Key Messages

- The risk perceptions of financial service providers are one of the major reasons behind the financing gap in developing countries’ agricultural sectors, even though there is a considerable need to invest in agriculture to transition to more sustainable production practices.

- Voluntary sustainability standards (VSSs) can help reduce material financial risks, as they require farmers to implement agricultural practices that support environmental protection and social well-being in compliance with their criteria.

- Our findings suggest that the VSSs examined have high coverage of criteria that can support agribusiness in complying with laws and regulations; implement sustainability planning and management systems; preserve soil, water sources, and forests; and protect basic labour rights and health and safety measures. All this can help mitigate and reduce financial risks derived from poor growing practices and legal infractions.

- Nevertheless, VSSs can incorporate requirements that better align with financial service providers’ needs, including criteria related to economic viability, transparency, corruption and anti-bribery, and climate adaptation and mitigation.

- Both financial service providers and governments can use VSSs in their investment activities and supporting services to catalyze finance in sustainable agriculture.

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The Issue

Many financial service providers (FSPs) are reluctant to invest in the agricultural sector due to concerns about risks related to such investments—especially external risks such as weather/climate change or market dynamics. These perceptions are a major hurdle to increasing much-needed investments in the sector, particularly in developing economies (Nugnes & Larrea, 2020; Shakhovskoy et al., 2019).

Farmers in developing countries have struggled for decades to access sufficient finance, as agriculture is seen as a low-profit sector. Other obstacles to farmer finance include a lack of collateral, savings, or insurance; high risks in terms of production quality or quantity; fluctuating prices; and weather shocks. These risks are likely to compound due to the impacts of a changing climate (Howlett & Muyungi, 2016). The International Institute for Sustainable Development (IISD) consulted 51 agricultural investors in 2019 and found that the issues deemed highly important for reducing agricultural investment risks in developing countries were governance of the agribusiness (73%), business management practices (68%), and addressing climate change (56%) (Nugnes & Larrea, 2020). Figure 1 defines the five main investment risks derived from agribusiness operations: market risks, reputational risks, regulatory risks, operational risks, and litigation risks.

Investors’ perceptions of agricultural risks lead to a large investment gap in the sector that particularly affects small and medium-sized agribusiness. In 2014, the United Nations Conference on Trade and Development (UNCTAD) estimated a USD 260 billion annual investment gap in meeting Sustainable Development Goal (SDG) 2 (zero hunger) targets in developing countries (UNCTAD, 2014). Seven years later, UNCTAD reported that these investments had dropped markedly because of the COVID-19 pandemic.

This financial gap contradicts the urgency of investing in the agriculture sector to support farmers in their transition to sustainability. Farming has devastating effects on natural environments, with about 38% of land and 70% of freshwater consumption appropriated for agriculture today (Food and Agricultural Organization of the United Nations, 2016, 2020). The clearing of natural environments means the sector is also a key driver of climate change and biodiversity loss (World Bank, 2020). The agricultural sector is also grappling with ethical and reputational issues such as human rights violations and social injustices, including forced and child labour (Fountain & Huetz-Adams, 2018; Pandey, 2014; Somayajula, 2019; Tulane University, 2015).
Figure 1. Agricultural investment: Financially material business risk categories in agricultural supply chains

<table>
<thead>
<tr>
<th>Issue-Driven Agribusiness Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance and management performance</td>
</tr>
<tr>
<td>Climate change</td>
</tr>
<tr>
<td>Water use and pollution</td>
</tr>
<tr>
<td>Livelihoods and working conditions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financially Material Business Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
</tr>
<tr>
<td>Potential losses resulted from external physical events and management failure to plan for and mitigate against these risks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Profit &amp; Loss</th>
<th>Balance Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased revenue; increased costs</td>
<td>Stranded assets; increased costs to access equity and debt</td>
</tr>
</tbody>
</table>

Source: Adapted from Ceres, 2017.
Voluntary sustainability standards (VSSs) that operate in the agricultural sector can be described as pseudo-governance systems to move supply chains toward sustainability. These voluntary schemes guide production toward delivering positive economic, environmental, and social outcomes in exchange for the formal recognition of VSS-compliant production in the marketplace. Developed to meet market demand for more sustainably grown goods, VSSs have expanded greatly in recent decades, both in numbers and in market share.

By motivating farmers to adopt more sustainable production practices, VSSs are in a good position to help tackle some of the negative impacts driven by the agricultural sector—such as deforestation, water scarcity, and basic human rights violations—and reduce the risks that discourage FSPs from investing in the sector. VSSs can improve productivity and profitability by requiring farmers to adopt more sustainable production practices and supporting them in forming associations, adopting sound agribusiness management practices, and improving their negotiating power.

They also facilitate the establishment of commercial relationships with buyers and often help farmers obtain better prices and premiums. Support in the form of training and technology transfer often accompanies the process of becoming VSS compliant. VSSs can also contribute to delivering positive economic, social, and governmental outcomes that benefit agribusinesses, communities, and the environment. The result? Agricultural investments are less risky.

To assess how VSSs can contribute to reducing investment risks while helping to deliver sustainable development outcomes, IISD examined the production criteria of 12 VSSs operating in the agricultural sector against the different components of 10 sustainable finance frameworks, such as the Principles of Responsible Investment, and credit rating factors for agricultural investment in developing countries (i.e., accounting methods, profitability). From this review, we established seven sustainability themes and 24 subthemes organized in three dimensions—economic, social, and environmental—to benchmark the VSS production criteria obtained from the International Trade Centre’s Standards Map.

