments to farmers, among other practices.

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In sum, the results of this empirical study indicate that it is particularly important for certifiers to generate the necessary resources to both motivate and enable certified producers to produce according to certification standards, particularly in developing countries and LDCs. In the future, it will thus be crucial to minimize the gap between supply and demand of certified products in order to stabilize and expand the price premiums paid to certified producers. In addition to the widely used indicator of standard uptake — measured in term of certified production volumes or certified production hectares — sales volumes and generated price premiums should be given more weight as other important indicators to evaluate the success of VSS. Especially from the perspective of developing countries, it is of the utmost importance that the existing VSS systems generate the necessary resources that empower producers in these countries to upgrade their production system within GVCs. Box 5 provides more insights into the opportunities and challenges facing VSS-compliant markets.



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CHAPTER 3

VSS AND DEVELOPING COUNTRIES: *CHALLENGES*

3.1. INTRODUCTION, MAIN CHALLENGES FOR DEVELOPING COUNTRIES

The effectiveness of VSS depends on a plethora of factors, including how they fit within the broader institutional context, and their interactions with other policy instruments, as VSS do not operate in a regulatory void. In particular, various policy developments have emerged in recent years which interact with the regulatory scope of VSS, especially in developing countries. This chapter investigates the role of VSS in broader institutional and policy contexts by exploring the governance gap issue (section 3.2), the rise of national standards (section 3.3), due diligence legislations (section 3.4) and policy mixes (section 3.5). Each of these sections, analyse the role of VSS as private governance instruments, and how they can complement or conflict with other policy instruments, or be undermined by those instruments.

3.2. REGULATORY GOVERNANCE CONTEXT AND VSS

Several studies have highlighted the importance of the regulatory governance context in which VSS operate as a relevant factor in understanding the degree to which they foster compliance with VSS and the latter's effectiveness (see section 2.5 on compliance with VSS). The regulatory governance context refers to the set of institutions in a given country which address a range of public policy fields and issues. These institutions consist of rules and procedures for implementation, monitoring and enforcement. The previous section and wide-ranging academic literature details how countries differ in how they regulate, and how compliance with regulation is organized (Lobel, 2012; Rhodes, 2012). This results in different approaches and the degrees to which compliance with rules is achieved. Since VSS in essence are rules/standards-based regulatory approaches, they can align, to different degrees, with a given country's existing approaches to regulatory governance, and their uptake and implementation might be influenced by the regulatory governance context in which they operate.

Bartley (2010) suggests that the political and regulatory context in which VSS operate might be an explanatory factor in understanding their effectiveness. Locke (2013) likewise identifies governance factors as a possible explanation for VSS effectiveness. Marx and Wouters (2015), who analyse the relationship between governance indicators and the occurrence of VSS, show that VSS are more widely adopted in countries that already have a strong and effective regulatory governance system. Basso et al. (2012) show that, in the case of forest certification, producers tend to be already more or less aligned and acquainted with rules, which facilitates the certification process and VSS uptake. In other words, certification is facilitated if producers are accustomed to complying with rules, which is typically more common in countries with strong regulatory and compliance systems. A literature review of more than 100 studies concluded that national regulatory institutions which provide a supportive environment for compliance with standards and facilitate regulatory compliance is a necessary, although insufficient, condition for the adoption of VSS (Loconto and Dankers, 2014: 9). Similarly, Essen and Lambin (2021: 2) argue that a "governance fit" is important for the effectiveness of VSS since producers seeking certification often depend on "supporting policies and enabling conditions created by local public authorities, such as law enforcement, clear land property rights and support for marginal producers" (see also Lambin and Thorlakson, 2018). More broadly, governance structures in which firms operate influence their engagement with corporate social responsibility initiatives of which VSS are an important component (Knudsen and Moon, 2017). Hence, the governance context in which producers and firms operate influences their engagement with VSS as well as the effectiveness of VSS both in terms of uptake and impact.

The operationalization of what exactly is understood by regulatory governance structure and context in this literature remains quite vague, but it is clear that at least two dimensions are important, namely private sector development policies and compliance with public rules and regulations.

First, as UNCTAD (2021) noted, the private sector can be a catalyst for the productive capacity development and structural transformation required to achieve sustainable development. In essence, VSS are regulatory

mechanisms which aim to make private sector practices more sustainable. Hence, regulatory governance of the private sector might enable or inhibit the use of VSS. As the UNCTAD Productive Capacities Index shows (UNCTAD, n.d.), there is significant variation between countries with regard to the development of the private sector and the policies they develop to foster, enable and support that sector (UNIDO, 2011). In some countries, the private sector is well developed and government policies promote that sector's development, but this is less so in other countries. Private sector development policies include a whole set of regulatory and financial measures that encourage private initiatives. These include providing local private enterprises with loans and equity financing, risk capital and guarantees, concessions and export credits, or creating micro-loan programmes; but also offering export training, vocational training, investment advice, grants to conduct feasibility studies, management assistance (finding and recruiting capable management) and information about markets and regulations, among others (Schulpen and Gibbon, 2002: 5). These private sector development policies directly influence the effectiveness of VSS (Essen and Lambin, 2021). For example, direct financial and technical support to producers can have a positive impact on VSS uptake and implementation.

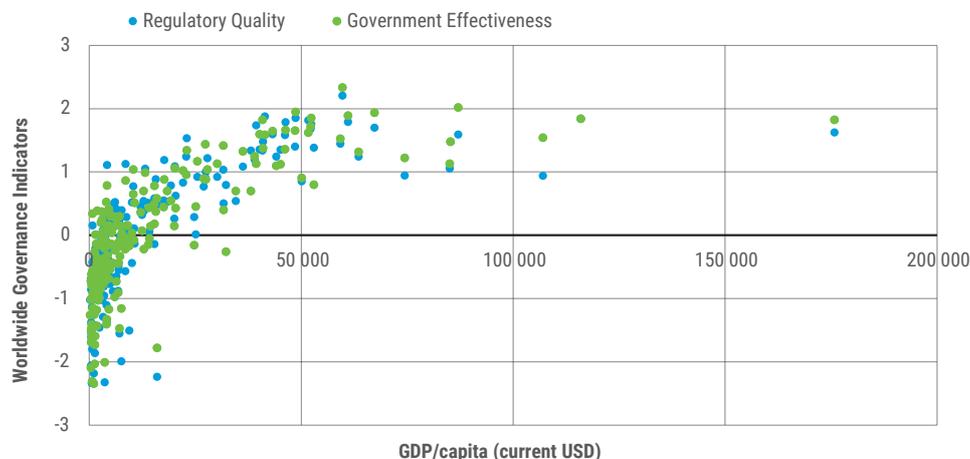
Second, concerning rule-compliance mechanisms, it has been argued that VSS use a specific regulatory approach which is characterized by setting standards and employing an elaborate set of procedures to check compliance with rules (see also sections 1.1 and 2.5). This is more akin to a traditional regulatory approach of setting rules and enforcing them through inspections and other tools (Auld and Renckens, 2021: 3; Levy et al., 2016). Producers who are used to complying with public rules are assumed to comply more easily with private rules and standards set by VSS. This is based on the understanding that countries which have developed effective and well-functioning governance structures constitute a better institutional context for well-functioning VSS. In other words, countries which score well on rule compliance indicators are hypothesized to have a higher rate of VSS use. This is substantiated by research findings that focus on VSS uptake (Depoorter and Marx, 2022; Marx and Cuypers, 2010; UNFSS, 2020).

The existence and strength of these two governance dimensions — private sector development policies and rule-compliance mechanisms — are closely associated with development levels. One way to measure this further is to use data from the World Bank on levels of economic development and on governance indicators. Two governance indicators are particularly interesting in this context, namely regulatory quality and government effectiveness. The Regulatory Quality Indicator “captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development” (World Bank, n.d.), which to some extent provides a measure for private sector development policies. The Government Effectiveness Indicator “captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies” (World Bank, n.d.), which to some extent provides a measure of rule-compliance mechanisms. Both indicators are composite indicators based on several data sources, and can range from -2.5 (lowest score, indicating poorer governance) and 2.5 (highest score, indicating better governance).

Figure 7 plots the relationship between income level and regulatory quality (in blue) and government effectiveness (in orange) at country-level. Countries' income level is measured by GDP per capita (in current dollars) using 2020 data from the World Bank (World Bank, 2022).

Figure 7 shows a strong positive correlation between income level and regulatory quality/government effectiveness at country level, with higher income countries performing better on regulatory quality and government effectiveness than lower income countries. This might inhibit VSS uptake in developing countries and LDCs. In countries where there is significant private sector development and which have better developed mechanisms for rule compliance, the likelihood of VSS uptake increases. In countries which score lower on the relevant governance indicators, producers might struggle more to adopt VSS due to a misalignment between the governance “context” in which they operate and the requirements of VSS. Hence, developing countries which score lower on the governance dimensions that are important for VSS might be confronted with what could be termed a “governance gap”.

Figure 7 Income level and Worldwide Governance indicators, 2020



Source: Author's calculations based on the World Bank's Worldwide Governance Indicators and World Development Indicators.

Hence, the regulatory governance structure of a country might have an impact on the effectiveness of VSS. However, VSS themselves can contribute to narrowing the governance gap and strengthening the (public) regulatory institutions in a country. There is some evidence that the introduction and use of VSS in countries with a relatively weak governance structure can have an effect on strengthening the governance structure. Basso et al. (2012) analysed the intersection between certification and the enforcement of existing national legislation on forest management in Brazil, and found that certification contributes to greater enforcement of existing national legislation in forest management units of plantations.

