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TRADE, DEVELOPMENT & THE ENVIRONMENT HUB

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# SUSTAINABILITY STANDARDS AND REQUIREMENTS FOR AGRICULTURE

## INTERNATIONAL TRADE CONSIDERATIONS


# CITATION AND ACKNOWLEDGEMENTS

Briefing scope: The purpose of this briefing is to provide a short and accessible introduction to the evolving landscape of sustainability requirements for agriculture, reflecting this in the context of international trade. In particular, the intention is to bring together considerations on both the voluntary and mandatory requirements, this way encouraging further thinking on "smart mixes" that use both instruments to achieve maximum sustainability benefits. The target audience is both trade and non-trade experts working on sustainable agriculture.

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# 1. INTRODUCTION

The global challenge related to the sustainability of agricultural systems is two-fold. Firstly, there is a need to improve production and access to food to deliver the Sustainable Development Goal (SDG) zero hunger target by 2030. Secondly, there is a need to do so in a way that protects ecosystems, restores biodiversity, maintains soil productivity, rationalizes water use, and reduces Greenhouse gas (GHG) emissions, including to ensure nature can serve as a sink for carbon.

After significant progress in reducing both the number and share of malnourished people over the last couple of decades, the number of people affected by hunger worldwide increased in recent years to reach between 720 and 811 million people, located mostly in Asia and Africa—a trend which makes achieving the SDG zero hunger target by 2030 challenging.[1] The situation has been recently worsened by the war in Ukraine, which has heightened risks to food security worldwide, particularly in Africa.[2]

Meanwhile, the agricultural sector contributes both directly and indirectly to environmental degradation, exacerbating the triple planetary crises through deforestation, soil pollution, biodiversity loss [3], and by emitting a quarter of global GHG emissions according to the Intergovernmental Panel on Climate Change (IPCC).[4] Conversely, sustainable agricultural practices can contribute to and foster environmental regeneration and restoration, avoid pollution, support sustainable use of natural resources and livelihoods.

Sustainable productivity improvements will be key to meeting increased demand without exerting additional pressure on fragile ecosystems, while addressing the problem of inadequate access to food that mostly affects smallholder farmers who struggle to achieve competitive yields. There are several pathways for both governments and business sector actors to attain such improvements, inter alia, through sustainability requirements and standards for agricultural production, products and trade.

Sustainability requirements and standards aim to guide agricultural production and trading practices to better address a variety of sustainability issues. They include both mandatory and voluntary requirements and can take different forms including national regulations, international criteria, compliance and certification systems, monitoring and traceability mechanisms, and technical innovation such as blockchain technology. The implementation of these measures is supported through a combination of actions including capacity building and training, market interventions, and awareness raising and advocacy. Elements commonly covered include food security and safety, equitable access to nutritious food, protection of ecosystems, restoration of biodiversity, maintenance of soil productivity, efficient use of water, reduction of GHG emissions, improved working conditions, and sustainable social development.

### BOX 1.1 DEFINING SUSTAINABLE AGRICULTURE

According to the Food and Agriculture Organization of the United Nations (FAO, 2022)[5], to be sustainable, agriculture must meet the needs of present and future generations, while ensuring profitability, environmental health, and social and economic equity. This approach rests on five key principles: increasing productivity, employment and value addition, protecting and enhancing natural resources, improving livelihoods and fostering inclusive growth, enhancing the resilience of people, communities and ecosystems, and adapting governance to new challenges.

In practice, what is considered sustainable can vary depending on the local and regional context, including policy and regulatory frameworks in place. For example, in some contexts low-input or organic practices form a core element of sustainable agriculture whereas in other contexts technological approaches and capacity building aimed at improving the efficiency of production are more prominent and reduce the need for land conversion. In addition, ensuring the livelihood of smallholder farmers plays a key role in sustainability considerations in many areas around the world. These differences need to be reflected when considering requirements and standards in the context of international trade.


This policy brief discusses the role of sustainability requirements and standards in supporting the sustainability of the agricultural sector. It outlines the state of play in their uptake, identifies key trade-related considerations in their application, and explores possible future directions to improve equitability and effectiveness.

## 2. WHAT DO WE MEAN BY SUSTAINABILITY REQUIREMENTS AND HOW DO THEY IMPACT TRADE?

The past several decades have seen rapid growth and formalization of sustainability initiatives in the agriculture sector. Forces driving the development of sustainability requirements and standards have included pressure from civil society, consumer demand, and leadership from some companies concerned about reputational and supply chain risks linked to poor environmental and social performance. In addition, a range of food safety scandals in recent decades have increased consumer awareness of the production conditions of agricultural commodities, and the need to ensure food quality.[6]

"Sustainability requirements" refer to requirements that producers, traders, manufacturers, retailers, or service providers may be asked to meet, relating to a wide range of environmental, social, economic, or quality metrics. They can encompass requirements related to the product itself, including substances it contains, or methods used in the production process. In the context of sustainable agriculture, such requirements can include, for example, criteria related to the maximum levels of pesticide residues in food and feed, or required practices that prevent land and wider ecosystem degradation.

On the other hand, the term "sustainability standard" is also commonly used in reference to the above and, depending on the context, sector and who sets the standard, it can refer to a variety of things ranging from voluntary standards adopted by businesses to ensure the sustainability in their supply chains (e.g. through certification), to mandatory requirements or

criteria defined in government regulations or international law. Sustainability standards can also refer to the globally agreed frameworks adopted by international organisations, which can be used as reference point in both voluntary and mandatory contexts (e.g. standards by the International Organization for Standardization (ISO)).[7]

Additionally, in the context of multilateral trade and the World Trade Organisation (WTO), the term "standards" is used to refer to voluntary schemes, whereas "technical regulation" refers to a government document that lays down product characteristics or their related processes and production methods with which compliance is obligatory.[8] In the national setting, it is common to refer to the latter also as standards (e.g. minimum environmental standards for agriculture), and use the term "voluntary standards" when referring to requirements adopted on a voluntary basis to go beyond the mandatory regulatory baseline.

For the purposes of this policy brief, the framing of "regulatory requirements" and "voluntary standards" is used to refer to mandatory and non-mandatory sustainability requirements for agriculture, respectively.