The benchmarking effort was enriched by including the perspectives of 51 FSPs that invest in agricultural operations in developing countries on the sustainability issues that most urgently

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4 Please see Voora et al. (2022) for details on these themes and selected indicators.
need to be addressed to reduce investment risks and generate sustainable development outcomes. In the next section, we present a summary of the main findings in aggregate. For each dimension, we illustrate the subthemes for which VSSs have high coverage (70%–100%), moderate coverage (45%–69%), and low to little coverage (0%–44%). Though the coverage of sustainability criteria could be an indication of the potential impact that VSSs could have on the ground, a specific study will be needed to assess such impacts.

Our Findings

The Economic Dimension

Why VSSs Focus on Criteria Related to Economic Sustainability

FSPs make investment decisions in the farming sector based on the economic viability of agricultural operations. VSSs often include production criteria that require farmers to adopt sounder business governance and management practices to mitigate potential financial risks. VSSs can also reduce transaction costs by requiring producers to collect information used to assess financial risks (Angel et al., 2013). As a result, VSS-compliant farmers may appeal more to prospective FSPs than farmers involved in conventional agricultural production.

VSSs have HIGH coverage of criteria within the economic dimension that support:

- **Compliance with laws and regulations**: All the VSSs examined include measures that require farmers to obey international, national, and local laws and regulations. This includes being legally registered and having all agricultural production rights and permits, such as land tenure documentation and water-use permits, to ensure that operations will continue uninterrupted. Operating illegally can lead to operational risks, and knowing that VSSs monitor agricultural operations to ensure that they are legal can reassure FSPs that otherwise would have to foot the bill for expensive background and due diligence checks.

- **Sustainability planning and management**: The majority of VSSs expect compliant farmers to create long-term sustainability plans and reduce the environmental and social risks associated with their operations. Many VSSs also require farmers to have measures in place to improve the environmental and social management of their farming operations; however, fewer require farmers to monitor the management of these risks, even though this could reduce potential impacts and costs. All these measures can prevent reputational and legal risks stemming from negative social and environmental impacts.

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5 The perceptions of the FSPs interviewed are reflected as the percentage of FSPs that regard sustainability issues as highly important to lowering financial risks and enabling sustainable development.

6 The benchmarked VSS production criteria are weighted as follows to reflect the timeline in which the requirements must be met to become and remain standard compliant: 0% = not covered; 20% = improvement or recommendation—implementation suggested in standard document but not required; 40% = longer-term requirement (more than 3 years); 60% = medium-term requirement (between 1 and 3 years); 80% = short-term requirement (within the first year); 100% = immediate—must be met immediately to be recognized as VSS compliant. Please see Voora et al. (2022) for an analysis of each VSS.
VSSs have MODERATE coverage of criteria within the economic dimension that support:

- **Traceability systems**: VSSs that are active in commodity sectors linked to food production require systems to track compliant goods through supply chains. Traceability systems can build consumer trust and make goods more marketable. They can also help FSPs measure financial risks and better understand the potential impacts of their investments as they seek to attract investors to support their funds. All but three VSSs include measures that support tracing inputs and products. The Organic standard forbids the use of genetically modified varieties, demanding separate supply chains and traceability systems for organic items. GLOBALG.A.P. has demanding conditions due to its focus on food safety, while the ProTerra Foundation also sets strict conditions, as any contamination of the non-modified soybeans it certifies could cause farmers to lose customers.

- **Record-keeping**: Keeping accurate records helps farmers make better decisions, as detailed information about the farming operation helps with business planning and forecasting. All 12 VSSs require farmers to maintain records on their operations as well as pesticide use, though none requires records on accounting irregularities. FSPs tend to prefer farmers who are VSS compliant because they are required to keep records (Angel et al., 2013) that FSPs can access if necessary.

VSSs have LOW to LITTLE coverage of criteria within the economic dimension that support:

- **Corruption and bribery prevention**: VSSs may need safeguards to prevent corruption and bribery in agricultural operations, which could support their credibility. Yet the 12 VSSs examined generally lack measures to prevent corruption and bribery in agricultural operations. Only four require their participating farmers to adopt measures to prevent bribery, and none demands internal controls or corrective actions to deal with corruption and bribery or requires having an anti-bribery policy in place.

- **Transparency**: Stronger business transparency would build trust among supply chain stakeholders, support FSPs’ due diligence requirements, and enable FSPs to obtain the information they need to make accurate risk calculations and investment decisions. Some of the 12 VSSs require producers to make their policies on workers’ rights available publicly, which underpins workers’ awareness and can help prevent labour conflicts. But few VSSs require farmers to publicly disclose environmental and social management reports, deal with auditing discrepancies, or give auditors access to production sites.

- **Economic viability**: By requiring farmers to adopt productivity measures, formal business plans, and viability studies and encouraging diversification, VSSs support business management practices that can boost economic viability and reduce operational risks. Such requirements can also lower the cost of gauging the financial viability of agribusinesses. Business claims that are based on business plans are more credible and better valued by FSPs. Yet fewer than half of the 12 VSSs demand business plans, financial resilience, or productivity improvement measures. Only four
require their agribusinesses to diversify, which helps farmers remain economically viable amid growing threats, such as climate change.

- **Supply chain development:** VSSs can contribute to more transparent agricultural supply chains by requiring supply chain mapping, sales contracts, minimum price guarantees, and price premiums across the board, which can provide legal and financial certainties for FSPs. However, only three VSSs require minimum price guarantees, which can make a big difference for small producers, as they protect them from price fluctuations, making for a more stable investment for FSPs. Only four VSSs require written contracts with traders that provide clear terms, which can protect producers from potential sales infractions, such as deviations from payment amounts and deadlines.