Moreover, there is some evidence that VSS can also help “overcome”, or reduce, the governance gap. In analysing the relationship between international trade and differences in regulatory governance, Fiankor et al. (2019) find that there is less trade between countries with significant differences in regulatory governance. They refer to this as the “governance distance” effect, which is related to the idea of a governance gap, and they show that increasing governance distance hinders bilateral trade. However, they also find that the interaction of VSS (GlobalG.A.P. in their case) and governance distance is positively associated with exports. This means that the uptake of VSS partially offsets the trade-inhibiting effect of governance distance. This shows that VSS can also reduce the governance gap.

3.3. NATIONAL AND REGIONAL SUSTAINABILITY STANDARDS: COMPLEMENTS OR COMPETITORS

A second element of the broader policy context in which VSS operate is the emergence of national standards. VSS are recognized as international standards, and utilize demand for sustainable products to help diffuse sustainable production practices across borders. However, VSS uptake crucially depends on whether producers are willing and capable of adopting standards due to their voluntary nature (Marx and Wouters, 2016). Hence, producers and governments of developing countries have the choice between promoting (international) VSS or creating national standards, either private or public.

There are several motivations for creating national standards (Michida and Nabeshima, 2017). First, local stakeholders may prefer national standards that are better adapted to local environmental, economic and social conditions. While some VSS have made efforts to adjust their generic, international standards to local contexts by developing “national interpretations” of their requirements, a lack of fit often persists, resulting in a preference for national standards. Second, national standards can provide a ladder, or intermediary step, for local producers who are unable (or unwilling) to adopt VSS due to language barriers, expensive

fees, or strict rules. Primarily, national standards help smallholders move up to international standards and thereby gain global market access. VSS have worked towards greater inclusion of smallholders by providing criteria specifically geared to them, along with supporting funds. However, training and creating incentives for smallholders require resources, and large-scale adoption of VSS has not yet occurred. Therefore, national standards may fill the gap.

As a national standard follows the criteria and practices of VSS as a model, its criteria are often similar to international standards. However, the degree of similarity varies depending on localization and aspiration for global market access (Michida et al. 2021). Similarity to VSS gives national standards a greater possibility of being accepted by markets. The prospect of greater market access thus provides the motivation for a national standard to align closely with VSS.

On the other hand, the motivation to improve the practices of local producers, such as increasing their harvest and improving governance, can lead to the development of a national standard that is more compatible with existing local conditions. Furthermore, the standard-setter may give higher priority to the diffusion of the localized standard by including a wide range of producers. Consequently, the criteria of the national standard may diverge from VSS. This raises the question as to whether national standards complement or compete with international standards. The following subsection examines this issue based on a case study of palm oil standards.

3.3.1. National standards: The case of palm oil standards

Oil palm grows in tropical regions with richly covered forests, such as in Indonesia and Malaysia. These two countries are the largest producers of palm oil, accounting for more than 80 per cent of global production. It is a highly versatile vegetable oil used in foods, consumer goods and even for renewable energy. Over the years, however, it has attracted considerable attention relating to sustainability issues, including its contribution to deforestation and biodiversity loss. Vegetable oils, including palm oil, used for renewable energy tend to be produced on a mass-scale, and scientific evidence points to their negative impacts on the environment. Therefore, the palm oil sector raises serious concerns, especially with respect to biofuel policy (Ponte, 2014).

As a response, VSS have played an important role in the palm oil sector, where the most prominent VSS is the Roundtable for Sustainable Palm Oil (RSPO). Developed in 2007, the RSPO is a globally recognized standard reflecting multi-stakeholder interests, including those of producers, retailers, banks and NGOs. Following the creation of the RSPO, the governments of Indonesia and Malaysia created mandatory national and public standards: Indonesian Sustainable Palm Oil (ISPO) in 2011 and Malaysian Sustainable Palm Oil (MSPO) in 2013. The RSPO and the two national standards differ in their membership, target markets, sustainability focus, and other characteristics (see table 8 for comparisons).

Why do the national standards differ from the global standard?

Besides the motivations discussed above (3.3), the two producer countries had specific problems with the RSPO which led them to establish their own national standards. First, the palm oil industry is vital for economic development, and reduction of poverty and inequalities between the rural and urban areas in these producer countries. However, many studies have documented obstacles for smallholders in developing countries to obtain VSS certification, particularly lack of capacity and finance or access to finance (Brandi et al., 2015; Glasbergen, 2018; Schuster and Maertens, 2015). Although the RSPO has been making continuous efforts to include smallholders, the latter tend to be marginalized from the GVCs that require RSPO certification from their suppliers (Brandi et al., 2015; Pramudya et al., 2018).

Second, as the RSPO became more influential, the governments of the producer countries became concerned about the growing influence of the private sector on their essential industry. Moreover, the governments found conflicting priorities between global environmental interests and domestic welfare concerns relating to poverty reduction and economic development (CPOPC, 2020). However, these national interests are not reflected in the RSPO, as producer governments do not have representation

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in the multi-stakeholder arrangement of this VSS — an issue raised in section 1.2 of this report relating to challenges to VSS uptake in developing countries. Therefore, the challenge of balancing international concerns, such as global warming, with domestic concerns for economic development and poverty reduction encouraged these governments to create their own national standards.

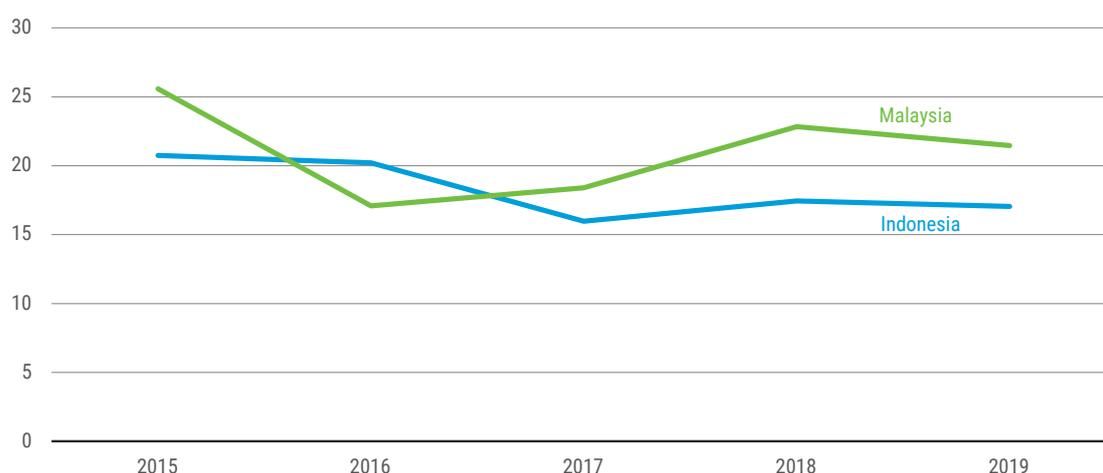
Table 8 Differences in characteristics between private RSPO (global) and public ISPO/MSPO (national)		
	Private certification scheme (RSPO)	Public certification schemes (ISPO/MSPO)
Years of inception and revision	2007, 2013, 2018	2011, 2020(ISPO), 2013, 2021(MSPO)
Dynamics	Raise the bar	Raise the floor
Business context	Promotes segregated certified oil	Promotes all growers
Major market(s)	Developed countries (Europe, United States and other Western markets)	China, India and other emerging markets
Membership requirement	Membership required	No membership required (ISPO/MSPO); all growers/mills participate (MSPO)
Membership fees	€2 000 per year per premise	Free (MSPO and ISPO)
Import charges	\$1 per ton	Free (MSPO)
Average cost of certification	€1 000 per auditor-day	
	€600 per auditor-day (MSPO)	
Requirement	Voluntary, no penalty for not being certified, but time-bound plan required from members.	Mandatory, penalty for not being certified
Scheme owner	Not-for-profit organization	Public sector (ISPO); working with the Government (MSPO)
Driver	Market-driven	Producer-based
Characteristics of members	Tend to be producers owned by listed companies, although the non-listed can also participate.	All mills and growers, including small-scale producers (ISPO 2020, MSPO after 2018)
Sustainability focus	Various aspects, but more emphasis on the environment and climate change	Various aspects, but more emphasis on poverty reduction/equitable development
Premium	Supply and demand (\$10~\$50)	Supply and demand
Standards	7 principles and 40 criteria	7 principles and 28 criteria (ISPO)
	7 principles and 33 criteria (MSPO)	
Supply chain certification	Yes	Yes (MSPO); No (ISPO)
Certified area	2.1 million ha (Indonesia), 1.2 million ha (Malaysia) as of 2019	6.6 million ha (MSPO) as of April 2022
No. of certified mills	237 (Indonesia), 140 (Malaysia) as of April 2022	460 (MSPO) as of April 2022

Source: Author, based on RSPO (2020); WWF (2012); Michida (2022); RSPO and MSPO homepages (<https://rspo.org/>, and <https://www.mpocc.org.my/about-mspo>) .

Note: Listed companies refer to those that are traded on the stock market.

Third, while the production volume of the RSPO has been increasing, the share of RSPO-certified production has been stagnating at around 20 per cent of total production in both Indonesia and Malaysia (figure 8). This is partly because the RSPO-certified products find a market mainly in Europe and other developed countries but not in the emerging market economies, which account for a larger share of the global market for palm oil. The major export markets for palm oil include China and India (figure 9 shows), where there is little demand for the higher priced RSPO-certified oil, at least in the near term (Schleifer and Sun, 2018). Consequently, these countries only import around half of the RSPO-certified oil. The remaining RSPO-certified oil is sold as conventional oil without a price premium. Although producers expect that the premium borne in developed countries will cover their VSS adoption costs, the premium price for sustainable oil is diminishing (WWF, 2012). Hence, the global sustainability cost-sharing mechanism falls short. The national standards, on the other hand, aim at supplying lower priced sustainable palm oil to emerging markets while also satisfying international expectations for sustainability across all types of growers using national funds and resources. Through these national standards, the two largest producer governments expect to hold palm oil production accountable for sustainability.