Sustainability requirements and standards put in place by importing countries or businesses have different implications for international trade.[9] If an imported product does not fulfil the importing country's regulatory requirements, it will not be allowed to be put on sale. Mandatory regulations adopted by WTO members to fulfil sustainability objectives have to be consistent with WTO regulations, i.e. shall not be more trade restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create. In the case of voluntary standards, products that have not been certified by such sustainability standards are not prevented from entering the markets. However, the consumer demand and preferences, or the "recognition" of certain voluntary standards as "valid" for legislative frameworks, may result in voluntary standards becoming *de facto* mandatory requirements for accessing international supply chains and markets. As such, the framework of sustainability requirements, mandatory or voluntary, can have a considerable impact on trade in agricultural commodities worldwide, especially if adopted by countries responsible for a large share of global imports. On the one hand, it can help to steer the production of agricultural goods towards sustainable production methods and labour conditions, and on the other, it can create barriers to trade for producing countries unable to match the requirements.

# 3. REGULATORY REQUIREMENTS FOR SUSTAINABLE AGRICULTURE

Regulations concerning sustainable agriculture are adopted by governments and form part of national legislative frameworks. These regulations set mandatory sustainability requirements for products and methods used for their production and processing, applying to both domestic producers and imports. They can be used to discourage unsustainable—or to encourage sustainable production, consumption and trade.

Adopting regulations to address environmental sustainability of the agriculture sector is common practice among WTO members.[10] Existing regulations consist of, for example, food safety standards and regulations (e.g. maximum pesticide residue limits, nutrition requirements for processed foods), labelling schemes indicating the nutritional content of food (e.g. traffic light approaches for processed food), and minimum environmental requirements for agricultural production (e.g. acceptable level of nutrients, airborne pollutants, wildlife and habitat protection, animal welfare).

Sustainability regulations can also include mandatory due diligence requirements for businesses operating in the agricultural sector. These requirements aim to enhance transparency in how businesses operate, making them accountable for any human rights violations or environmental degradation in their supply chains. Existing examples of such regulations—covering the agriculture sector and beyond—are included in Box 3.1.

### BOX 3.1 EXAMPLES OF REGULATORY REQUIREMENTS FOR BUSINESS DUE DILIGENCE ON SUSTAINABILITY

**EU TIMBER REGULATION (2010):** the Regulation prohibits operators to place illegally harvested timber, and products derived from such timber, on the EU market. It also requires EU traders to exercise due diligence in their operations, including to ensure access to information of origin and compliance with national laws, and have measures in place for risk assessment and risk mitigation.

**UK MODERN SLAVERY ACT (2015):** the Act requires businesses over a certain size to disclose each year what action they have taken to ensure there is no modern slavery in their business or supply chains.

**FRENCH LAW ON DUTY OF CARE (2017):** the Law requires companies of a certain size to set up 'vigilance plans' to identify risks and prevent serious violations of human rights and fundamental freedoms, health and safety of persons and environmental protection resulting from the activities of the company and of the companies it controls, either directly or indirectly. It also covers activities of subcontractors or suppliers. Measures need to be adopted to address the above, including mechanisms for monitoring their implementation and effectiveness.

**GERMAN SUPPLY CHAIN DUE DILIGENCE ACT (2021):** the Act requires companies of a certain size to set up processes to identify, assess, prevent and remedy human rights and environmental risks and impacts in their supply chains, and in their own operations. They must also make sure they provide ways for employees of indirect suppliers (suppliers they don't have a direct commercial relationship with) to file a complaint alerting the company to human rights or environmental violations.

**U.S. SLAVE-FREE BUSINESS CERTIFICATION ACT OF 2022 (in development):** the Act, introduced in the U.S. Senate in March 2022, would require any business involved in mining, production or manufacture of goods for sale with an annual revenue greater than $500 million to audit their supply chains for labor practices or human trafficking activities that violate specified national or international standards and report the results to the U.S. Department of Labor.

**U.S. CORPORATE GOVERNANCE IMPROVEMENT AND INVESTOR PROTECTION ACT (in development):** the Act, introduced in the U.S. Senate in March 2022, subjects publicly traded companies to periodically disclose information related to the sustainability of their activities including, for example, environmental, social, and governance performance metrics, and climate change-related risks (e.g. direct and indirect greenhouse gas emissions and fossil fuel-related assets).

# 4. VOLUNTARY STANDARDS FOR SUSTAINABLE AGRICULTURE

As non-mandatory measures are often created by industry consortia, NGOs or multistakeholder initiatives, voluntary sustainability standards habitually go beyond minimum sets of criteria mandated by regulations. They generally provide sector-adapted guidance on how to avoid deforestation, land degradation, resource depletion, child labour or forced labour in supply chains.

Even if voluntary, these standards often—but not always—come with stringent certification and compliance assessments protocols, which need to be applied by producers, processors, traders and retailers. They sometimes also have provisions on trade relationships stabilization or on ensuring a fixed minimum income for producers, despite price volatility in most agricultural commodity markets. These standards can apply at the individual farmer level, or to producer groups, or even to export companies at the manufacturing and processing levels of the value chain.

Drivers and reasons explaining the rise of voluntary sustainability standards evolved over time. Going back to the 1960s, when advances in agriculture and chemistry coupled with a post-war population

boom marked the advent of large-scale agriculture, ecological consciousness blossomed. Around the same time, the grassroots organic and fair trade movements took off, signaling the advent of voluntary sustainability standards, seeking more balanced trade relations between North and South. During the 1990s, a turning point for the formalization and rapid growth of sustainability initiatives, social issues became more prominent as globalization took hold, and international policy discourse adopted the term 'sustainable development'. As sustainability efforts gained critical mass, companies developed their own corporate social responsibility (CSR) initiatives, to protect their reputations (as well as sales and profits) and stave off a rise in regulation. Pressed to show positive impact, companies looked around for pragmatic tools and began to adopt voluntary sustainability standards to address specific issues in their value chains. The corporate appetite for these standards is reflected in their rise from fewer than 200 in 2000 to more than 400 in 2010. At the same time, several global roundtables were established on specific agricultural commodities (soy, palm oil, sugar).[11]

Following the international fragmentation of production networks and highly complex supply chains, voluntary sustainability standards have proliferated, focusing each on different sectors, specific stages of supply chains, various regions, particular categories of producers or defined sustainability issues. The global governance of sustainability involves a wide range of such standards prescribing companies with requirements to conduct business responsibly. These standards can be managed by different industry players, ranging from civil society organizations and intergovernmental bodies to companies and industry associations (Box 4.1). They also differ significantly in their quality, design, core activities, governance systems and levels of transparency.