- **Quality systems:** VSSs can contribute to establishing quality-assurance systems that require producers to have suitable storage facilities, a policy on quality management, and mechanisms that support the traceability and record-keeping of the product and related inputs. All of the standards except the Roundtable for Responsible Soy and the Roundtable for Responsible Palm Oil cover at least one of these three criteria, which are essential to ensuring that the product meets basic quality standards and is stored properly until it is delivered to the market. Nevertheless, none of the VSSs include requirements to ensure that the product complies with specific quality legislation, and very few include criteria to conduct quality risk assessments and monitoring.
Environmental Dimension

**Why VSSs Focus on Criteria Related to Environmental Sustainability**

Environmental damage caused by farming can destroy natural resources and create material risks for investors. Adopting environmentally friendly production practices can not only lower costs and lessen risks, but it can also improve farmers’ ties with the local community and offer them a competitive advantage (International Finance Corporation [IFC], 2012b). Agriculture depends heavily on a healthy natural resource base to remain viable, which highlights the importance of environmentally friendly production practices.
VSSs have HIGH coverage of criteria within the environmental dimension that support:

- **Water conservation:** While most of the VSSs examined require farmers to implement measures for water resource conservation and improved irrigation efficiencies, some have no requirements for water management plans or water-use impact assessments, which could improve the viability of farming operations. All but two require farmers to cut water consumption by reusing, recycling, and harvesting rainwater, and eight also require the protection of water bodies, such as rivers and wetlands. Agricultural operations must be able to access water to remain sustainable without harming natural ecosystems and, as a result, tarnishing their own reputations and credibility.

- **Soil conservation:** VSS-compliant agricultural producers are often subject to soil conservation measures aimed at lowering operational risks to changing conditions and increasing profits for both farmers and FSPs. All 12 VSSs have soil conservation practices designed to prevent erosion—which can damage both infrastructure and the quality of water resources—and increase soil health and productivity. Many VSSs also have processes to assess potential risks to soil resources, which can result in the adoption of soil conservation measures. Fertile soils are essential for the viability of farming operations.

- **Forest conservation:** Most of the VSSs examined impose forest conservation measures and, with few exceptions, forbid their farmers from converting forests into agricultural lands. They also have requirements to prevent and remedy deforestation. Agricultural operations that preserve and regenerate forests benefit from their ecosystem services, which are essential for their long-term sustainability (The Economics of Ecosystems and Biodiversity, 2015). Forest conservation counters reputational risks associated with deforestation, improves product marketability, and offers revenue sources via non-timber goods and payment for environmental services. Adopting forest conservation measures enables FSPs and agricultural operations to align and stay a step ahead of policies and regulations designed to preserve forests.

VSSs have MODERATE coverage of criteria within the environmental dimension that support:

- **Biodiversity conservation:** Biodiversity is vital to sustaining agricultural operations over the long term (IFC, 2012a). For instance, pest outbreaks and associated crop losses are less likely in biodiverse environments (Philpott, 2013). Soils that are biodiverse have fewer fertilization needs and provide a buffer against nutrient deficits (Luo et al., 2018; Sidibé et al., 2018). Most of the VSSs examined require the monitoring and protection of high conservation value areas. Several VSSs also require farmers to protect natural habitats on their lands by integrating natural habitat buffer zones and preventing fragmentation. Some VSSs even require the rehabilitation of ecosystems. At least eight have requirements for protecting endangered and threatened species and ecosystems, an important issue in agriculture.

- **Pesticide pollution:** All 12 VSSs expect their farmers to apply integrated pest management measures, which typically involve monitoring plant health and pest and predator populations as well as pest control practices such as plowing, natural
traps, and protecting predators. These measures can stop water and air pollution and reduce hazardous solid waste while cutting pesticide costs. Adapting integrated pest management measures can improve profitability and product marketability. Of the 12 standards that were studied, only Organic bans the use of synthetic pesticides. All the VSSs prohibit their farmers from using pesticides made with hazardous chemicals. All the standards except Organic and Bonsucro require targeted pesticide use to safeguard human health and natural ecosystems.

- **Waste prevention:** Good waste management is vital to ensuring a healthy, safe, and productive farming enterprise. Farmers who produce excess solid waste may have inefficient operations and production. Hazardous waste, such as pesticide containers, must be adequately disposed of to avoid environmental risks. With the exception of the Organic standard, which does not allow the use of agrochemicals, all the other VSSs include criteria that support the proper disposal of hazardous and non-hazardous waste. All VSSs require farmers to adopt measures for solid waste reduction, reuse, and recycling. However, these standards had less coverage of criteria related to the treatment of solid and non-solid waste.

**VSSs have LOW TO LITTLE coverage of criteria within the environmental dimension that support:**

- **Climate adaptation:** Only four of the VSSs require climate adaptation activities, and just one—Rainforest Alliance—expects its farmers to create hazard emergency response plans. Just over half of the standards require agricultural producers to manage water-scarce areas. The extreme vulnerability of agriculture to climate change constitutes a significant operational risk, and farmers’ abilities to adapt should feature more prominently in financial decision making. Nevertheless, there are other criteria that VSSs cover that help to build climate resilience, such as soil and water conservation and the preservation of forests.