Figure 8 Share of RSPO-certified palm oil in total palm oil production in Indonesia and Malaysia, 2015–2019 (per cent)



Source: Author's calculations, based on the *RSPO Impact Report 2015–2019*, *Malaysian Oil Palm Statistics* ((2019) (<https://mpoc.org.my/monthly-palm-oil-trade-statistics/>), and the Directorate General of Estate Crops, Indonesia homepage (<https://ditjenbun.pertanian.go.id/>).

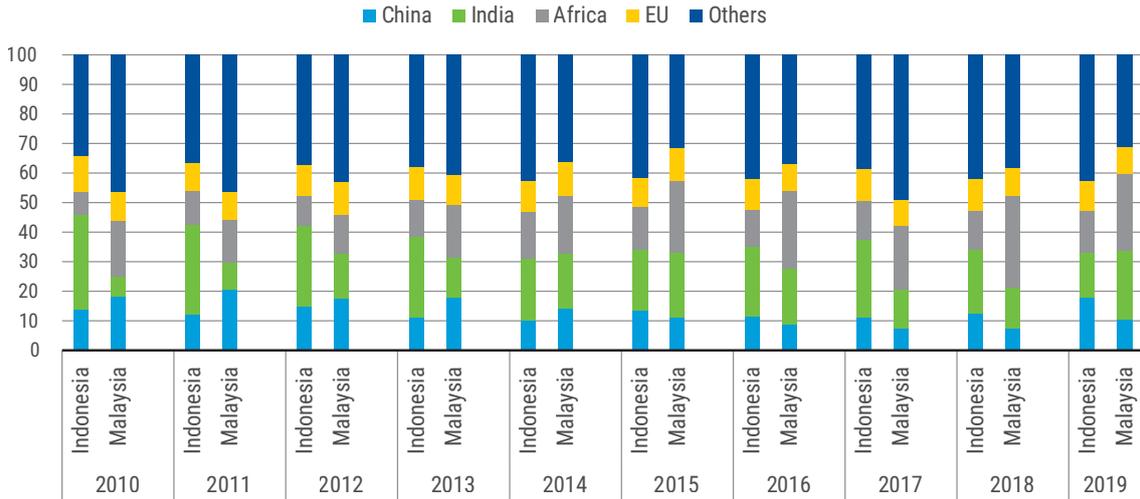
Competitors or complements?

While the ISPO and MSPO were initially established to compete with the RSPO (Hospes, 2014), the national standards have requirements that complement the RSPO (table 8; see also Humphrey and Michida, 2021). Both the ISPO and MSPO aim to develop more inclusive standards based on national policies. Certification by the MSPO is mandatory for all growers, including smallholders, and the ISPO is moving in a similar direction. As a result of ISPO and MSPO implementation, RSPO-certified growers and mills are also covered by the national mandatory schemes, leading to double certification. An analysis shows that the RSPO and the national standards target different destination markets (figure 10). The growers owned by listed companies whose shares are traded on the stock market tend to obtain RSPO certificates. The major drivers for RSPO uptake are access to the European market and the ESG (Environmental, Social and Governance) requirements. However, non-listed companies are less likely to obtain RSPO certificates (Michida, 2022). Therefore, the RSPO, as a market-driven mechanism, promotes

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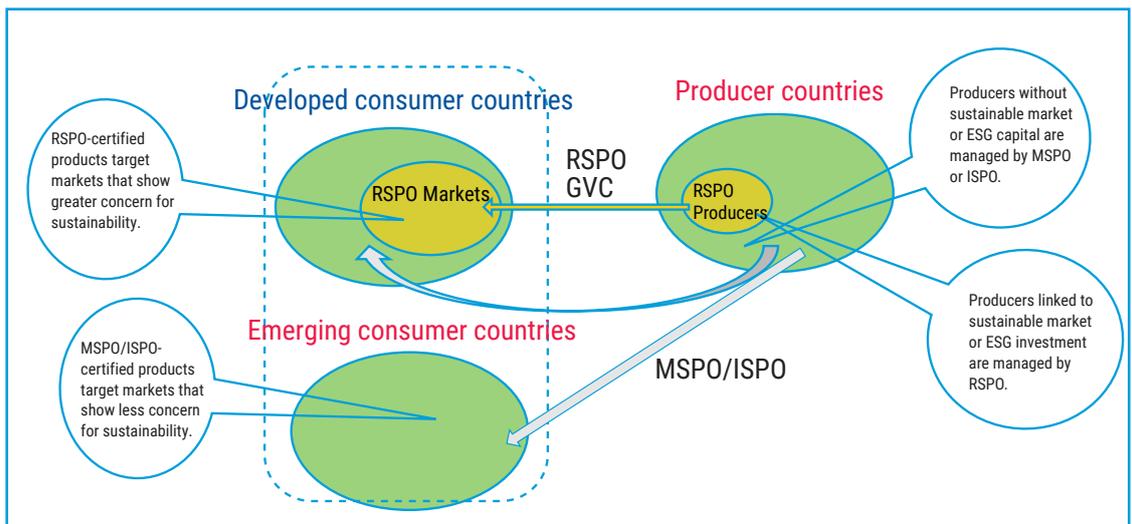
sustainability for the growers that the developed-country or international capital market can reach. On the other hand, the national schemes can offer an alternative way to become sustainable for other growers supplying domestic and emerging economy markets, reaffirming the complementary component of these two schemes.

Figure 9 Palm oil exports from Indonesia and Malaysia: Share of major destinations, 2010–2019 (per cent)



Source: Author's calculations using UN COMTRADE.

Figure 10 Palm oil market segmentation and trade



Challenges for the international and national standards

The RSPO has successfully created a sustainable palm oil market and raised the standard of sustainability. However, it faces challenges to increased uptake, including by smallholders, and extending its market to emerging economies. Moreover, the growing demand for more actions¹⁰ to protect the environment has resulted in the standards becoming more stringent, which further raises the bar for smallholders to achieve RSPO standards.

The national standards face different difficulties. Both the ISPO and MSPO have gained limited international recognition so far partly due to fears of a race to the bottom since these standards are still considered less stringent than those of the RSPO, although they have improved their standards through revisions. To date, the governments of several importing countries have recognized the RSPO but not the producer countries' standards. For example, the list of VSS used by the Renewable Energy Directive of the European Union includes the RSPO and other international standards, but not the ISPO or MSPO. Moreover, the European Union is set to phase out palm oil for biofuel by 2030. In 2021, the European Free Trade Association (EFTA) concluded the Comprehensive Economic Partnership Agreement (CEPA) with Indonesia, whereby it was agreed that the CEPA preferential tariff would only apply to products meeting environmental sustainability criteria. Switzerland recognised that palm oil certified by the RSPO would meet these requirements, but not ISPO- or MSPO-certified palm oil. And Japan's feed-in tariff policy for renewable energy requires power-generating companies that use palm oil to procure only RSPO-certified oil. The exception is the 2020 Tokyo Olympic and Paralympics Committee in Japan, which has recognized the RSPO as well as the two national standards in its sustainable procurement rules. The Committee supports further diffusion of sustainable standards, recognizing that the ISPO and MSPO help achieve sustainable management across smallholders. While the sustainable procurement rule applies only during the Olympic and Paralympic Games period, it contributes to increasing the number of RSPO members and preparing the traceability system for MSPO-certified palm oil. Also, in 2020, the Chinese and Malaysian governments agreed to cooperate to promote sustainable commodities through the MSPO and the Chinese Green Food label.

3.3.2. Regional Voluntary Standards: The case of ECOMARK Africa¹¹

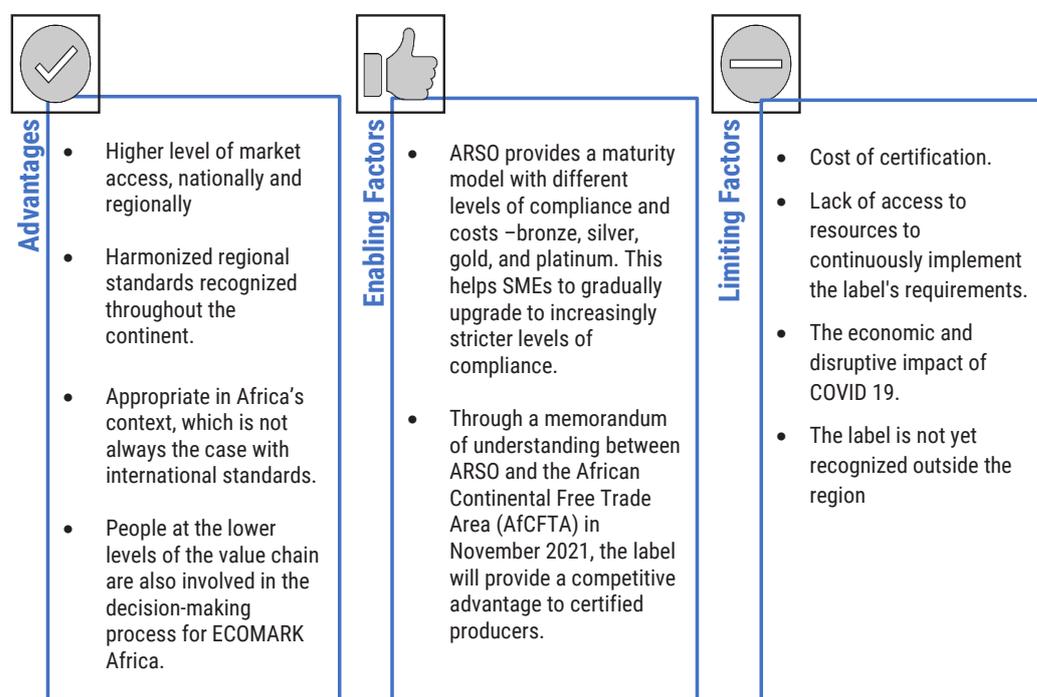
In 2018, ECOMARK Africa (EMA) was established at the request of the African Union through the African ministries of environment, driven by the urgent need to produce and consume in a sustainable way within the continent. It is an African eco label that is owned by the African Organization for Standardization (ARSO)¹², and aims to address the challenge of multiplicity of standards and ecolabels in Africa. It promotes the competitiveness and sustainable production of goods and services through implementation and compliance with African sustainability standards. During the process of harmonization of African standards, reference was made to international standards. The development of ECOMARK Africa involved first, identifying key sectors for Africa's economy and trade. Second, identifying the key sustainability concerns in Africa. And third, examining which of the international standard requirements should be appropriately applied by ECOMARK Africa based on the identified socioeconomic and environmental requirements of the continent.

