The CGIAR Research Program on Forests, Trees and Agroforestry’s (FTA) work on sustainable value chains and investments to support forest conservation and equitable development is one of its five research themes. This work facilitates innovations in public policy, business models, private investments and finance to stimulate the sustainable supply of timber from natural and planted forests, enhance the sustainable production of high-value tree crops and reduce the impacts of agricultural expansion in forests.
Sustainable value chains and investments for forests, trees and agroforestry

Commercial agriculture is driving significant deforestation, mainly associated with the expansion of oil palm, soybean and beef supplies for national and international markets. Unsustainable logging in natural forests contributes to forest degradation and often logged-over forest is replaced with agricultural cash crops or tree plantations.

Commercial pressures on land have accelerated due to a growing global demand for food, feed and fiber. Several public and private policy responses have emerged to deal with these challenges. Commodity-specific voluntary standards systems have been developed to promote more sustainable production, and major corporate groups are also adopting ‘zero deforestation’ commitments. Some governments in consumer countries, notably the United States and in the European Union (EU), have introduced regulations to limit imports of timber and biofuels that do not comply with legal and sustainability standards, while financial service providers are integrating environmental, social and governance (ESG) criteria.

These public and private policy responses bring significant opportunities for moving toward sustainable supply, but also risk excluding smallholders that are not able to upgrade their production systems. Innovative approaches are required to improve business and finance models to support sustainable and inclusive options with potential for scaling up and out toward more sustainable supply with greater social inclusion.

In this way, FTA contributes to supporting sustainable and inclusive development while helping to achieve wider objectives of low-emissions development and climate change mitigation and adaptation.
The role of FTA in sustainable value chains and investments

FTA addresses key challenges associated with the need to reduce deforestation, forest degradation and conversion of species-rich agricultural and forest landscapes, while meeting a growing global demand for food, feed and fiber that originates from sustainable sources and integrates smallholders.

This entails improved public and private arrangements to enhance the governance of global value chains and their adherence to sustainability standards in order to reduce negative environmental impacts. This involves supporting more intensive, climate-smart and integrated management and production systems, with a greater participation of smallholders and small and medium enterprises (SMEs) in the value chains, while also emphasizing women, youth and other marginalized groups.

Focus of work and key questions

FTA’s work on sustainable value chains and investments is organized around the following three areas:

• **Public and private institutional arrangements** that create an enabling environment for enhancing the sustainability of commodity supply;
• **Business models that integrate smallholders** to deliver positive impacts across social, economic and environmental dimensions;
• **Responsible finance initiatives** to enable appropriate business models to scale up and encourage corporate and smallholder uptake of improved sustainability practices.

These areas are associated with the following overarching questions:

• What are the public, private or hybrid institutional arrangements that have the most potential for enhancing the adoption of sustainability practices and social inclusivity in the value chain?
• What conditions and support are needed to build business models involving smallholders and SMEs that are economically viable, socially inclusive and environmentally sustainable?
• What mechanisms could promote more widespread adoption of responsible finance among financial service providers that improve not only sustainability but also stimulate conditions that support smallholders’ access to finance for forest and agroforestry-based systems?
Enabling sustainable commodity supply chains

Emerging voluntary sustainability standards (e.g. certification and commodity round tables) as well as private self-regulatory commitments (e.g. zero deforestation) aimed at enhancing the social and environmental performance of commodity production are being increasingly adopted to support sustainable supply in order to reduce negative social and environmental outcomes of commodity production.

These initiatives differ in their approaches, scope and targets, conflicting in some cases and complementing government-backed efforts in others, with smallholders and SMEs often being excluded as they lack the capacity to comply. This calls for exploring antagonisms and synergies between different types of regulatory instruments and private initiatives, as well as for identifying approaches with potential for scaling up, such as territorial or jurisdictional approaches, to facilitate a wider uptake of improved production and protection practices at the landscape level.