- **Climate mitigation:** Climate change mitigation practices can improve the profitability of farming operations by improving energy efficiencies and using renewable energies, which can lower operational costs. They can also increase environmental resilience and social recognition and provide access to carbon financing. Most of the VSSs examined require energy-use reduction, which can be a key cost-saving measure that lowers greenhouse gas (GHG) emissions for farming operations relying on fossil fuels. Five VSSs have GHG emission sequestration requirements, while four require high carbon stock area management.

- **Water pollution prevention:** The fact that all 12 standards enforce conditions to prevent water contamination—with several adding requirements on agricultural runoff—underscores the importance of safe water for agribusinesses and the local population and the potential for farming operations to taint water supplies. Polluting water can lead to reputational, operational, and even legal risks. Some of the VSSs also require farmers to have facilities to treat, store, and dispose of wastewater to minimize impacts on downstream users and aquatic ecosystems. Measures to reduce, treat, store, and properly dispose of wastewater primarily apply when processing takes place. However, none of the VSSs include measures to prevent transboundary water pollution and only one prevents wastewater reduction.
Voluntary Sustainability Standards and Investments in Sustainable Agriculture

Figure 3. VSS coverage of nine subthemes included in the Environmental Dimension and the percentage of FSPs that perceive them as highly important to lower financial risks and enable sustainable development

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Degree of coverage by VSSs (%)</th>
<th>FSPs that perceive each subtheme as highly important to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil conservation</td>
<td>76</td>
<td>Enable environmental impact</td>
</tr>
<tr>
<td>Forest conservation</td>
<td>72</td>
<td>Lower financial risk</td>
</tr>
<tr>
<td>Water conservation</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Biodiversity conservation</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Pesticide pollution</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>Water pollution</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Climate mitigation</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Climate adaptation</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

Source: Voora et al., 2022.

Social Dimension

Why VSSs Focus on Criteria Related to Social Sustainability

Socially responsible relations between farmers and the communities where they operate can ensure that they maintain their social licence to operate. Good community relations can also minimize potential negative impacts on human rights, cultures, and development, which are particularly important for vulnerable groups. Furthermore, minimizing potential conflicts associated with agricultural operations can improve access to qualified local workers while reducing reputational risks (IFC, 2012b). Fostering good relations with the communities

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7 A social licence to operate is an informal licence granted by a community to an agricultural producer conveying that the community accepts and approves of its agricultural operations (The Ethics Centre, 2018).
where they operate represents good business for agricultural producers. Farmers who have
good community relations can lower financial risks for FSPs while being better positioned to
contribute to community development.

**VSSs have HIGH coverage of the following criteria within the social dimension that support:**

- **Labour rights:** With just one exception, all the VSSs examined require that labour
  rights are upheld in accordance with International Labour Organization (ILO)
  conventions. Prohibiting forced labour and allowing freedom of association and
collective bargaining are important requirements. Preventing child labour is important
and a challenge that must be carefully met, as many farming operations rely on the
labour of family members to remain viable. Nevertheless, child labour should not take
opportunities away from child development, such as by imposing dangerous tasks or
preventing school attendance. Upholding labour rights can also result in increased
worker satisfaction, productivity, profitability, and product marketability.

- **Health and safety:** All 12 VSSs have workplace health and safety requirements. Many
  require farmers to follow safety-at-work measures in accordance with ILO 184, adopt
workplace safety measures, and comply with workplace safety laws. All the standards
require that employers provide workers with protective equipment and access to
medical services. Safe and healthy working conditions contribute to worker retention
and productivity. This is especially important in countries with limited occupational
health and safety laws and enforcement capacity.

**VSSs have MODERATE coverage of the following criteria within the social
dimension that support:**

- **Employer practices:** Most VSSs expect their farmers to adopt good and gender-
equitable practices, ensure decent and fair work conditions, respect labour rights, and
make sure that health and safety measures are in place. A few VSSs have incorporated
living wage requirements in their standards—a big step over simply requiring
minimum wages. Some standards demand compliance with employment laws and
maximum working hours. Fewer require farming operations to provide pensions
and social security benefits. Overall, the 12 VSSs include provisions to ensure that
employer practices are fair and appropriate, which can result in important dividends
for agricultural productivity and profitability.

- **Gender-equitable employer practices** focus on ways to avoid gender discrimination
and create socially inclusive work environments. These practices include promoting
women’s education, professional training, employment, and participation in decision-
making structures and measures to protect and ensure equal remuneration and
guaranteed rights for parental and sick leave. Many VSSs compel their farmers to adopt
anti-discrimination measures in their operations, protect their workers from sexual
exploitation and harassment, and offer equal remuneration in accordance with ILO
100. Several require farmers to have workplace gender policies and measures in place to
protect women’s working rights. Although gender equality is a major issue in agriculture,
not all standards have adopted strict measures to address it.
• **Indigenous rights:** Several VSSs have measures in place to protect Indigenous rights and their way of life, which can be of greater concern where clearing natural ecosystems for agricultural production is prevalent. Eight of the 12 VSSs require the free, prior, and informed consent of the community, which entails obtaining permission from local and Indigenous communities before undertaking agricultural operations that could have negative impacts. None of the VSSs has community resettlement requirements, which can be critical when agricultural operations interfere with Indigenous Peoples’ land.

**VSSs have LOW TO LITTLE coverage of the following criteria within social dimensions:**

• **Community development:** The VSSs examined generally do not have extensive measures to enable community development. Five require farmers to have a grievance mechanism for communities. Some require farming operations to support community economic development and investments. Fewer than half have measures in place to assess the potential human rights and community impacts that their farming operations may have on surrounding communities.