Currently, ECOMARK Africa consists of four certifications that cover agriculture, fisheries, forestry and tourism, but it aims eventually to expand to other sectors, including mining, energy and textiles. Today there are 10 certified producers in Africa, mostly in Ghana, Kenya, Nigeria, Uganda and Zimbabwe. The most certified products are coffee (40 per cent of certified companies) and tilapia fish (20 per cent of certified companies).

Advantages of ECOMARK Africa certification, and the enabling and limiting factors to certification

In 2020 ARSO conducted surveys and interviews with certified companies and producers, and identified the main advantages of ECOMARK Africa certification, as well as the enabling and limiting factors to certification (figure 11).

Figure 11 Advantages of ECOMARK Africa , and enabling and limiting factors to certification



Source: Interview with Hermogene Nsengimana, the Secretary General of ARSO.

Figure 11 shows that, as all other VSS, ECOMARK Africa is perceived to offer improved market access to certified producers . As a regional standard, it encourages intra-African sustainable trade. Also, ECOMARK Africa's different certification levels— bronze, silver, gold and platinum — from beginners to achievers, offer a set of requirements that respond to specific levels of certifications. It thus provides a flexible system that enables a gradual transition for producers from lower to higher certification requirements.

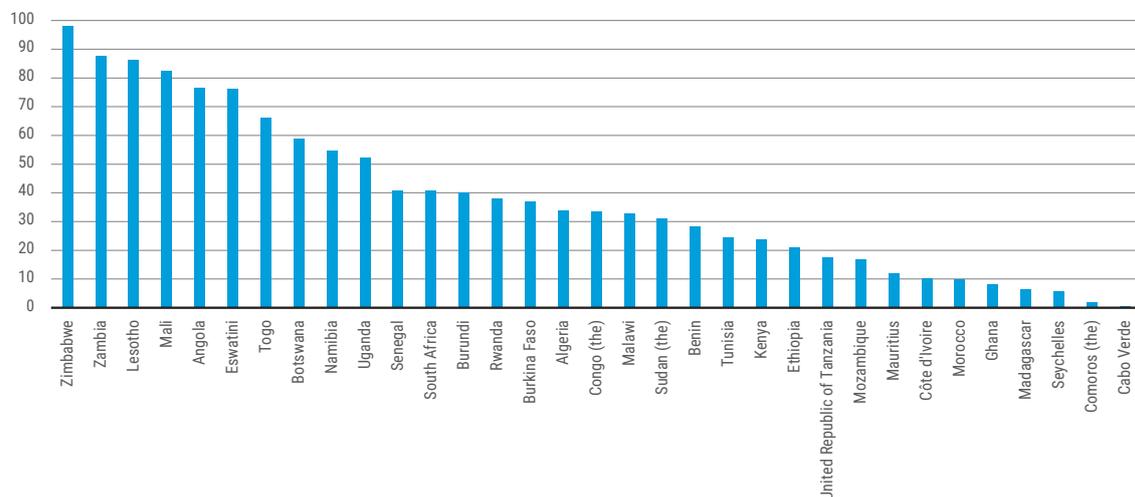
Although the cost of certification by ECOMARK Africa is relatively lower compared to international standards, it nevertheless remains one of the main concerns for smallholders and producers in African countries. Moreover, ECOMARK Africa is not yet recognized internationally, which limits its certified producers' ability to access many developed-country markets.

Intra-African trade level

Regional trade of agri-food products (HS01 to HS24) is quite significant for some African countries for which data were available (figure 12). In some countries, the share of exports in intra-African trade in agri-food products exceeds two thirds of their total exports of those products. This suggests the potential role ECOMARK Africa, along with other international standards, could play in enhancing regional trade of sustainable agri-food products in the continent.

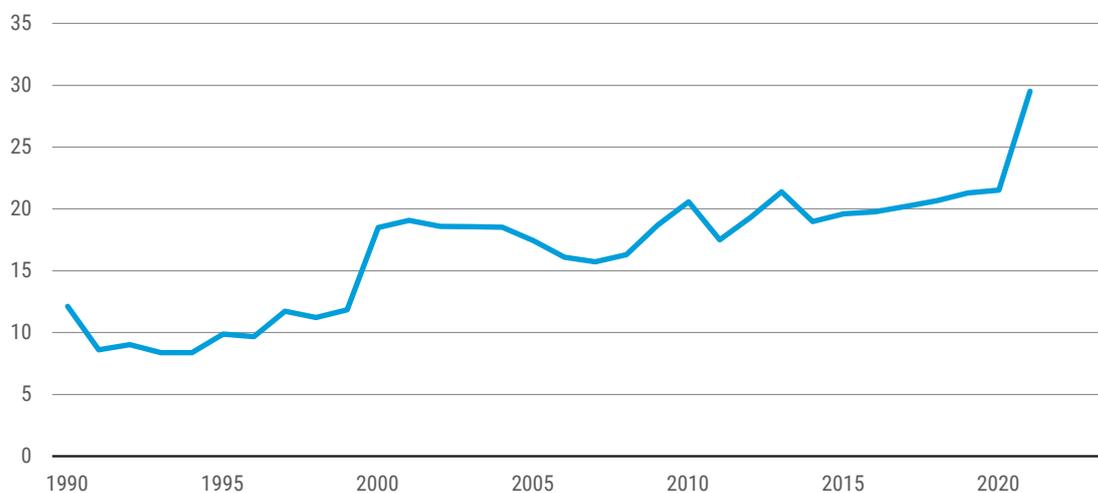
Moreover, the share of intra-African exports of agri-food products in Africa's total exports of those products has shown an upward trend since the 1990s (figure 13). Interestingly, following the COVID pandemic, it has increased by 8 per cent in 2020. That is, intraregional trade flourished in this particular year due to disruptions in GVCs.

Figure 12 Share of African countries in intra-African trade (exports) of agri-food products in their total trade of those products, 2019 (per cent)



Source: Author's calculations, based on UN COMTRADE data.

Figure 13 Share of intra-African exports in Africa's total exports of agri-food products, 1990-2020 (per cent)



Source: Author's calculations, based on UN COMTRADE data.

Recognition and link to international standards

While ECOMARK Africa is registered at the World Intellectual Property Organization, and the European Intellectual Property Agency, it has not been employed yet in trade between Africa and developed countries. This is mainly for technical reasons, including the need for signing memoranda of understanding with international partners (including certification bodies and governments).¹³

As a way of overcoming this barrier, African governments should play a role in facilitating the promotion of regional certifications among international partners. In addition, it is important to assist local producers to participate in international trade fairs to promote their products and convince potential buyers that their quality is on a par with other certified products.

International standards and regional/national standards can be viewed as complementary, as they work on different levels but generally aim to address the same issues. Regional sustainability standards are found to respond to some of the challenges presented by international ones, including lower costs of certification. In addition, as noted previously, international standards are not always suited to the local context. However, the degree of success of regional standards is still unclear, given that the cost of certification is still an obstacle to their uptake.

The multiplicity of standards, which is a growing concern to smallholders and farmers from developing countries, along with the high costs of international certifications, highlights the needs for regional/national and international standards to work together to facilitate mutual recognition and harmonization of their standards. However, a major challenge to such efforts towards harmonization is the VSS market, where differentiation presents a business opportunity. The adaptation of international standards to the local context through partnerships between international standards bodies and regional and national standards bodies is a way to help overcome some of the challenges.

3.4. A NEW POLICY DEVELOPMENT: DUE DILIGENCE AS A NEW REGULATORY APPROACH

An additional element in the wider policy context in which VSS operate and interact are the current policy developments relating to the emergence of due diligence legislation. The phenomenon of due diligence is further qualified in the discourse and practice as “human rights due diligence”, “risk-based due diligence”, or “supply chain due diligence”¹⁴, among others.

3.4.1. Emergence and evolution of due diligence measures

Discussions and debates on the interface of corporate activity with human rights and the environment first began in the 1990s, and resulted in the emergence of various instruments such as corporate social responsibility (CSR), the United Nations Global Compact, voluntary sustainability standards (VSS), sustainability reporting on environmental, social and governance (ESG) criteria, human rights due diligence (HRDD) and risk-based due diligence. With the growing realization that risks were being inadequately addressed due to an overreliance on the use of standards, certification and external audits, regulatory innovations sought to legally mandate corporate due diligence across GVCs.