With the rise of corporate social responsibility, increasing relevance of environmental, social and governance frameworks (ESG), and the emergence of new due diligence legislation (see Chapter 5), agri-food companies continue to search for pragmatic tools, tailored to their supply chains. As a result, voluntary sustainability standards are at the heart of most agri-food corporate sustainability actions today. The number and scale of certified agricultural commodities continues to rise, fuelled by consumer, brand and increasingly producer interests. According to the ITC State of Sustainable Markets (2021), the area under certification of voluntary standards increased by 52% between 2014 and 2018 in the following sectors: bananas, coffee, tea, soybeans, oil palm, cocoa and cotton (See Figure 4.1).[12] Organic is by far the most common sustainability standard, covering 50.9 million hectares globally.[13]

### BOX 4.1 THE VARIED LANDSCAPE OF SUSTAINABILITY STANDARDS

Existing standards aimed at supporting the sustainability of agricultural systems are multiple and varied in terms of scope, governance and implementation:

- **TYPE OF INSTRUMENT:** certification-based standards (e.g. Fairtrade International Small Producer Standards), audit protocols (e.g. GLOBALG.A.P Crops), codes of conduct (e.g. Fair Labor Association Agriculture Code of Conduct), benchmarking tools (e.g. FEFAC Soy Benchmarking tool); ESG rating programs (e.g. Sustainalytics), reporting initiatives (e.g. Global Reporting Initiative), guidance and good practices (eg. SAFA-Sustainability Assessment of Food and Agriculture Systems), due diligence frameworks (e.g. OECD-FAO Guidance for Responsible Agricultural Supply Chains), etc.
- **SCOPE:** specific commodities (coffee, sugar, palm oil, soy, cocoa etc.), certain aspects of sustainability (gender empowerment, biodiversity conservation, soil protection etc.), sectors (agri-food etc.) or cross-sector (e.g. International Labour Organization's Labour Standards)
- **GOVERNANCE:** private or public sector entities, for-profit or not-for-profit organisations, with management through multistakeholder boards and committees, or a single organisation (e.g. civil society multistakeholder-driven programmes or company specific corporate sustainability programmes, respectively)

*Source: ITC Trade for Sustainable Development (T4SD) Programme Standards Map*

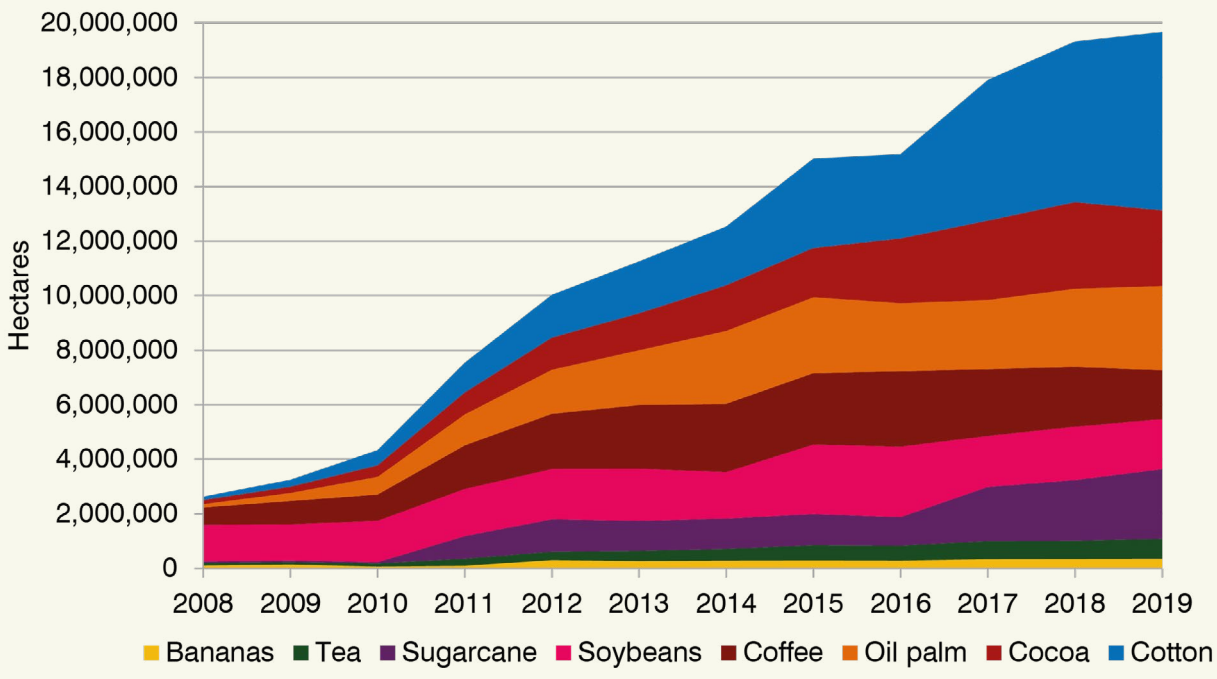
# 5. OPPORTUNITIES AND CHALLENGES LINKED TO THE UPTAKE OF SUSTAINABILITY REQUIREMENTS

Various studies have demonstrated the potential of both voluntary sustainability standards and regulatory requirements to support sustainable agricultural practices. However, there are some limitations to their effectiveness that need to be taken into consideration and addressed.

While voluntary sustainability standards have improved some social and environmental sustainability-related aspects (e.g. reduction in deforestation, reduced pesticide use, increased farm income, reduced poverty) ( see box 5.1) their effectiveness is always dependant on other factors, such as their institutional design, their adaptation to the local context, and the environment they operate in. The evidence indicates that the effectiveness of voluntary sustainability standards is highly dependent on the economic and political context of intervention, and whether this context is 'conducive' or not. For instance, on the topic of wages, the effect of sustainability standards which impose the requirement to exceed minimum legal requirements and close gaps in living wages is reduced when there is no government policy aiming to increase wages at national level.

In general, there is more evidence on intermediate outcomes, i.e. producer prices and agricultural income from certified products (e.g. rent or revenue derived from land by agricultural operations including processing) than on final outcomes, i.e. wage levels, household income and assets (e.g. income from earnings, benefits, investments, etc.). The 5th Flagship Report of the United Nations Forum on Sustainability Standards indicates that sustainability standards are effective to improve the well-being of the most vulnerable actors in the food system, but that they do not systematically succeed in fostering social sustainability[15]: For instance,they may help secure non-wage benefits for farm workers but rarely improve their wages. Their institutional design features and adaptation to the local context is a key factor for uptake and effectiveness.