• In terms of supporting **gender equality in community development**, several of the VSSs require farmers to address gender issues when interacting with their local communities so they can be better understood and addressed. Some require community development initiatives and policies that promote gender equality. Only two VSSs require farming operations to engage in gender-sensitive stakeholder engagements, while two require farmers to carry out a gender-sensitive community impact assessment of their operations.

• **Cultural preservation:** Preserving culture while promoting an intercultural dialogue is at the heart of any development intervention that aims for success. It can also help maintain prosperous relationships with local communities and mitigate conflicts. Though the VSSs examined do not cover many criteria on this issue, most of them include measures to respect the natural and cultural heritage of the communities as determined by the United Nations Educational, Scientific and Cultural Organization when planning and siting agricultural operations. Proterra requires the protection of traditional production practices, and the Roundtable for Responsible Soy protects community access to cultural heritage sites.
Voluntary Sustainability Standards and Investments in Sustainable Agriculture

Figure 4. VSS coverage of six subthemes included in the Social Dimension and the percentage of FSPs that perceive them as highly important to lower financial risks and enable sustainable development

The analysis provided insights for fine-tuning VSS production criteria to improve VSS-compliant farmer access to financing from FSPs. The VSSs examined have not typically focused on the business aspects of agricultural production. Consequently, their coverage of the economic and sustainable finance aspects was relatively low at 34%. On the other hand, the VSSs’ coverage of environmentally and socially sustainable finance aspects was 45% and 47%, respectively.

Nevertheless, according to our analysis, VSSs can help reduce financial risks by improving the economic governance and management of agribusiness by supporting compliance with national laws and regulations, record-keeping, and the adoption of sustainability planning and management practices. VSS-compliant farmers are audited regularly, which can also reinforce their management practices. Standards can also help lower environmental and social risks by encouraging farmers to adopt practices that preserve soil, water, and forest sources, as well as respect labour rights and workplace health and safety measures. All these measures can lead to more secure harvests and improved land and labour yields, which can financially benefit the agribusiness. Through their criteria coverage, VSSs can also support the mitigation of more pressing risks—such as deforestation or biodiversity loss and helping agribusinesses to comply...
with increasing market and regulatory requirements—and offer those that adhere to them a roadmap for sustainable development.

Our Recommendations

How can FSPs Use VSSs in Their Investment Activities?

FSPs can leverage VSSs in their investment due diligence and decision-making processes to increase their financing for small and medium-sized enterprises engaged in sustainable agriculture. For example, VSSs can help assess the environmental, social, and governance (ESG) performance of potential investees through their criteria coverage and supporting practices. Standards can also ensure that investees incorporate ESG considerations in their agribusinesses, which can mitigate financial risks (i.e., prohibiting the use of agrochemicals, deforestation, and forced labour).

Box 1. The Moringa Fund: Leveraging VSSs for ESG screening

The Moringa Fund, an agroforestry investment company that provides financial and technical assistance to mango smallholders in Mali, invested in ComaFruits to add value, build a fruit-drying plant, and develop other fruit products to diversify farmer revenues. ComaFruits helps producers become certified with Organic, Fairtrade, or the Rainforest Alliance, and these VSSs support the exporter’s efforts to train farmers to grow different mango varieties by requiring better quality aligned with strict importing country requirements. Farmers who adopt agroforestry practices for mango production and market linkages favoured by certification drive Moringa’s value-addition investment. The fund leverages VSSs by carrying out ESG screening of farmers and agribusinesses in its pre-investment phase, and it regularly monitors the social and environmental impacts of its investments.

Source: Voora et al., 2022.

FSPs can also leverage VSSs in the way they structure financial products. VSSs can provide valuable information about crop production and commercial cycles so financial products can be structured to meet farming cash-flow needs at specific times. Standards can help farmers access new markets and obtain direct sales contracts that can be used as collateral to reduce FSPs’ investment risks. By requiring producers to keep records and follow chain-of-custody requirements and enabling compliant farmers to earn price premiums that can be reinvested to improve farming operations and farming communities, VSSs are creating useful information for FSPs to determine investment risks and reducing their risk perceptions and transaction costs. These measures can result in lower interest rates for VSS-compliant farmers.
Box 2. The Mercon Group: Leveraging VSSs to help structure financial products

The Mercon Group, which provides sustainability-linked loans to coffee farmers in Africa and Latin America, links its interest rates to sustainability results that include ESG issues such as deforestation, child labour, and pest and pesticide management. These loans are coupled with a technical/capacity-building facility whose pricing is linked to key sustainability issues measured by performance indicators. Mercon’s interest rates on sustainability-linked loans are determined after assessing coffee practices using a third-party verified index that is aligned with Rainforest Alliance criteria. The index also supports measuring farmers’ progress in adopting sustainable coffee practices.

Source: Voora et al., 2022.

VSSs can also help FSPs make investment decisions by supporting the pre-selection and selection of investees based on their risk-impact profiles. FSPs can also use standards’ compliance and sustainability impact evidence to disclose non-financial information, such as the impact of their agricultural investments, which can make them more competitive. Financial service providers that invest in more sustainable agricultural operations—such as those that comply with a VSS—may be in a better position to attract business opportunities, such as capital from more socially oriented investors who want their financial resources to tackle sustainable development issues such as climate change mitigation, biodiversity conservation, or human rights protection.