The Human Rights Due Diligence (HRDD) concept was articulated in the *United Nations Guiding Principles on Business and Human Rights, 2011* (UNGPs), which were endorsed by the United Nations Human Rights Council (UNHRC) the same year (UNHRC, 2011). Several other legal frameworks that set out broad rules for corporate due diligence include the International Labour Organization’s (ILO) *Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy* (2017), the Organisation for Economic Co-operation and Development’s (OECD) *Due Diligence Guidance for Responsible Supply Chains of Minerals* (2016), the OECD *Due Diligence Guidance for Responsible Business Conduct* (2018), the OECD-FAO *Guidance for Responsible Agricultural Supply Chains* (2016), the International Finance Corporation’s (IFC) *Sustainability Framework* (2012) and the International Organization for Standardization’s (ISO) *Social Responsibility Standard ISO 26000* (2010) (ITUC, 2020: 6). And on 23 February 2022, the European Commission published its draft directive on *Corporate Sustainability Due Diligence*. In addition, several countries have enacted their own forms of due diligence legislation.¹⁵

The HRDD is but one of multiple efforts aimed at promoting a corporate culture respectful of human rights, and is expected to fill the “coherence gap” by providing “an authoritative focal point” for the business-

human rights relationship (Ochoa, 2008: 4). HRDD specifies "...the steps a company must take to become aware of, prevent and address adverse human rights impacts" (Ruggie, 2008: 199) "across its operations and business partner networks", especially in their value chains (UNWGBHR, 2013: 3). The scope of the responsibility to respect applies to all internationally recognized human rights¹⁶ and to all businesses, whatever their size, sector, location, ownership or structure (UN OHCHR, 2011: 15; UNWGBHR, 2013: 3). HRDD is described as "an ongoing management process", dynamic and adapting to changes in operating contexts (UNWGBHR, 2012: 6, 33), and covering both *actual* and *potential* human rights impacts (UN OHCHR 2011: 17).

A more expansive definition of the due diligence concept is to be found in the *OECD-FAO Guidance for Responsible Agricultural Supply Chains*, which uses the term "risk-based due diligence" to describe a process through which companies are to "...identify, assess, mitigate, prevent and account for how they address the actual and potential adverse impacts of their activities as an integral part of business decision-making and risk management systems." (OECD and FAO, 2016: 21). The use of the term "risk-based" refers to the fact that the extent of due diligence should correspond to the type and level of risk (OECD and FAO, 2016: 22). The words "actual and potential adverse impacts" are broad enough to include social and environmental impacts, thus not focusing only on human rights. The OECD-FAO Guidance elaborates on a Five-Step Framework for Due Diligence comprising the steps enterprises need to follow: "(i) Establish strong enterprise management systems for responsible supply chains; (ii) identify, assess and prioritize risks in the supply chain; (iii) design and implement a strategy to respond to identified risks in the supply chain; (iv) verify supply chain due diligence, and (v) report on supply chain due diligence." (OECD and FAO, 2016: 22). A risk-based due diligence framework can also be applied to HRDD.

3.4.2. Conceptual complexity of due diligence

The challenge of implementing due diligence measures is partly attributable to the complexity of the concept itself and to the lack of a definitive resolution of, inter alia, the following questions/challenges:

1. **Is due diligence a managerial tool or a standard of conduct?** The term "due diligence", in its original usage, has a limited meaning, defined (in business terms) as "research...of a company... done in preparation for a business transaction..." (Merriam Webster Dictionary). Ruggie conceived of a "governance hybrid" – HRDD – "straddling international human rights law and corporate governance" (Aaronson and Higham, 2013: 336; Martin-Ortega, 2013: 46, 45; Muchlinski, 2012: 150) to improve the chances of acceptability of the new concept, as companies were already accustomed to performing due diligence in commercial relations (Martin-Ortega, 2013: 50–51; Bonitcha and McCorquodale, 2017: 900). If human rights or environmental violations are projected as commercial risks for corporations,¹⁷ due diligence will simply be a managerial tool used to minimize any such risks. Due diligence for human rights or the environment, according to some critics, will remain an ambiguous concept if viewed as a managerial tool, and will become useful only when corporations accept it as a standard of conduct and a perfect moral duty (Bonitcha and McCorquodale, 2017; Fasterling and Demuijnck, 2013: 812). Extending the due diligence concept to include human rights or environmental concerns would mean shifting the focus from "risk to the company" ("shareholder-based corporate governance") to "risk to potential victims of corporate action" ("stakeholder-based corporate governance") (Muchlinski, 2012: 167).
2. **Is due diligence mandatory?** In the absence of a regulatory requirement, the corporate responsibility to respect human rights or the environment remains voluntary – defined by "social expectations" (McCorquodale and Nolan, 2021).¹⁸ Ruggie (taking inspiration from the Nobel laureate, Amartya Sen) consciously sought to invoke "social logics and processes other than law that drive public recognition and respect for human rights" (Ruggie and Sherman, III, 2017: 925–926). Several studies offer arguments about both the need as well as implications of making HRDD mandatory (Muchlinski, 2012: 145; Brown, 2018: 122; Ertl and Schebesta, 2020). "The term 'mandatory human

rights due diligence' (mHRDD) describes the use of law to compel companies to take proactive steps to ...address their adverse human rights impacts." (UN OHCHR, 2020: 3). The trend towards mHRDD is particularly evident in Europe and the United States, and mHRDD regulations are expected to grow in the future (IOE and KAS, 2021: 34).

- 3. How can effective compliance with due diligence requirements be ensured?** Even though the due diligence concept is increasingly incorporated in national regulatory frameworks, significant improvements in corporate behaviour may remain elusive if companies indulge in "tick the box" approaches or "cosmetic compliance" (Landau, 2019: 14).¹⁹ Blankenbach (2020a: 32) points to the "growing evidence of human rights risks and abuses going unnoticed by social audits", and suggests that for effective HRDD, companies should internalize due diligence steps rather than outsourcing them to an external scheme. The same would apply to environmental due diligence as well.
- 4. What is the scope of concerns covered by due diligence measures?** One of the potential challenges for the HRDD formulation is the possibility of a separation and hierarchization of the objectives of human rights protection and environmental sustainability, which, at times, may even be in conflict with each other. Attempts at "bringing back sustainability concerns" into the HRDD framework have manifested in references to "HREDD" (Human Rights and Environmental Due Diligence). Some observers argue that, while environmental issues are not explicitly mentioned in the UNGPs, they are inherently linked to human rights, such as the rights to food, water and health (ITUC, 2020: 12). Companies should also be expected to carry out due diligence with regard to their environmental impact and climate impact ("climate due diligence") (ITUC, 2020: 12; Macchi, 2021: 93). The European Commission's draft Directive published in February 2022 uses the term "corporate sustainability due diligence".²⁰ The term "risk-based due diligence" includes within the notion of "risk" both social and environmental concerns.
- 5. How does due diligence interface with VSS?** While the word "voluntary" is included in VSS, evidence indicates that, in practical application, VSS may not be all that voluntary (Blankenbach, 2020b: 4). At the same time while HRDD is moving towards including the added 'm' (for mandatory) in its nomenclature (mHRDD), it is not mandatory in original design. A productive collaboration, with the possibility of integrating VSS into due diligence efforts would require a match in scope (i.e. an alignment in the criteria covered by the external standard and the due diligence risks identified by a company) (ISEAL Alliance, 2020: 2; Partiti, 2022). VSS could potentially help due diligence "harness and steer collective market signals" (ISEAL Alliance, 2020: 3). It could contribute to due diligence in designing and implementing a strategy to respond to risks as required in step (iii) of the OECD-FAO Five-Step Framework, as certification could keep a check on the identified human rights and environmental objectives in supply chains. VSS could also help verify supply chain due diligence as required in step (iv). The OECD-FAO five-step framework can thus provide a useful lens through which to understand the interaction between VSS and due diligence objectives, and steps 3 and 4, in particular, could provide the possibility of aligning due diligence concerns with VSS.

3.4.3. Due diligence and developing countries

It is well documented that the worst cases of business-related human rights violations and environmental damage have occurred in developing countries and LDCs, many of which are already grappling with low incomes, conflicts or weak governance structures (UNHRC, 2008: 6; ILO et al., 2019). Incidents such as the fire at the Ali Enterprises factory in Pakistan (2012) which killed 250 workers, or the Rana Plaza building collapse in Bangladesh (2013) which caused 1,132 deaths, became globally visible, but other regular incidents of human rights violations and environmental damage, particularly in the developing world, remain undocumented. Thus the beneficiaries of a robust implementation of HRDD are more likely to be located in those countries.

However, the developing countries are relatively distanced from the discourse around due diligence in its extended meaning – in the context of human rights or environmental due diligence – which is more prevalent in the discourses in developed countries.²¹ Indeed, most suppliers, producers, workers, consumers, investors, human rights advocates outside the European Union member States are not even aware of human rights or risk-based due diligence regulations, or their implications (see box 6).

Box 6. Tying the Knot: Questions on voluntary sustainability standards and corporate due diligence laws from the perspective of developing countries

The interlinkages between issues, and policy instruments and impacts drive the emerging debate on environmental, social and economic sustainability. Because of these interlinkages, the implementation of a policy in one country can affect the implementation of policy and market instruments in other countries. Therefore any evaluation of the feasibility or the ability to implement an instrument despite of resistance needs to include a consideration of these interlinkages. For example, the new due diligence laws in several European countries are expected to have impacts on other instruments such as VSS, but they will also affect developing countries. However, because the more ambitious laws on due diligence in several European countries are quite new, an evaluation of their impacts on developing countries will necessarily be limited for the time being. Meanwhile, questions raised by developing countries on how the new due diligence laws in developed countries could affect them need to be addressed in both academic and policy debates. The next step is to address these questions through dialogue.

Due diligence is an instrument that is part of legislation in many countries. It allows identification, prevention, mitigation and accounting for adverse social and environmental impacts that might arise both within a company's operations and throughout its entire supply chain. Several European countries, including France, Germany and the Netherlands, have adopted corporate social and environmental due diligence regulations which apply to companies that meet a certain threshold in number of employees and net turnover. In addition, in February 2022, the European Commission adopted a proposal for a Directive on "Corporate Sustainability Due Diligence" to promote the observance of human rights and environmental protection. The current momentum in the public sector to expand due diligence is driven by efforts to ensure that economic activities align with environmental and societal interests as countries seek to achieve their SDGs.

At the same time, questions have been raised about how social and environmental due diligence legislation will interact with other voluntary instruments such as VSS, particularly given developing countries' existing concerns relating to these instruments.