FIGURE 4.1 GROWTH OF MINIMUM AREA CERTIFIED BY CROP, 2008–2019[14]




*Source: ITC, The State of Sustainable Markets 2021: Statistics and Emerging Trends.*

Box 5.1 provides examples of studies that demonstrate, through empirical evidence or literature review, some positive outcomes brought by sustainability standards. These results are inconclusive as the assessment of the impacts of standards remain challenging hindered by the lack of representative data on sustainability standards, particularly given that some of the sustainability practices have been recently implemented by farmers. Information on effectiveness is likely to improve in the future as an increasing number of voluntary standards include monitoring and evaluation systems to track their impacts on supply chains, and also their alignment with the 2030 Sustainable Development Goals.

**REGULATORY REQUIREMENTS** can be used to hold domestic producers and importers accountable for meeting set requirements, which can increase the effectiveness of sustainability provisions. In practice, however, successful implementation of such requirements depends on their design and enforcement. For example, review of the EU Timber Regulation—prohibiting operators in Europe from placing illegally harvested timber and products derived from illegal timber on the EU market—has demonstrated varying success.[17] The regulation itself has resulted in EU trade partners taking steps to strengthen their forest governance systems and reduce illegal logging. However, the voluntary partnership agreements (VPAs) between the EU and timber producing countries[18], designed to support the implementation of the regulation, have had limited contribution to reducing illegal logging limiting overall effectiveness of the regime. This has been due to a slow uptake and implementation of VPAs, leading to only a relatively small part of the EU wood-based product imports originating from VPA countries.

While regulatory requirements apply to both domestic production and imports alike, importing countries may request an exception by applying for import tolerances. A practice of exceptions can lead to outsourcing the environmental damage to trade partner countries. It could also lead to a "race to the bottom" as domestic producers seeking to remain competitive might be compelled to cut corners or seek derogations. These aspects have led to calls to introduce "mirror clauses" to ensure that domestic requirements also apply to imported products and proposals to establish international minimum environmental standards for agriculture (see Chapter 6 below).

From the perspective of international trade rules, sustainability regulatory requirements based on criteria linked to processes and production methods (PPMs) have raised complexities in the context of trade regulation under the WTO. While product-related requirements essentially deal with the quality of the final good and can be more easily applied to imports, production-

## BOX 5.1 EXAMPLES OF BENEFITS RELATED TO SUSTAINABILITY STANDARDS

| STUDY[16] | COMMODITY / SECTOR | COUNTRY / REGION | EXAMPLES OF POSITIVE OUTCOMES OF SUSTAINABILITY STANDARDS IMPLEMENTATION |
|---|---|---|---|
| Carlson *et al.* (2018) | Palm Oil | Indonesia | Reduction of deforestation in high tree cover areas and primary forests |
| Tritsch *et al.* (2020) | Agro-forestry | Congo Basin | Enhanced forest management plans |
| Blackman *et al.* (2022) | Coffee | Costa Rica | Reduced use of pesticides, chemical fertilizers and herbicides |
| Milder *et al.* (2016) | Cross-sectors | | Increased awareness of threats to biodiversity |
| Akoyi and Maertens (2018); Vanderhaeghen *et al.* (2018 | Coffee | Eastern Uganda | Increased land and labour productivity, Increased farm income, Reduction in poverty |
| Schleifer and Sun (2020) | Various | Various | Positive (but weak) impact on food security |
| Sellare *et al.* (2020) | Cocoa | Ivory Coast | Improved farmer health |

*Source: the table has been produced based on a compilation of research presented in the 5th Flagship Report of the United Nations Forum on Sustainability Standards.*

related requirements may establish obligations regarding certain production methods which are not necessarily visible in the final product. In other words, differences in production processes might not aways leave any physical traces in the traded products making differentiating between imported products challenging in practice (e.g. deforestation in the cultivation process is not visible in the product). Applying "unincorporated PPMs" or "non-product related PPMs" requirements to imports is more difficult, not least given the challenges in ensuring compliance. It also raises legal questions under the multilateral trading system on the extent to which market access can be differentiated between products based on methods of productions that are not reflected in the physical characteristics of the final products.

For businesses, the complex nature of global supply chains means that they need to put considerable efforts in gaining full transparency of their operations. Implementation of due diligence processes, either on a mandatory (regulatory) or voluntary basis, will also have cost implications which will impact firm behaviour. In order to achieve the balance between increased international trade and sustainable development, a business case will have to be made. Consequently, requirements for business due diligence can face resistance from the private sector and consumers. For example, in Switzerland a proposal to hold the Swiss companies accountable for their actions abroad was rejected in a nationwide vote in 2020 due to the concerns that it would unduly burden both companies and the national justice system. However, an increasing number of businesses are seeing the value and business case in integrating sustainability due diligence as part of their operation, with studies showing that companies adopting environmental, social and governance (ESG) measures can outperform others on the market.[19] For example, in the case of the Swiss initiative, the proposal was supported by nine mid-sized business associations and companies such as Nestlé.

From the perspective of developing countries and their access to global supply chains and agricultural markets, the need to comply with sustainability standards and regulatory requirements can pose a barrier for trade-related opportunities in the agricultural sector. For many developing countries, agriculture—including agriculture-related exports—is central to socio-economic development, with the sector relying heavily on smallholder farmers and Micro, Small and Medium Enterprises (MSMEs) that have limited resources and capacity for implementation of standards and requirements in their operations.

Therefore, sustainability requirements and standards can create barriers to MSMEs that are often less able to afford compliance costs, have difficulties to organize themselves and are situated in more remote locations. Another obstacle faced by MSMEs—and also larger companies—is the difficulty navigating across the plethora of sustainability requirements and standards, understanding their differences and opportunities for convergence, harmonization, or mutual recognition. This is because existing requirements, including the multiple voluntary standards, differ considerably in their focus, their commodity, where they operate in one or multiple value chain tiers, the level of detail of their requirements, their claims, conformity assessment or verification policies, among others.