Box 3. The eco-business Fund: Leveraging VSSs to pre-select potential investees and report contributions to impacts

The eco.business Fund gives loans to financial institutions in coffee-growing countries for on-lending to coffee agribusinesses to obtain financial and environmental returns and build resilient plantations. Local financial institutions lend to coffee agribusinesses that are certified or adopt biodiversity and natural resource conservation measures aligned with the fund’s sustainability mandate. The fund also leverages blended finance from its partners (i.e., UK Aid Direct, FinancieringsMaatschappij voor Ontwikkelingslanden, Kreditanstalt für Wiederaufbau) to provide technical assistance and training to its investees to build their capacity to adopt sustainable practices that protect biodiversity and promote sustainable natural resource management and climate adaptation (eco.business Fund, 2018, 2019). VSSs play a key role by enabling the fund to pre-select coffee agribusinesses that meet their conservation criteria, save monitoring and verification costs, and leverage impact measurements to better clarify and report on the benefits of VSS-compliant coffee investments (eco.business Fund, 2018, 2019).

Source: Voora et al., 2022.
What Can VSSs do to Support Compliant Farmers Accessing Finance?

1. **Develop VSS requirements that help farmers access finance:** VSS production criteria that farmers must meet to become and remain compliant offer opportunities to ensure that they meet FSP requirements to obtain finance (see Appendix B for VSS production criteria). Based on the benchmarking analysis conducted for our report, the 12 VSSs’ requirements for farming business and economic aspects were relatively undemanding, even though FSPs perceive them as highly important when assessing financial requests from agricultural producers. These requirements include keeping records of the farming enterprise that provide a history of agricultural production costs and revenues. Designing VSS production criteria aligned with access to finance requirements would preferably be tailored to local contexts. Furthermore, the VSS compliance information collected by farmers (i.e., price records, sales information, pesticide use records) could be compiled in a way that directly supports FSP investment due diligence and reporting requirements.

2. **Assess VSS-compliant farming operation sustainability impacts:** Although the number of sustainability impact studies on implementing VSSs in agriculture is growing, empirical evidence is still lacking across geographies and sectors. Establishing a robust evidence base resting on independently conducted sustainability impact studies across geographies and sectors will be invaluable to attracting investments needed to facilitate a shift toward more sustainable forms of agriculture. To address this need, more independent VSS sustainability impact studies have been undertaken, and evidensia.eco, a repository of sustainability impact studies, has been established. VSSs have also responded by collecting economic, environmental, and social impact data associated with the farming operations applying their standards. Some VSSs are shifting from practice-based to performance-based requirements that would oblige farmers to achieve specific sustainability outcomes to become and remain VSS compliant. This shift would allow FSPs to easily report on their investment-related sustainability impacts and comply with disclosure regulations. Furthermore, VSS sustainability impact measurements could be quantified into ESG risk reduction to communicate the economic value of VSS-compliant farming with FSPs.

3. **Ensure full product traceability and transparency:** VSS chain-of-custody standards and product traceability requirements allow product origins and characteristics to be tracked. However, they do not always allow for full product traceability back to the farm or plantation and the full product transparency associated with farming practices and sustainability outcomes. Full VSS-compliant product traceability and transparency can help FSPs meet more stringent non-financial reporting regulations and offer evidence of sustainable practices associated with their agricultural investments. VSSs must leverage technological developments to establish real-time farm monitoring systems that can provide full product traceability.
and transparency. These systems need to be designed to support farming decision making and operational course corrections for sustainable outcomes. The information collected could also be leveraged to assess and forecast farming sustainability risks, which can be communicated to FSPs.

4. **Support business diversification within VSS-compliant operations**: The revenue-generating activities of farming operations should be diversified to improve farmers’ resilience to potentially detrimental unforeseen disturbances, shocks, and stresses, which are becoming increasingly important in the context of climate change. These can include crop and business diversification activities supported by the farm, such as implementing agroforestry systems, agrotourism, and undertaking ecosystem restoration and climate mitigation projects to generate payments for ecosystem services and carbon credits.

5. **Improve farmers’ financial knowledge and decision making**: VSSs need to develop guidance documents, training, and extension services for farmers so they can access financing and avoid exploitation by formal and informal FSPs. Farmers may lack adequate knowledge and capacities to obtain the financing they need to maintain their operations. Providing farmers with knowledge and understanding about how financial institutions function and what they need to access financing can be useful, especially for farmers who may need bridge financing to get from one harvest season to the next. Farmers also need to be better equipped to identify unfair and predatory lending practices that can trap them into spiralling debt. VSSs’ training on access to finance can be extended to give farmers a better understanding of insurance products (i.e., crop insurance, credit insurance), which could help them deal with unexpected events.

### What Can FSPs Do to Invest in Sustainable Agriculture Leveraging VSSs?

1. **Train investment teams on sustainability risks**: FSPs can leverage VSS sustainability compliance and impact information to educate and train investment officers on the environmental and social risks associated with agricultural investments. Translating the risk-reduction benefits of more sustainable farming practices—such as biodiversity, water, soil, and forest conservation—into financial terms could help to convey the importance of sustainability considerations to reduce financial risks. Furthermore, FSPs can use data from VSSs to inform risk-mitigation strategies and thus support investment decision making and its incorporation into return-on-investment considerations.

2. **Leverage VSSs to make investment decisions**: VSSs can help FSPs make investment decisions and conduct investment due diligence by assessing the sustainable development performance of potential investees or farming operations using VSS production criteria that require farmers to adopt more sustainable farming practices. VSS-compliant farming operations can provide FSPs with lower-risk investments. Pre-selecting and selecting VSS-compliant investees can reduce
investment risks as they work to achieve Sustainable Development Goals (i.e., biodiversity conservation, climate mitigation, and living wages), which can be aligned with FSP investment objectives and are regularly monitored for VSS compliance. VSSs can also provide some certainty that an investee incorporates more sustainable business and farming practices in agribusiness operations to mitigate potential investment risks (i.e., they can avoid issues such as agrochemical use, deforestation, and forced labour).