On the one hand, the successful adoption of VSS can help monitor, evaluate, report and implement social and environmental due diligence obligations, because both instruments are based on similar requirements and use the same infrastructures and related disclosure elements. For developing countries that often struggle with establishing the needed infrastructures, the linkage between VSS and due diligence could help address these shortcomings, especially when developed countries will be obliged, de facto, to help establish them in developing countries. On the other hand, there are concerns that the legislation on social and environmental due diligence could undermine the effectiveness of VSS, or that VSS could hinder the implementation of social and environmental due diligence in the European countries that have passed due diligence legislation. For example, there is a concern that if companies try to justify their non-compliance with social and environmental due diligence because of their compliance with VSS, legislative bodies might target VSS by introducing legislation that could undermine VSS.

The following questions can help frame the discussion on the linkages between due diligence and VSS.

(1) How should social and environmental due diligence and VSS synergize to further advance the 2030 Agenda for Sustainable Development? (2) Which additional measures are needed to prevent social and environmental due diligence from posing additional challenges to the sustainable development trajectories of developing countries? These questions highlight the need for carefully aligning social and environmental due diligence with VSS.

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In order to achieve such alignment as well as synergies, a number of additional questions need to be considered. Will the due diligence legislation (i) Institutionalize “standards of care” and scale up social and environmental sustainability standards, as such legislation may cause these standards to have further impact on other laws (e.g. law to reduce food waste and loss) and policies (e.g., climate policies)? (ii) Enhance the links between VSS and other important global and domestic voluntary guidelines and commitments, such as the United Nations Global Compact or national legislation that prohibits modern slavery, for example? (iii) Broaden the scope of VSS, as a consequence of the due diligence legislation, to increase the latter’s credibility among business actors? (iv) Improve the attractiveness of VSS, because the latter focuses on rewarding companies that set ambitious targets compared to legislation that focuses on penalizing violations? (v) Lead to a corporate culture that is geared to obeying the new legislation, rather than exploiting grey areas and loopholes; (vi) Strengthen partnerships or competition between business actors and civil society, given that this legislation is expected to increase the role of the civil society in risk analysis and monitoring compliance? Will private companies feel comfortable being constantly monitored and assessed by NGOs? And how will this affect companies’ commitment to transparency?

Scholars and policymakers from developing countries have raised other important questions about the possible impacts and additional challenges resulting from social and environmental due diligence legislation and VSS interactions. First, will social and environmental due diligence, VSS and other environmental, social and governance (ESG) instruments implemented by developed countries reinforce oligopoly structures and existing privileges enjoyed by developed countries? Will these instruments strengthen one-sided control by developed countries multinational corporations over technologies and production processes? Second, are due diligence laws and VSS, through the compliance and the monitoring costs they involve, likely to pose de facto non-tariff trade challenges for developing countries that could further inhibit their integration into GVCs? The higher costs of market access, may cause emerging companies from developing countries to drop out of developed-country markets, inhibit their learning rate, and cement the dominance of companies in developed countries in technology innovation and production processes. Third, will due diligence laws limit the employability and qualifications upgrading of low-skilled workers in supplier countries? There is a risk that higher costs of monitoring progress, ensuring compliance and reporting could reduce incentives for companies to invest in upgrading the skills of low-skilled workers. Instead, due diligence laws might create incentives to use new labour-saving and low-carbon production methods at the expense of unskilled workers. Fourth, will due diligence laws hamper protection of the most vulnerable workers as they may be forced to move to the informal sector or to other sectors where working conditions are more precarious? Under which conditions can the prohibition of child labour be feasible in countries where such labour is a significant source of income for poor households? Will the monitoring and compliance regime include the monitoring of relevant impacts such as an increase in child prostitution?

Tying the knot between due diligence and VSS offers opportunities, risks and challenges that need further critical discussion, transformative research and decisive actions. While due diligence legislation is gaining momentum as it benefits from existing VSS infrastructures, and is already self-enforcing and influencing other policy priorities of governments, such as official development assistance and trade policies, due diligence (and VSS) requirements need to be considered in a wider context, including in developed-developing country discourse. Because the debate on due diligence and VSS will inevitably touch upon other debates such as the Global North-South (or developed-developed country) discourse, the public acceptance and effectiveness of both the due diligence law and VSS will depend on how grievances of the Global South are adequately addressed.

Moreover, there is little evidence of developing countries moving towards domestic legislation requiring mandatory due diligence. Some examples of voluntary initiatives include Brazil's *National Pact for the Eradication of Slave Labour, 2005*, and the Indian *National Guidelines on Responsible Business Conduct, 2018*. Even though several developing countries are in the process of preparing their national action plans²², implementing HRDD is likely to be far more challenging for them, given the complexities related to both the structure of work in their countries (e.g. lack of “decent work”, informalization, low-skilled jobs, gender wage gap, child labour, forced/bonded labour, and an abundance of MSMEs) and weak protections of workers (e.g. weak unionization and social protection, intersectionality as rights holders, and low access to remedies) (Agarwal, 2020).

The move towards mandatory due diligence is likely to be problematic for developing countries, which have always been concerned about the international standards sought to be implemented as legal requirements. The issue of process and production methods has long remained unresolved and contested within the World Trade Organization (WTO). Further, monitoring in overseas segments of value chains by European countries, acting under European legislation, could be regarded as unwarranted interference in countries' internal affairs. The question of the effectiveness of legal frameworks in providing a level playing field to businesses will also need to be addressed (IOE and KAS, 2021: 34). In any mandatory application of due diligence, concerns over such aspects as sovereign spaces and cultural relativism are likely to re-emerge. Although GVCs are on the increase, the links of these chains are spread across very different locational contexts that tend to resist standardized treatment.

The uptake of VSS in the recent years is possibly a reflection of the difficulties with operating through mandatory regulations. Suggestions for using mandatory due diligence measures and VSS in a complementary fashion (i.e. a smart mix of both) will be useful only if fleshed out in terms of practical application. For the VSS research community, a focused effort is required towards (i) reconciling the varying interpretations of the due diligence concept (ii) establishing its relationship with other players – such as VSS – in the field and (iii) taking on board the concerns of developing countries. For practitioners, action will need to (i) carry the discourse beyond Europe, the United States and the United Nations system (ii) avoid the trap of “cosmetic compliance”, and (iii) assist developing countries in benefiting from the application of due diligence and VSS.

3.5 THE ROLE OF VSS IN PUBLIC POLICYMAKING FOR SUSTAINABILITY

In general, VSS are part of rich policy mixes that also include public policies and financing mechanisms. Their effectiveness largely depends on the policy context in which they are implemented (Lambin and Thorlakson, 2018). The objective of this section is to provide an understanding of how voluntary sustainability standards interact with public policies to foster environmental sustainability in developing countries. The main focus is on environmental standards in tropical agriculture and forestry.

3.5.1 Government support to VSS

Governments can play a key role in creating enabling conditions for VSS to be widely adopted and effectively implemented. These include establishing the rule of law, a legal system that sanctions cheaters, well-established contract and property law (including clear land rights) and functioning markets that create a level playing field for private companies. They can also develop physical infrastructure to facilitate trade, have a minimum level of land use planning, organize the collection of information on economic activities and their social and environmental impacts, and create redistribution policies to avoid the marginalization of weak actors (Lambin et al., 2018). In addition, governments may consider developing principles grounded in public law to establish transparency and accountability procedures and information disclosure that increase the credibility of VSS (Glasbergen and Schouten, 2015). Enabling conditions by the State can include information dissemination, supporting extension services to help farmers meet

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certification standards, offering training on benefits of certification, paying for audit fees, providing tax benefits for actors who adopt sustainable practices, facilitating resource access rights and avoiding a regulatory burden (Carlson and Palmer, 2016).

Some governments have developed social programmes to compensate for costs borne by farmers and rural communities that are negatively affected by private regulations, such as prohibitions of environmentally unsustainable practices. For example, Brazil designed a programme of payments for environmental services to compensate farmers who adopted land-use practices that contributed to forest conservation. In addition, government and multi-stakeholder programmes may mitigate the marginalization of smallholders by offering better access to technologies, information and financial resources (Grabs et al., 2016).

Public and multi-stakeholder policy instruments may reinforce each other through “carrot-and-stick” approaches. Multi-stakeholder certification can provide incentives for producers who are already integrated in the market and are among the pioneers in the adoption of sustainable practices. By contrast, governments can focus on command-and-control policies with a threat of sanctions for laggards and support for weak actors who do not have access to the capital, training and technologies to meet sustainability criteria (Lambin et al., 2018).

Developing-country governments are more likely to support private governance initiatives if certification programmes help public authorities meet their public policy objectives. For example, diversification of income sources and the development of a rural non-farm economy is widely viewed by policymakers as offering a pathway out of poverty. In this case, alignment between public policies and certification largely depends on whether certification-supported farming is compatible with diversified activities (Makita, 2016).

Public law may facilitate compliance with private standards. For example, Bolivia’s forest code is inspired by the FSC standard, with several legal criteria for sustainable forest management being copied from FSC guidelines (Ebeling and Yasue, 2009). Some governments have established long-term collaboration agreements with certifying NGOs. For example, the government of Minas Gerais in Brazil signed an alliance with UTZ (now part of the Rainforest Alliance) based on a convergence between the UTZ Code of Conduct and the “Certifica Minas Café” certification standard. The Minas Gerais coffee farmers are therefore gaining access to international markets by benefiting from the UTZ network (Glasbergen and Schouten, 2015).