On the other hand, however, the adoption of regulatory requirements and voluntary standards for sustainable agriculture can increase the resilience of MSMEs, by diversifying their revenue sources, increasing price stability and allowing more stable trading relationships. A recent study from IISD (2021) on smallholder operating in the bananas, cashew, avocados, rice, cocoa and cotton sectors also showed that voluntary certification against sustainability standards boosted producers' resilience to the Covid-19 pandemic-related market shocks.[20]

Key to setting sustainability requirements, be it through regulatory or voluntary means, is the adequate support structures in place to meet requirements. For example, developing clear guidance, providing platforms for learning and exchange, and facilitating the establishment of grievance mechanisms. For this reason, there is growing attention on the need to engage with the smallholder communities in any transformative multi-stakeholder discussions in agricultural sector. To make global supply chains sustainable and resilient, efforts need to be made to enhance the participation of smallholder farmers and MSMEs through training and capacity building to improve market access and increase access to financing networks. Examples of good support

frameworks that improve the effectiveness of voluntary standards include, for example, adequate public consultation periods to allow for community input not only through civil society acting as a proxy for community voices, but also through direct dialogue with affected communities. The preservation of multi-stakeholder governance systems for standards has also proven effective, where NGOs, academia, direct representatives of affected farmers and companies have equal say. For example, partnerships with NGOs have helped to build farmer's capacity, and detect, remediate abuses or build farmers' resilience.

# 6. EMERGING POLICY DEVELOPMENTS AND TECHNOLOGICAL ADVANCES

As concerns increase about the social and environmental impacts of agriculture and its role as a key source of greenhouse gas emissions, a range of governments are exploring options to improve the sustainability of the sector both domestically and globally, including through adopting more comprehensive and rigorous sustainability requirements and standards for agricultural trade and supply chains.

**ADOPTING REGULATIONS TO ADDRESS GLOBAL SUPPLY CHAINS:** Acknowledging their role as drivers for unsustainable land use and deforestation globally, both the EU and the United Kingdom are in the process of adopting regulations aimed at restricting imports associated with illegal forestry practices and/or deforestation globally.[21] The new regulations target key commodities known to be associated with unsustainable land use practices, including several agricultural commodities such as coffee, cocoa, soya and palm oil. When entering into force, these regulations will introduce mandatory due diligence requirements for the private sector with a view to decoupling their operations from practices causing deforestation.[22] Rather than relying on labelling or voluntary standards, the new regulations will require that the sustainability of imported goods be verified by businesses—using dedicated due diligence processes—based on their place of production, including requiring the producers to provide businesses with such information. Reflecting the issues outlined in Chapter 5 above, several developing countries have raised concerns over these regulations, including how they might affect smallholders' ability to access the EU and UK markets.[23]

**'MIRROR CLAUSES' TO ENSURE SAME STANDARDS FOR DOMESTIC PRODUCTION AND IMPORTS:** As an 'extended version' of the regulatory requirement approach, the EU has also been exploring the possibility of adopting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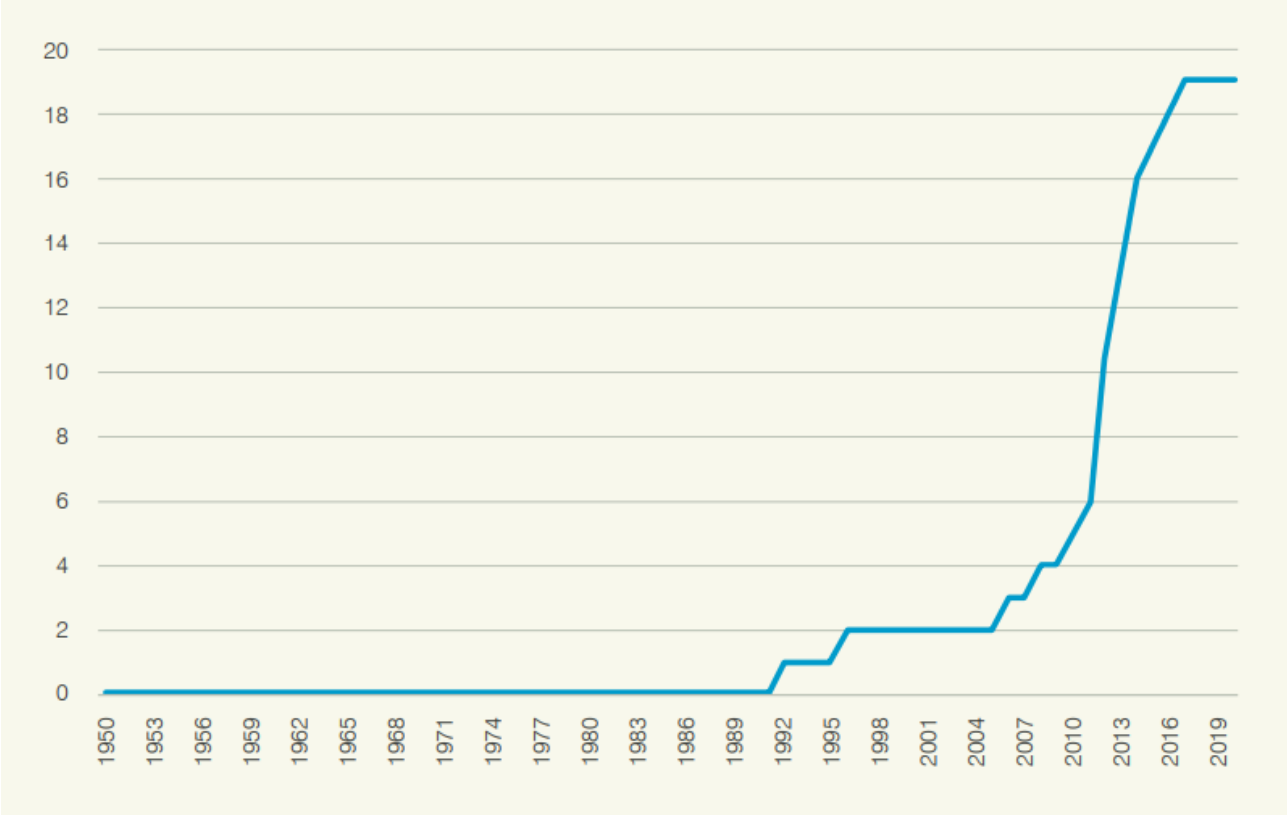
a "mirror clause" regime to help ensure that the sustainability of agricultural products imported into the EU is on a par with those produced within the EU.[24] The aim of such a regime is to make market access conditional to compliance with domestic environmental, animal welfare or health standards and regulations, applying across the board to all agricultural imports and covering both products themselves and how they have been produced. If adopted, a mirror clause regime would help to ensure that EU efforts to improve the sustainability of its agriculture sector (e.g. the role of the sector in delivering global climate and biodiversity targets) is not undermined by imports with lower standards. In principle, mirror measures could be imposed through two means, either as provisions in bilateral FTAs (see below) or unilaterally through domestic laws. The latter case foresees clauses to be adopted as part of individual pieces of EU legislation, thus requiring potentially significant legislation to reach a wide scope of application. Furthermore, the compatibility of a unilaterally adopted mirror measure with international trade rules would need to be assessed, depending on the specific form, scope and objective of the measure. Consequently, while the EU continues to explore this avenue to increase the sustainability of the agricultural sector, both internally and globally, the limitations and risks are also being recognized, as is the importance of internationally agreed standards and procedures to support sustainable farming and food production worldwide.[25]