3. **Develop preferential investment and loan programs:** FSPs can work with VSSs to develop preferential investment and loan programs for farmers who adopt more sustainable cultivation practices, which lower the external costs of agriculture. This will give farmers and cooperatives additional incentives to become VSS compliant and accelerate the transition to more sustainable forms of agriculture (i.e., net-zero, “nature positive,” regenerative agriculture, agroforestry) and other regenerative, nature-based solutions. These preferential investment and loan programs could also be tailored to farmers with different resources and capacities who are looking to adopt standard-compliant practices. This could include flexible loan requirements, payment schemes, below-market interest rates, capacity-building activities, and grace periods. Public FSPs are best positioned to develop these programs and support private FSPs to implement them through incentives or subsidized interest rates.

4. **Establish VSS-focused investment products:** VSSs can give FSPs information on VSS-compliant farmer needs, crop production, and commercial cycles to support the development of effective investment products. FSPs should work with standards to develop investment products for VSS-compliant operations, such as certification bonds. For instance, investors can issue a Fairtrade bond to raise capital that would then be invested in a pool of Fairtrade-certified agribusinesses. Certification bonds can be sector- and theme-focused (i.e., agricultural certification bonds or forestry certification bonds, VSS compliant deforestation-free agribusinesses, or women-led agribusinesses). FSPs can also work with VSSs to identify VSS-compliant agribusinesses in different commodity sectors and geographies to establish diverse portfolios of potential investees and investment products. In addition, standards can be used as catalysts to establish blended finance partnerships to address difficult sustainability issues and make more risky investments in farmers with fewer resources and capacities. FSPs could also develop tailored financial support programs for farmers aspiring to become VSS compliant; this could expand their customer base with lower investment risks. These programs must allow farmers to recover their investment to become VSS compliant.

5. **Leverage VSSs to achieve sustainable development objectives:** FSPs can leverage VSSs to address social and environmental challenges. Investments in VSS-compliant agricultural operations can help FSPs attract capital from shareholders who want their investments to address specific environmental or social goals, such as climate change mitigation, biodiversity conservation, or labour rights protection. For instance, VSS-compliant farming operations can support climate-related investments that have GHG emissions reduction and climate adaptation objectives. Development impact investors can support the expansion of VSSs in areas that can benefit most
from their implementation, such as least developed countries, which represent
greater opportunities for them to have sustainability impacts. Furthermore, some
VSS-compliant agricultural producers prefer to receive financial support from FSPs
with similar values focused on making sustainable investments. Lastly, information
gathered on VSS-compliant agricultural operations can support FSPs in reporting the
sustainability impacts of their investments and disclosing non-financial information,
such as climate mitigation and biodiversity conservation.

What Can Governments Do to Leverage VSSs and Support
Investments in Sustainable Agriculture?

1. **Help farmers secure property rights:** Establishing clear land tenure systems,
especially for women, can encourage farmers to adopt more sustainable agricultural
practices and maintain the agricultural productivity and ecological resilience of their
own lands. Land tenure is essential to accessing financing and attracting investments.
Governments in producing countries can set up programs to support the registration
of land titles and the issuance of land certificates to landholders, including women
(Agada et al., 2021; Brown & Hughes, 2017).

2. **Promote the establishment of farming organizations:** Governments in
producing countries can help farmers organize into formal groups or associations.
They can also support farmers’ transitions to VSS-compliant production by offering
extension services aligned with VSS and FSP requirements, reaching last-mile
farmers by leveraging VSS networks.

3. **Create favourable investment conditions in VSS-compliant production:**
Governments can attract investments in agriculture by improving the infrastructure
that supports farm production, such as roads, irrigation, and communication networks,
as well as storage facilities. They can also attract capital by supporting farmers with
commercial readiness and value-addition programs (i.e., agro-processing). To support
the adoption of VSS-compliant agriculture, governments can offer incentives to
transition to VSS-compliant production. These incentives can include payment for
ecosystem services (i.e., flood retention, water treatment, and carbon sequestration
and storage), extension services for VSS-compliant farmers, subsidizing part of the
compliance costs, and incentivizing sustainable consumption.

4. **Promote business relationships to catalyze investments:** Platforms can be
established to enable joint contracts among VSS-compliant farmers, investors, and
buyers. The platforms can also be used to connect private and public investors,
philanthropists, extension service providers, and first-loss investors to support blended
finance vehicles to invest in helping higher-risk farmers transition toward more
sustainable agricultural production systems.

5. **Provide guarantees and insurance programs for VSS-compliant farmers:**
Governments can offer guarantees to VSS-compliant farmer groups to cover part of
the default risk of a loan and provide weather-based insurance to protect farmers
against changing weather patterns, including temperature and rainfall that can affect
their productivity. These measures may encourage investment in VSS-compliant farmers as they can lower FSPs’ operational risks.

6. **Support and encourage FSPs to increase lending to VSS-compliant farmers:** Central banks can provide incentives to FSPs that offer financing to VSS-compliant firms. These could include tax incentives or favourable regulatory requirements (such as lower collateral or compensatory capital reserve requirements) in lieu of extending credit to VSS-led businesses. Central banks could also provide concessionary loans to FSPs for on-lending to VSS-compliant businesses.