Current and planned key research activities on enabling sustainable commodity supply chains are:

- Assessing the implications of certification systems with emphasis on the performance of auditing procedures, such as the case of the Forest Stewardship Council (FSC);
- Examining the emerging public and private institutional arrangements in the governance of palm oil supply associated with the implementation of international and national standards;
- Analyzing the potential of private commitments to sustainability, including zero deforestation, and their social risks on smallholder integration in supply chains;
- Identifying governance options for reducing deforestation by learning from the Forest Law Enforcement, Governance and Trade (FLEGT) process implemented by the EU, aimed at tackling illegal logging;
- Assessing options for transitioning to more sustainable landscapes, including territorial approaches linking both supply chain and landscape management interventions.

Business models in timber and tree-crop value chains

There is a growing consensus that the transformative potential of markets needs to be better leveraged to achieve development goals. The assumption is that business models which productively integrate smallholders and SMEs offer win-win opportunities by increasing buyer access to raw materials while improving smallholder and SME access to profitable (global) markets and services that facilitate the uptake of more intensive and environmentally sustainable production practices.

However, understanding is lacking on the conditions under which such business models can effectively overcome existing bottlenecks and deliver positive, long-term impacts at scale. FTA’s work provides knowledge on opportunities to overcome such bottlenecks by enabling value chain support organizations, public and private, to improve and better link their service delivery in support of more inclusive, gender-responsive, equitable and sustainable business models. FTA emphasizes business models related to forest and agroforestry systems and products.
Current and planned key research activities on business models are:

- Learning from past and ongoing projects of development organizations (e.g., the Netherlands Development Organisation, SNV) on the most effective models for developing smallholder-inclusive business models;
- Identifying options for scaling sustainable production of tree-crops (e.g., cocoa in Ghana, coffee in Central America), while leveraging the potential of certification systems;
- Developing guidelines for overcoming institutional and operational barriers and obstacles faced by businesses in integrating smallholders into their operations and value chains;
- Developing best practice guidelines, tools and metrics for the design, implementation and assessment of business models that are more socially inclusive, economically viable, environmentally sustainable and can potentially produce greater impact at scale;
- Developing guidelines for organizations providing technical, business and financial services to value chains for strengthening the capacity of smallholders and SMEs to engage with businesses.

Scaling through responsible finance and investments

Finance service providers (FSPs), such as private banks, development finance institutions and institutional investors, could potentially play an important role in augmenting corporate social and environmental performance in forest and tree-crop value chains through the adoption of ESG criteria. However, more responsible FSPs do not necessarily lead to increased finance for smallholders.

One challenge is to identify mechanisms that both promote more widespread adoption of ESG among a greater number of FSPs and increase their capacity to effectively leverage their potential influence over corporate strategy and practice. Another challenge is to find more effective ways to link progress in responsible finance by FSPs with improvements in smallholder and SME access to finance for forest and agroforestry-related investments, which could also make a positive contribution to improved land use and enabling restoration in forest landscapes. FTA’s work will examine ways to address these two challenges.

Current and planned key research activities on responsible finance are:

- Analyzing the conditions and mechanisms that incentivize FSPs to more explicitly integrate ESG or similar criteria into their products in different institutional and economic contexts;
- Assessing the impacts of ESG-conditional finance on the social and environmental performance of different types of corporate value chain actors across disparate socioecological contexts;
- Identifying metrics and tools that enable FSPs to better screen prospective corporate clients and evaluate the social and environmental performance of their financial portfolios;
- Analyzing innovative financial mechanisms implemented by FSPs to make financial goods and services more accessible to smallholders and SMEs in timber and tree-crop value chains.
How does FTA work on sustainable value chains and investments?

FTA’s work on value chains and investments embraces ambitious targets based on the assumption that much of the desired change needed to achieve them will be driven by new knowledge, as well as improved alignment between public and private actors’ views and interests.