### INTEGRATING PROVISIONS FOR AGRICULTURAL SUSTAINABILITY IN TRADE AGREEMENTS:

There is a growing trend to include environmental and social provisions in bilateral and regional trade agreements that have direct relevance also for the agricultural sector. For example, all recent EU FTAs contain chapters dedicated to sustainable development with three kinds of obligations required to be upheld by trade partners vis-à-vis environmental and labour dimensions: obligations based on existing international agreements, obligations related to existing domestic regulations, and more aspirational clauses referring to higher levels of protection.[26] Similarly, the recently negotiated EU–UK agreement contains a list of international labour and environmental agreements to enhance the integration of sustainable development in their trade and investment relationship.[27] There are also some pioneering examples pertaining to sustainable agriculture explicitly. The Swiss-

FIGURE 6.1 NUMBER OF TRADE DEALS REFERRING TO VOLUNTARY SUSTAINABILITY STANDARDS.[30]



Indonesian Free Trade Agreement (FTA) that entered into force in 2021 provides for reduced tariffs on sustainably produced Indonesian palm oil by 40% within a fixed quota, using four sustainability standards to certify compliance.[28] The modernised EU-Chile Association Agreement includes a Sustainable Food Systems Chapter, with a view to enhance cooperation between the trading parties as regards to the sustainability of their respective food systems.[29] The chapter explicitly refers to strengthening research collaboration to develop science-based animal welfare standards.

While an increasing number of environmental and social provisions have been included in trade agreements since the 1990s, these trade agreements now directly refer to sustainability standards as a way for exporters to address social and environmental risks in production. These references remain recommendations, but standards are clearly on the radar of governments as a mechanism to check for imports of sustainable certified products.

**GLOBAL SYSTEM OF MINIMUM ENVIRONMENTAL STANDARDS FOR FOOD:** There is no common global international minimum environmental standard that addresses the negative externalities of food production on the environment. This is one of the drivers for countries having adopted domestic requirements for sustainable agriculture through regulations. As highlighted earlier, compliance with a multitude of environmental and wider sustainability requirements, mandatory or voluntary, is acknowledged to be challenging and leading to ineffectiveness of the overall regime, for example by importers applying for exceptions under the import tolerance practice. To address this, the development of a set of international minimum environmental standards— called a Codex Planetarius—has been proposed as a possible way forward.[31] The idea is similar to the existing Codex Alimentarius that is administered by the Food and Agriculture Organization (FAO) and sets out international standards for food safety.[32] The idea for Codex Planetarius was put forward by WWF in 2016 and a concrete proposal for the codex is currently being developed.[33] It is proposed to serve as the legal basis for countries as they develop environmental standards in agri-food systems, incentivising countries to adopt harmonized environmental standards for food production. The proposed focus of Codex Planetarius is envisaged to be applied to most important globally traded foods and soft commodities, as well as some key environmental impacts associated with agri-food production, including biodiversity loss, habitat conversion and loss of soil health, water quantity and quality, GHG emissions, and agrochemical toxicity.[34]

**TECHNOLOGICAL ADVANCES IN SUPPLY CHAINS:** A variety of technological means are emerging to digitalize global supply chains through mobile and internet technologies, helping to implement sustainability provisions and monitor compliance. For example, artificial intelligence

### BOX 6.1 EXAMPLES OF TOOLS OFFERING SUPPLY CHAIN TRACEABILITY

**HARA:** a blockchain-based ecosystem that enables Indonesian farmers to enter data related to their farming production into their mobile phones. Farmers, as well as others who engage in the data exchange (e.g. cooperatives, NGOs, etc.) receive HARA loyalty points that can then be redeemed for services and products, including phone credits and discounts on agriculture and education supplies.

**IBM FOOD TRUST:** a blockchain distributed ledger that allows supply chain participants (producers, suppliers, manufacturers, distributors, and retailers) to securely upload, manage and access transactional data. It allows users to trace food products upstream and downstream and share inspections, quality certifications, and registrations. It is a permissioned network and employ smart contracts.

**GAVEA MARKETPLACE:** blockchain-based food commodities exchange bringing transparency and information ownership with full upstream traceability thanks to the tokenization of physical products. Onboarding is robust as all participants pass through an ESG check to prevent illegal deforestation and illegal labor conditions. All processes are executed on the platform, from negotiating, executing and signing contracts or trading to managing positions.

*Source: Julie Sigles Robert / TRADE Hub (pers. com.)*

(AI), internet of things (IoT) and blockchain technologies are increasingly used by procurement professionals to track sustainability at each stage of the supply chain. For example, some pioneering companies already use blockchain to track their supply chain starting at the farm gate. Technology is increasingly being designed to track supply, improve the overall level of traceability and increase transparency in supply chains, while also enabling suppliers to receive premiums for products.[35]

Traceability technologies that enable automated data collection reduce the time and costs required from companies for data processing and maintenance. Furthermore, gathering information manually can lead to risks of inventory inaccuracies and stock ruptures. According to the Grocery Manufacturers Association (GMA) in the United States, errors occur in 36% of packaged goods orders.[36] The use of technology for product identification, information capture, analysis, storage and transmission of data significantly reduces these risks and allows data to be captured at minimal operating cost. For instance, bar codes and RFID are exceptionally accurate (>99%).[37] Traceability is thus seen as a risk-management tool for food business operators and governments and could even be a source of new revenue from an increase of sales or premium prices linked to origin, quality or sustainability labelling or certifications. For instance, an EU survey showed that most consumers are willing to pay more for higher quality food products and would trust them more if there was a guarantee on the origin and production practice.[38] Consumer willingness to pay could result in revenue growth of over 3%.[39]

The question remains however on who would bear the costs of these technologies investments which can be very expensive.