As sustainability risks become more serious, widespread, and urgent due to global challenges such as climate change, deforestation, biodiversity loss, and human rights infractions, VSSs have a key role to play in ensuring that farming operations protect and regenerate natural environments and support worker's rights and communities' well-being. The agricultural sector offers many solutions to reduce the effects of and adapt to climate change, reverse environmental degradation, and ensure prosperity for all. VSS production criteria cover these aspects to some degree, and standards offer promising avenues to increase investment in sustainable agriculture in developing countries. But there is room—and opportunity—for improvement.
References


Appendix A. Voluntary sustainability standard (VSS) documents, crop and producer focus, and weighting approach for assessing production criteria against sustainable finance frameworks

<table>
<thead>
<tr>
<th>VSS document</th>
<th>Crop and producer focus</th>
<th>Production criteria implementation stringency and weighting approach</th>
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</thead>
<tbody>
<tr>
<td>Common Code for the Coffee Community (4C): 4C Code of Conduct V4.0 – 2020</td>
<td>Coffee: Managing entities, business partner producers, business partner service providers, intermediary and final buyers, smallholders</td>
<td>Immediate (100%)</td>
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<tr>
<td></td>
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<td>Level 1</td>
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<td>Bonsucro: Bonsucro Production Standard V4.2 – 2016</td>
<td>Sugarcane: Sugar mills</td>
<td>Core &amp; 80% indicators to be met</td>
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<tr>
<td>Cotton made in Africa: Cotton made in Africa Criteria Matrix Volume 4 – 2020</td>
<td>Cotton: Smallholders</td>
<td>Exclusion criteria</td>
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</table>
### Production criteria implementation stringency and weighting approach

<table>
<thead>
<tr>
<th>VSS document</th>
<th>Crop and producer focus</th>
<th>Immediate (100%)</th>
<th>Within 1 year (80%)</th>
<th>1–3 years (60%)</th>
<th>In more than 3 years (40%)</th>
<th>Recommended (20%)</th>
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<tbody>
<tr>
<td>Fairtrade International:</td>
<td>All crops: Smallholder cooperatives, hired workers</td>
<td>Core 0</td>
<td>Core 1</td>
<td>Core 3 Dev 3</td>
<td>Dev 6</td>
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<tr>
<td>• Fairtrade Standard for Small-scale Producer Organizations V2.2 – 2019</td>
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<td>• Fairtrade Standard for Hired Labour V1.5 – 2014</td>
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<td>GLOBALG.A.P.: IFA V5.2</td>
<td>All crops: All farms</td>
<td>Major-must Minor-must</td>
<td>Traffic Light Assessment</td>
<td>GRASP-Module Requirements</td>
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<td>July 17- Crops Base Module 150727, GRASP-Module V3.1 – 2019a</td>
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<td>Organic Standard: IFOAM-Organics International, October 2019 (Edited version of the IFOAM Norms 2014)</td>
<td>All crops: All farms</td>
<td>Requirements</td>
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<td>The ProTerra Foundation: ProTerra Standard V4.0 – 2018</td>
<td>Non-GM soybeans: All farms</td>
<td>Core</td>
<td>Other</td>
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<tr>
<td>VSS document</td>
<td>Crop and producer focus</td>
<td>Production criteria implementation stringency and weighting approach</td>
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<td>Rainforest Alliance: Rainforest Alliance Sustainable Agriculture Standard: Farm Requirements V1.0 – 2020</td>
<td>Tree crops, fruits, nuts and cut flowers: Group and individual certification for small and large farms</td>
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<td>1–3 years (60%)</td>
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<td>Core</td>
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<td>Mandatory improvement-level 2</td>
<td>Self-selected improvement requirements</td>
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<td>Roundtable on Sustainable Palm Oil: Principles and Criteria for the Production of Sustainable Palm Oil – 2018</td>
<td>Palm oil: Oil palm plantations</td>
<td>Critical</td>
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<td>The Roundtable on Responsible Soy Association - Standard for Responsible Soy Production V3.1 – 2017</td>
<td>GM and non-GM soybeans: All farms</td>
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<td>Short-term</td>
<td>Mid-term</td>
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Appendix B. VSS Production Criteria Enhancements for Financial Service Providers

Examining the VSS criteria coverage and FSP perceptions of the sustainability subthemes examined in this report revealed that VSSs should strategically improve their criteria coverage to match FSP information requirements, particularly related to transparency, anti-bribery and corruption, economic viability, and climate mitigation and adaptation. Based on the analysis undertaken in this report and an FSP consultation, VSS criteria that could be incorporated to considerably strengthen the investment profiles of their participating farmers include the following (Nugnes & Larrea, 2020):

**Economic Governance Subthemes**

- Transparency:
  - Disclosure of environmental and social risk management reports
- Corruption and anti-bribery
  - Anti-bribery and corruption policy that clearly articulates the types of corrupt conduct it means to prohibit and the procedures the business defines to prevent bribery (i.e., facilitation payments, secure business)

**Business Management Subthemes**

- Economic viability:
  - Productivity records for the last 2–3 years and productivity projections
  - Information on cost structures and selling price records
  - Projected sales revenues of farming activities and net income
  - Economic and financial risk management plans
- Supply chain practices
  - Records of existing buyers, identity, length, and type of relationship
  - Records of sales contracts
- Record keeping
  - Records and archives of financial transactions the farm has conducted with supporting documentation

**Climate Change Subthemes**

- Climate mitigation
  - Monitor greenhouse gas emissions
  - Monitor and measure carbon stocks at the farm/plantation
- Climate adaptation
  - Climate change projections affecting the farm/plantation, risk assessment, and management plans
  - Assessment reports of climate vulnerability and adaptation capacities at the farm/plantation
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