Furthermore, trade policies may lead to a de facto endorsement of certification, in particular those involving partners at different levels of development. Trade agreements between the European Union and Central America, for example, require traceability standards, thus forcing companies to adopt such standards (Krauss and Krishnan, 2021). The European Union Renewable Energy Directive includes requirements for the sustainable production of biofuels, which is driving up demand for Bonsucro certification for sugarcane in Brazil (Schleifer, 2017). More indirectly, government restrictions on the import of genetically modified (GM) soy in European countries and labelling requirements have led some Brazilian Amazon producers to specialize in the production of non-GM crops. High market shares in the European market also exposed these Brazilian producers to consumer demand for sustainable and deforestation-free soy, thus leading to high rates of soy certification in regions in Brazil that produce non-GM soy (Garrett et al., 2013).

3.5.2. Government control of VSS

Certification schemes may be constrained and influenced by government policies. For example, mandatory government policies are regularly used as a benchmark for voluntary certification schemes. Compliance with the laws of producing countries is often a minimum requirement. In addition, governments may use their power to restrict the rule-making authority of private governance initiatives, for example by enacting regulations that restrict their discretion, or by rejecting or discriminating against weak certification schemes (Gulbrandsen, 2014).

Developing-country governments may perceive VSS as a rival governance system controlled by actors external to the country (Wijaya and Glasbergen, 2016). Some governments have been pushing against

multi-stakeholder-led certification as an approach promoted by developed countries. On the one hand, these governments may value the opportunity to access new export markets, promote rural development and improve their image internationally by means of certification of their local products. On the other hand, some governments in developing countries perceive VSS as a threat, fearing that private standards will lead to the exclusion from key export markets of the part of their production that does not meet certification criteria (Glasbergen and Schouten, 2015).

As a tactical response, some governments have created their own national, government-led standards as rival governance networks that challenge global private standards. Multi-stakeholder certifications are more likely to be undermined by governments if they fail to align with national public policies and government regulations, leading to conflicting requirements (Hospes, 2014; Wijaya and Glasbergen, 2016).

With the rise of South-South trade, governments of emerging market economies that import commodities may also deter the uptake of certification in producing countries by placing less emphasis on sustainability criteria at home. For example, Brazilian soy producers started to oppose soy certification by the Round Table on Responsible Soy (RTRS) once China replaced Europe as the most important export destination, which relieved the transnational regulatory pressure (Schleifer, 2017). Similarly, growing imports of palm oil by India has undermined RSPO certification uptake in Indonesia, which supplies about 80 per cent of India's demand (Schleifer, 2016). Some markets continue to prioritize economic development over environmental concerns, and therefore are not willing to pay the premium price for certified products.

3.5.3. VSS support to government policies

Some governments rely on a private governance initiative to implement their public regulations. The private initiative benefits from being incorporated into public policy through the legitimacy it receives, as well as through the government's enforcement capacity and a greater uptake by market actors (Gulbrandsen 2014).

VSS may contribute to updating government regulations. For example, in the late 1990s, the FSC introduced the forest management designation of "high conservation value forests" (HCVF). This concept was then adopted by other certification schemes, by private companies making zero deforestation commitments and by public administrations responsible for forest management (Savilaakso et al. 2017). In Brazil, the Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, the administrative arm of the Ministry of the Environment, relies on the HCVF concept for planning and establishing protected areas.

The uptake of VSS, with its associated traceability and verification requirements, can also raise the bar for public sector practitioners. In Indonesia, for example, voluntary timber certifications have led to better training of auditors and better auditing practices, which in turn have improved legality verification standards and auditing requirements (Savilaakso et al. 2017). The general perception among actors in the forestry sector of the nature of sustainable forest management, of the value of transparency and community participation, and of the social responsibility of extractive companies also improved after these aspects gained prominence through certification schemes.

Governments sometimes create systems of traceability and certification schemes to improve market access for their producers using certification systems as models. Several provincial governments in Ecuador, for example, have created alternative models of local agricultural certification based on multi-stakeholder governance and independent auditing (Clark and Martinez, 2016). These include certification of small-scale producers in sustainable agriculture, certification of geographical origin, and fostering collaboration between local producers' initiatives for organic production. These public initiatives represent alternatives to multistakeholder-led certification. They are more accessible to small producers, owing to the absence of fees, thus enabling them to access niche markets. Certification is thus transformed into a public, rather than a private good (Clark and Martinez, 2016).

The wide uptake of stringent private regulations may also create spillover effects to public regulations and enhance compliance with rules in developing countries, as legal compliance is a basic requirement in most sustainability standards.

3.5.4. VSS in policy mixes

Interventions that address major environmental challenges, such as deforestation, exist across three domains: domestic public policies, financial mechanisms and sustainable supply chain initiatives (Nepstad et al., 2013; Furumo and Lambin 2020). The latter are often based on VSS. The order in which these different interventions are introduced into a policy mix matters (Furumo and Lambin 2021). The pattern of policy sequencing generally observed consists of early government intervention, which includes regulatory incentives, disincentives and enabling measures, followed by external financing, often through international programmes such as REDD+ (reducing emissions from deforestation and forest degradation in developing countries, an initiative of the United Nations Framework Convention on Climate Change (UNFCCC)), and then sustainable supply chain initiatives. VSS are therefore introduced into the policy mix at a late stage, as they are the most effective only after prerequisites have been met, when there is a legal basis for reducing deforestation and institutional capacity for enforcement, along with monitoring capabilities (Furumo and Lambin, 2021).

Under a jurisdictional approach, adherence to VSS is required for an entire geographical region (von Essen and Lambin, 2021). By leveraging both public and private incentives, governments, NGOs and companies co-create “sustainability havens” to showcase the benefits of sustainable production practices.

To conclude, so far, the main contribution of VSS has been as catalysers, causing an accelerated uptake by the private and public sector of credible policies that promote sustainability. They have raised awareness among all supply chain actors, improved supply chain traceability, and defined achievable sustainability standards. However, so far they have failed to foster environmental sustainability at scale. As private governance continues to expand as a form of regulation on social and environmental issues, it is necessary to better articulate the role of private regulations within the broader policy ecosystem.



CHAPTER 4

CONCLUSIONS AND POLICY RECOMMENDATIONS

CONCLUSIONS

There is a growing push towards sustainable and inclusive development, and recognition of the crucial role of business in this effort. As companies are increasingly using certification schemes to achieve sustainability objectives, VSS are proliferating and expanding their reach. These schemes can offer opportunities for economic actors to be integrated into global value chains. However, they can also present challenges for producers and economic actors, particularly in developing countries. This report has explored the role of VSS in advancing the sustainability agenda in developing countries.

Chapter 1 introduced VSS as a trade governance tool, and described their growth and uptake across the globe, especially in key tropical commodity sectors (section 1.2). The chapter also highlighted the uneven uptake of VSS across countries, and identified the level of economic and institutional development in a country as an important factor in understanding uptake and use of VSS (section 1.3). It enumerated several barriers to VSS uptake, especially in developing countries and LDCs, and particularly among smallholders. The barriers include high certification costs, lack of incentives to obtain certification, sociopolitical resistance to VSS, and lack of inclusion of developing countries' representatives in VSS governance structures.

Chapter 2 discussed the role of VSS in fostering environmental, social and economic sustainability in developing countries. For each of these key dimensions of sustainability, it presented overviews of the current state of research on the impact of VSS based on a selected number of studies. Section 2.2 presented empirical evidence on the effects of VSS on environmental outcomes such as pollution abatement, biodiversity protection and deceleration in deforestation rates. Section 2.3 explored research on the contribution of VSS in improving social outcomes, including income growth, poverty alleviation, and improved managerial practices, schooling and gender equality. Section 2.4 focused on the economic (trade-related) effects of VSS. It outlined the channels through which VSS can act either as catalysts for trade through enhanced competitiveness, increased demand, reduced transaction costs and reduced institutional gaps between trade partners, or as barriers to trade through compliance costs, technical barriers, delaying effects, and exclusionary effects. Overall, studies find a positive impact of VSS on the different sustainability dimensions. However, effects remain mixed and highly context specific, meaning that in some cases and on some sustainability parameters, studies have found a positive effect of certification, while in other cases they have found no effect, or in yet other cases even a negative effect. In addition, the current state of research on VSS impacts highlights trade-offs in sustainability improvements, as some studies have found a positive effect on environmental outcomes but not on social or economic outcomes, or the other way around. To further understand this diversity in effects, Section 2.5 explored the factors that contribute the most to compliance with standards, assuming that better compliance generates more significantly positive impacts. Several potential drivers for compliance were discussed, of which price premiums seems to be the most significant, especially in developing countries.

Chapter 3 focused on the broader political and policy context in which VSS operate, including the governance context, their complementarity or competition with newly established national standards, their link with new due diligence legislations, and their integration into broader policy mixes. Concerning the governance context (section 3.2), the report emphasized that if VSS are to have an impact, it is important for them to fit in with existing governance institutions. It highlighted the role of policies that enable private sector development — as VSS are tools used primarily by the private sector — as well as governance institutions which foster rule compliance, irrespective of whether the rules are created by public or private actors. Section 3.3 discussed the emergence of new national standards, with a specific focus on palm oil standards in Indonesia and Malaysia and ECOMARK in Africa. The chapter identified several motivations to create national standards, in particular to better suit local environmental, social and economic conditions. It also explored possible complementarities between national standards and VSS, and identified uptake of national standards as a possible intermediate step for local producers before they are able to apply for (the more stringent) VSS in the future. Section 3.4 highlighted the implications of new human rights due diligence regulations for VSS and for producers in developing countries. As

VSS provide management tools to govern value chains, and as HRDD regulations require firms to govern their value chains, one might expect HRDD to drive the adoption of VSS. The chapter identified some key opportunities and challenges related to these developments. Finally, the chapter discussed how VSS are increasingly integrated into national public policies (section 3.5). Governments can play a key role in addressing sustainability concerns, and VSS are increasingly used to support government actions. The interactions between VSS and governments can lead to governments supporting or controlling VSS, or VSS supporting government. Each of these interactions can lead to different forms of public-private policy mixes, the implications of which were discussed.