# 7. FUTURE REFLECTIONS: TOWARDS A SMART MIX OF APPROACHES FOR SUSTAINABLE AGRICULTURE AND TRADE

## 7.1 INTERPLAY BETWEEN DIFFERENT REQUIREMENTS AND STANDARDS

Sustainability requirements for agriculture have the potential to create a systemic positive change across international value chains. Both regulatory measures and voluntary initiatives can help to both create a level-playing field and scale-up national initiatives for sustainable agriculture. Through stakeholder engagement, consultation, and dialogue between supply chain actors, both regulatory requirements and voluntary standards can contribute to create a conducive environment for trade partnerships, networking and collaboration. However, existing evidence indicates that for this to happen more transparency, synergy, and cooperation is needed between the multitude of regulations and standards, including support for their uptake and compliance among producers.

The need for a combination of voluntary and regulatory requirements has long time been promoted in the debate on responsible global business conduct. The term “smart mix”, referring to the productive combination of various regulatory types to advance human rights and environmental sustainability has become popular.[40] A “smart mix” of requirements involves a combination of voluntary and mandatory, as well as national and international measures. In such combination, public regulators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could improve the design, uptake, and compliance with voluntary sustainability standards through information provision, capacity building, economic incentives, or even legal recognition. On their side, voluntary sustainability standards may compensate for some of the weaknesses of public regulation by offering more speedy, flexible, and tailored implementation.[41] In a smart mix, regulations ensure level playing field and action across the whole of business sector while voluntary sustainability standards function as tools for the implementation and application of these regulations in practice. Because of their closeness with business operators, voluntary standards can collect and provide data and information, enable collective action, and can create sector wide consistency, this way helping to operationalize the law. Governments can call for higher standards, or floor-level standards, and therefore indirectly address regulatory multiplicity and reduce complexity and coordination problems.

In a smart mix, voluntary standards can bring supply chain knowledge, understanding of socio-economic contexts of specific regions or stakeholders, active field resources to identify and monitor sustainability hotspots. As such, they can also serve as inspiration or model for scalable approaches, including those enforced by regulations. They can also be useful tools for financial service providers to lower their financial risks and enable sustainable development outcomes when investing in the agricultural sector.

However, to remain relevant in the smart mix, voluntary standards will have to be credible, transparent, inclusive and well-governed. They may also need to rethink the certification model approach if going to a level of scale imagined with new developments in mandatory regulatory approaches for environment and social compliance.

One important response to the challenge of navigating between standards has been the development of benchmarks to evaluate, compare and qualify sustainability tools and company performance. Benchmarking compares the scope, coverage, rigor and outcomes of standards and enable consistency and transparency. As existing standards are numerous and vary profoundly in terms of scope, expertise and rigour, initiatives such as the ITC Standards Map and different standards benchmarking initiatives can help to "separate the wheat from the chaff" and provide directions of travel for companies (Box 7.1). In general, participation to benchmarking and collaborative platforms, promoting learning and exchange between voluntary standards have facilitated more effective use of these tools. One example of collaboration in the voluntary standards space is the recent merge of the standards UTZ and Rainforest Alliance that aims to reduce costs and maximize efficiencies for value chain actors.[42]

Finally, smart mix requirements need to be developed in a locally suitable way, with context-adapted law, addressing local legitimacy and sovereignty concerns, and without disregarding conflicting norms or diverging interests and power asymmetries between actors.[43] Achieving this, the combination of voluntary and regulatory measures can become an impetus for farmers to form associations, cooperatives, or agribusinesses and lead to improving their negotiating power and market access.[44]

Moving forward, it remains to be seen how voluntary standards will be leveraged to support the implementation of various regulations for corporate sustainability due diligence and deforestation-free supply chains under way (Chapter 6). However, they are likely to play a role in the implementation, not the least because governments are already entering the space of developing and adopting voluntary standards to guide production nation-wide. For example, the Malaysian government has developed the Malaysian Sustainable Palm Oil (MSPO) certification scheme to help move Malaysian producers towards more sustainable production practices. Initiatives like MSPO can be helpful in increasing the capacity and technical ability of domestic producers, including the ability to match the requirements of importing countries.

If voluntary standards are included in a smart mix of measures, they can offer producers more flexibility and various means of complying with regulations. For example, the recent proposals for the future EU Corporate Sustainability Due Diligence Directive include the mention of sustainability standards as an important tool for enforcement of the law, with the caveat that a form of recognition system shall be put in place to evaluate which standards are fit for the purpose.[45]

## 7.2 SUSTAINABILITY REQUIREMENTS AND STANDARDS IN THE CONTEXT OF INTERNATIONAL TRADE RULES

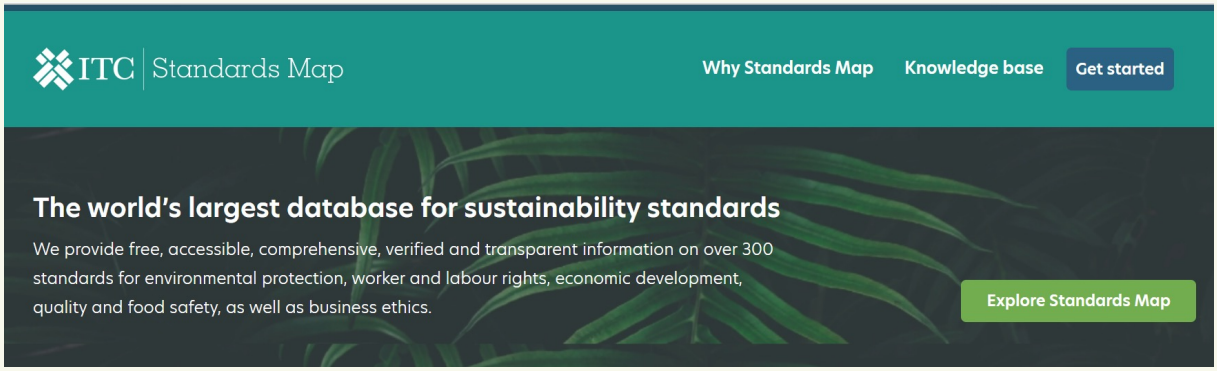
As mentioned in Chapter 5, standards have emerged as a new form of trade governance in global value chains. Policymakers are increasingly integrating

## BOX 7.1 NAVIGATING THE MULTITUDE OF SUSTAINABILITY STANDARDS

The ITC Standards Map, indexing more than 300 sustainability standards, among which almost 160 cover agricultural commodities, helps to make sense and use of sustainability standards.