However, FTA does not ignore the existence of strong, entrenched interests and incentives supporting non-inclusive and unsustainable business practices in commodity chains that have to be reversed. FTA expects to achieve its outcomes through three mutually reinforcing pathways.

Informing political decision-makers and policy dialogues on improved policy options. FTA engages governments and intergovernmental platforms to enable more informed policy decision-making processes. At the national level, FTA supports decision-making processes that build on well-established relationships with key government actors in the countries where the program works.

Engaging multistakeholder processes to improve implementation of standards. FTA has actively contributed to global certification standards, mainly on timber and palm oil, and supports more integrated sustainability frameworks and standards. At the national level, FTA engages with multistakeholder initiatives on oil palm, cocoa and beef. FTA’s analysis on the governance approaches and instruments for enhancing sustainable supply chains and inclusive business models informs the actions of businesses and business platforms, and national and international NGOs.

Supporting private sector initiatives and commitments to sustainability. FTA contributes to private actors’ sustainability efforts by monitoring and evaluating progress and by informing practices that enable these actors to deliver on their commitments. In addition, FTA discusses progress, challenges and opportunities through global platforms, such as the Global Landscapes Forum. FTA also engages with global financial initiatives for responsible finance, as well as finance platforms for enhancing practices in the countries where the program works.
FTA engages with a select number of research partners for coproduction of knowledge, policy engagement and capacity building. Development or knowledge-sharing partners with complementary capacities are engaged to undertake work on research, field implementation, outreach, engagement and capacity building. Other linkages enable policy and outscaling.

- **Advanced research centers** e.g. the Stockholm Environment Institute (SEI), International Institute for Applied Systems Analysis (IIASA) and Copernicus Institute
- **Developing country research partners** e.g. research institutes as well as national NGOs, and universities including Bogor Agricultural University (IPB) and the University of Sao Paulo (USP)
- **Universities in developed countries** e.g. Wageningen University (WUR), Utrecht University (UU) Bonn University and ETH Zurich
- **Development organizations** e.g. SNV and the Swiss Agency for Development and Cooperation (SDC)/R4D
- **Multilateral organizations** e.g. the United Nations Environment Programme - Finance Initiative (UNEP- FI), the World Bank (WB) and the Food and Agriculture Organization of the United Nations (FAO)
- **Business networks** e.g. the Finance Alliance for Sustainable Trade (FAST) and Global Impact Investing Network (GIIN)
- **Certification initiatives** e.g. the Sustainable Agriculture Network (SAN), Forest Stewardship Council (FSC), Roundtable of Sustainable Palm Oil (RSPO) and the association of sustainability standards (ISEAL Alliance)
- **Regulators** e.g. ministries and state agencies across sectors including forestry, environment, economy, finance, and trade and investment
- **Environmental organizations** e.g. The Nature Conservancy (TNC) and World Wide Fund for Nature (WWF)
- **Business platforms and networks** e.g. Tropical Forest Alliance (TFA 2020)

This work on value chains and investments is integrated with other research areas within FTA, specifically with tree genetic resources by exploring opportunities from improved tree-planting material in certain value chains; livelihood systems through assessing the performance of smallholder production systems that embrace high-value trees (e.g. cocoa, coconut, rubber, coffee, oil palm) under different business models; landscapes by exploring the impacts of value chains in environmental services in the landscapes and initiatives to deal with them, such as certification; and climate change by providing analysis of the effectiveness of governance arrangements in supporting the transition to more sustainable supply chains and thus reducing GHG emissions.

In addition, FTA’s work on value chains and investments links with other CGIAR Research Programs that work on value chains and sustainable supply, especially the CGIAR Research Program on Policies, Institutions, and Markets (PIM) and the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).
The CGIAR Research Program on Forests, Trees and Agroforestry (FTA) is the world’s largest research for development program to enhance the role of forests, trees and agroforestry in sustainable development and food security and to address climate change. CIFOR leads FTA in partnership with Bioversity International, CATIE, CIRAD, ICRAF, INBAR and TBI.

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