RECOMMENDATIONS

Advancing transparency and research on VSS, and their impacts

The mixed results on the impacts of VSS on environmental, social and economic outcomes suggest the need for further research. Future research should explore methods that can rectify the shortcomings of VSS and make them more effective, especially in the context of developing countries and LDCs, where progress on sustainability is needed the most. It is necessary to understand not only why standards work, but also why they do not work in some cases. The role of the international institutions and leading think-tanks, in collaboration with governments, VSS and civil society, in advancing transparency about the impacts of VSS should therefore be enhanced through their respective mandates.

Reducing market imperfections

Obtaining certification requires significant investments which not all producers can afford, particularly in developing countries and LDCs. Providing support to producers to help cover certification costs is therefore crucial to promote VSS uptake, especially in light of the increasing use and recognition of VSS and its potential exclusionary effects. Governments, along with international organizations, NGOs, donors and the private sector, could facilitate producers' access to financial and technical resources for certification. One way forward could be collaborating with financial service providers to offer and support affordable financing models for them. VSS bodies could also assist by implementing cost-sharing arrangements. In addition to the cost barrier, there are other challenges related to producers' capacity to comply with standards. Thus, capacity-building and training should be leveraged to enable greater inclusion of smallholders and producers in GVCs through VSS. Overall, it is important to create an enabling environment to meet the objectives of the various actors involved in VSS uptake. This includes investing in technology and innovation, process upgrading, value chain upgrading, capacity-building, providing information and access to finance, and policies that support inclusive labour markets (i.e. making it easier for people to join the workforce), among others.

Harnessing the role of the private sector

The report underlined the growing importance of making trade more sustainable and enhancing efforts to integrate sustainability concerns into international trade. For developing countries pursuing an export-led economic growth model, the inclusion of sustainability in trade and trade policy will become increasingly important. As a result, developing countries' private sector development initiatives should pay particular attention to sustainability concerns. One way of doing this, especially in light of limited public institutional and enforcement capacity, is to provide support for the adoption of tools which focus on making production more sustainable. This can include developing policies that support the VSS uptake.

Establishing cooperation and mutual recognition

The report identified the emergence of national standards as a new trend, which can generate some new opportunities but also challenges. For example, in the palm oil sector, only a segment of the market requires VSS-certified palm oil. However, some governments recognize the importance of sustainability

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and develop mandatory public standards. For products with a large export market in developing countries, compliance with these national standards can provide a stepping stone to later apply for VSS certification. Hence, national standards can complement VSS. However, for national standards to play a more significant role, they need to gain the trust and recognition of international standard-setting bodies. This report, identified some avenues to build such trust, which can be emulated by other developing countries intending to develop national standards. These avenues include increasing transparency and designing laws that further strengthen the implementation of standards. Hence, the rise of national standards can constitute an opportunity. However, it can also constitute a challenge. The lack of mutual recognition between national standards and VSS can compromise efficiency. Fostering mutual recognition therefore is a key issue for future consideration.

Preparing for continuously changing developments

The report discussed how new regulatory initiatives which will put greater pressure on producers in developing countries and LDCs to integrate sustainability concerns in their day-to-day operations. The sections on due diligence and policy mixes exemplify this trend. The introduction of mandatory due diligence measures related to GVC governance is a potential game-changer. It implies that firms above a certain turnover or personnel threshold will be required to implement sustainability governance tools in order to identify and address sustainability risks throughout their value chain. This will, arguably, impact producers, small and large, throughout the world. It raises some key questions for the future, some of which have been discussed in this report. First of all, how do VSS fit into this new wave of due diligence regulations? There are clear links and overlaps between due diligence requirements and VSS that require a better understanding. There is also a need to study the contributions VSS could make in the context of due diligence. On the one hand, adherence to VSS could be considered as providing proof of companies' compliance with due diligence regulations. On the other hand, VSS may not play any role whatsoever in due diligence regulations, but merely exist alongside new forms of GVC governance. Second, issues concerning coherence between international, regional and national standards need to be further investigated in this context. Third, more research needs to delve into the possibilities and limitations of fostering and developing mutual recognition across standards systems. Currently there is a proliferation of initiatives, with little coordination and a limited degree of mutual recognition. For firms, this is not only confusing but also costly if they need to work with multiple systems that have similar objectives. Fourth, more research should focus on how developing countries can be better prepared to deal with these new regulatory initiatives. It will require dialogue and collaboration among development partners. Addressing these issues will help provide a better understanding of current developments, the role of VSS therein, and the contributions VSS can make to achieving the SDGs, including the ultimate goal of "leaving no one behind".

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ENDNOTES

- ¹ This Report (Part 1: Issues and Part 2: Initiatives) is available at https://unfss.org/wp-content/uploads/2012/05/unfssreport-issues-1_draft_lores.pdf , https://unfss.org/wp-content/uploads/2012/05/unfss-reportinitiatives-2_draft_lores.pdf.
- ² This Report is available at https://unfss.files.wordpress.com/2016/09/final_unfss-report_28092016.pdf.
- ³ This Report is available at <https://unfss.org/wp-content/uploads/2018/09/UNFSS-3rd-Flagship-Report-FINAL-forupload-1.pdf>.
- ⁴ This Report is available at: https://unfss.org/wp-content/uploads/2020/10/UNFSS-4th-Report_revised_12Oct2020.pdf.
- ⁵ For a list of members, see: [National Platform and Initiative Cooperation Network, UNFSS](#)
- ⁶ The ITC Standards Map and Ecolabel Index follow different methodologies in constructing their databases. The ITC Standards Map is more restrictive in recognizing and reviewing VSS, whereas the Ecolabel Index includes a significant number of corporate codes of conduct which are (by definition) not VSS.
- ⁷ Reporting a global total for certain commodities remains difficult, as many producers are certified by more than one sustainability standard, and there are not enough reliable data on the share of multiple certifications. Taking this into account, the *State of Sustainable Markets* reports provide a range that encompasses the minimum and the maximum amounts possible, along with the average of the two at the country level. To calculate the maximum amount, the total area or production of all standards in the country was determined. For the minimum, the standard with the largest area or greatest production volume in the country was used as the reference. An average of the maximum and minimum was then calculated.
- ⁸ The literature in this section was selected from recent reviews on sustainability standards. Also selected were papers using Google search with the following terms: “sustainability”, “standards”, “environment”, “VSS”. The review is not exhaustive, but provides a snapshot on the recent literature relating to the impacts of VSS on environmental outcomes.
- ⁹ A shortcoming is that it does not trace the origin and use of intermediates which can come from third countries and be used by them for either further export processing or consumption. For more, see <https://www.oecd.org/countries/mali/Participation-Developing-Countries-GVCs-Summary-Paper-April-2015.pdf>.
- ¹⁰ This demand is partially driven by new regulatory initiatives based on due diligence requirements; see section 3.4.
- ¹¹ This section is based on primary data collected through an interview with ARSO, as well as secondary data, including ARSO reports and website information, in addition to the ITC standards map.
- ¹² ARSO is an intergovernmental organization established by the former Organization of African Unity (OAU, currently African Union (AU)) and the United Nations Economic Commission for Africa (UNECA) in 1977. ARSO’s mandate is to promote standardization in Africa so as to boost intra-African and global trade. By August 2021, it had 40 members, and by June 2019, it had 1,234 harmonized African standards.
- ¹³ The relevant technical committee analyses any international standard for relevance and applicability before formal approval by ARSO as a standardization project. It is then circulated for public enquiry and notification to WTO before being recommended for adoption. The process can take up to six months.
- ¹⁴ Supply Chain Due Diligence is described as “a holistic concept to proactively manage supply chains” (Hofmann et al., 2018: 115).
- ¹⁵ Examples of diligence legislation at the national level include the *California Transparency in Supply Chains Act, 2010*, the *US Dodd-Frank Wall Street Reform and Consumer Protection Act, 2010*, the *UK Modern Slavery Act, 2015*, the *French Duty of Vigilance Act, 2017*, the *Dutch Child Labor Due Diligence Act, 2019* and the *German Supply Chain Due Diligence Act, 2021*, etc.
- ¹⁶ Principle 12 of the UN General Principles states that “internationally recognized human rights” refer to those found in the *International Bill of Human Rights* and the International Labour Organization *Declaration on Fundamental Principles and Rights at Work* (UN OHCHR, 2011: 13, 14; UNWGBHR, 2012: 12, 89).

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- ¹⁷ Viewed thus, they could incur increased costs such as legal liability, reputational loss, operational risks and loss of investor or consumer confidence and goodwill (Aaronson and Higham, 2013: 335; Muchlinsky, 2012: 156; Hoffman et al., 2018: 116).
- ¹⁸ The 'Framework' stipulates that "failure to meet this responsibility can subject companies to the courts of public opinion..." (UNHRC, 2008: 16).
- ¹⁹ The adoption of "...internal policies and compliance structures that have all the formal hallmarks of human rights due diligence, but that fail to lead to genuine and substantial improvements in practice" (Landau, 2019: 1).
- ²⁰ See the official website of the European Commission at https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1145
- ²¹ A simple Google search of the term "due diligence" in the context of developing countries yields information relating to the limited meaning, whereas a search for HRDD shows literature located in either developed countries (Europe in particular) or in the work of international organizations.
- ²² The Danish Institute for Human Rights (DIHR) website, at www.globalnaps.org, lists countries that have published a national action plan (NAP), those developing a NAP and other non-State initiatives. O'Brien et al., (2021) please provide the full reference details in the list of references state that since 2011, 42 NAPs have been adopted or are in the process of development worldwide. India is preparing a Business and Human Rights NAP, a draft of which was released in 2018. Its vision is stated as being founded on the Gandhian principle of trusteeship (i.e. the purpose of business is to serve all stakeholders, and not just shareholders) (Government of India, 2018: 3, 4–5).