The Standards map enables the active benchmarking and harmonization of standards, to facilitate transparency on responsible production, lower certification costs and streamline approaches for more value chain efficiency. It helps differentiating standards according to their level of transparency, their economic viability and overall credibility. It also provides information on standards' governance models, stakeholder participation in standards' design and management, financial and technical support provided to small producers, and conformity assessment techniques, among other areas.

Building on the Standards map, ITC is partnering with several organizations to develop robust benchmarking tools aligned with ISEAL's Sustainability Benchmarking Good Practice Guide. For example, the European Feed Manufacturers Federation's soy benchmarking tool was co-developed with ITC, to promote deforestation and "conversion-free" production in the soy sector.[46] Similarly, the Global Coffee Platform Equivalence Mechanism, aiming to support sustainable coffee purchases, will be leveraging ITC Standards Map global database to facilitate the assessment of sustainability schemes.[47]




references to voluntary standards into trade agreements and public procurement policies aimed at encouraging sustainable production. Voluntary standards are also used by governments as a basis to monitor large firms' international supply chains. Some European and Asian countries refer to standards in their sustainable procurement policies because there is no other way to prove companies' compliance with social or environmental criteria.[48]

The recent UNFSS research has indicated that voluntary sustainability standards have a relevance across several trade policy instruments (tariffs and non-tariffs measures) including free and preferential trade agreements, market access regulations, and export promotion measures.[49] According to an ITC review, 19 of such agreements are already in place, mostly involving the EU.[50] Consequently, environmental protection and labour rights promotion, are increasingly seen as central to international trade. This raises the question of whether, and how, international trade rules and trade facilitated by the WTO could play a more proactive role in promoting sustainable agricultural practices, including the uptake of sustainability requirements and standards by governments and businesses.

Given that the WTO is an inter-governmental organisation, the question of whether voluntary sustainability standards, which are set up by private entities, are within the purview of WTO regulations has been strongly debated and remains ambiguous. At the WTO, members have recognised the role standards play in the context of international trade, especially when it comes to their implications for developing countries.[51] To this effect, the WTO Committee on Technical Barriers to Trade agreed in 2000 upon six principles to guide the WTO member in the development of international standards.[52] These principles include transparency, openness, impartiality and consensus, effectiveness and relevance, coherence, and addressing the concerns of developing countries. The question of "who is behind the standard" for instance (public entity, private one, level of authority) is a crucial one in this context.

On the other hand, credibility principles for private sustainability standards were established by the ISEAL alliance in 2013, followed by an update in 2021, to help businesses, governments, and civil society to identify a set of common values that all credible sustainability standards should display.[53]

Although navigating the myriad of voluntary sustainability standards through the lens of WTO regulations is complex, there is considerable overlap between the WTO's Six Principles and the ISEAL Credibility Principles (Box 7.2).

### BOX 7.2 WTO SIX PRINCIPLES VS. ISEAL CREDIBILITY PRINCIPLES

The ISEAL Standard-Setting Code serves as a means to evaluate and strengthen the sustainability standard-setting process. It aims to build on Annex 3 to the WTO Agreement on Technical Barriers to Trade. By using the ISEAL Standard-Setting Code, standard-setters can ensure that their standards are set in a manner that is transparent, open and sustainable. The preamble of the WTO Agreement on Technical Barriers to Trade explicitly recognises the important contribution that international standards and conformity assessment systems can make by improving efficiency of production and facilitating the conduct of international trade.[54] The ISEAL Standard-Setting and other codes are currently under review and consultation. The future unique ISEAL Code will revise and integrate the ISEAL Impacts, Standard-Setting, and Assurance Codes of Good Practice, and also essential practices from the ISEAL Sustainability Claims Good Practice Guide and will improve the credibility tools, in alignment with the WTO principles.

### FIGURE 7.2 WTO SIX PRINCIPLES VS. ISEAL CREDIBILITY PRINCIPLES


This highlights the importance and need for harmonisation and convergence amongst different voluntary sustainability initiative, to achieve the sustainable development goals without creating additional barriers to trade, especially for emerging economies.

As shown below there is interesting equivalency between the WTO TBT and ISEAL credibility principles, and it is to be noted that both are aimed at reducing unnecessary barriers to trade. The multiplicity of standards constitute in itself a barrier to trade as explained above, and ISEAL credibility principles promote alignment and convergence of these approaches/have spurred the development of various pre-competitive platforms aiming to harmonizing standards and making all approaches converge.

# CONCLUSION AND KEY INSIGHTS

While the rapid growth and formalization of sustainability initiatives in the agriculture sector can help to steer the production of agricultural goods towards sustainable production methods and labour conditions, it can also create barriers to trade for producing countries unable to match the requirements.

This market access risk has become more acute with the emergence of mandatory due diligence requirements for businesses operating in the agricultural sector, where requirements aim to enhance transparency in how businesses operate. While agri-food companies can leverage voluntary sustainability standards to demonstrate their compliance to emerging regulations as part of the "smart-mix", the market access concerns for developing country exporters remain.

There is no shortage of efforts being made by NGOs and international donors to enhance the participation of smallholder farmers and MSMEs through training and capacity building to improve market access and increase access to financing networks. Notwithstanding these efforts, policymakers in developing countries by and large still lack the sufficient awareness of these voluntary and regulatory requirements and their longer-term implications.

Efforts are therefore needed to support policymakers to understand and respond to this new sustainability environment. Harnessing the capacity to meet these sustainability requirements and standards, while not easy, can lead to increased market access, improve MSME economic and climate resilience, while leading to the creation of new local markets for sustainability services that can have economy-wide benefits. Moreover, armed with this new knowledge, policymakers will be empowered to advocate for their interests at the international negotiating table while helping to steer how regulatory requirements are implemented in their national jurisdictions.

The key recommendations of this paper are therefore for policy makers to:

- Measure the impact that sustainability requirements can have on trade in agricultural commodities;
- Foster the adoption of these requirements in a smart way, building on the learning and challenges that voluntary standards have faced over decades;
- Foster transparency and alignment between sustainability requirements, to create a level playing field, drive their adoption by operators and improve their fitness to purpose;
- Convene dialogue with producing countries supply chain actors, to hear their needs and glean solutions to meet global food demand in a sustainable and equitable way, without depleting natural resources further.

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