



Report

Land- and forest-based investments in Lao PDR: Practices and perspectives

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Introduction

The economy of Lao People's Democratic Republic (PDR) grew at an average rate of around 7 percent between 2000 and 2019 (World Bank, 2022a), mainly due to its capital-intensive resource sectors, such as mining, hydropower and infrastructure investment. This growth was largely driven by foreign direct investment, which made up 94 percent of the some USD 3 billion of approved investments between 2010 and 2021. Agricultural exports also have been growing. Between 2018 and 2021, their value grew by an average of about 23 percent per year, to around USD 982 million, which is more than one fifth of Lao PDR's total exports.

In 2021, however, and due to the COVID-19 pandemic, the country's economy grew by only 3.5 percent, with the agriculture sector growing by only 2.5 percent, accounting for 16 percent of the country's gross domestic product. Despite the pandemic challenges, the agriculture sector has been resilient, thanks to strong export demand for key products, such as cassava, banana, rubber and coffee (annex 1 provides more contextual detail of Lao PDR's agriculture sector and commodities).

The pandemic has had significant impact on land- and forest-based investments, with travel restrictions and supply chain disruptions hindering the ability of investors to carry out due diligence and implement new projects. The pandemic also highlighted the importance of promoting more sustainable investments that support local communities and encourage their resilience in the face of global challenges.

In recent years, government policies, market forces, growing awareness of the environmental and social impacts of investments and changing investor preferences have driven an evolution of the land- and forest-based investments in Lao PDR. This change has been characterized by increasing emphasis on sustainability, renewable energy and responsible practices, with investors seeking to minimize the negative impacts and promote positive outcomes, such as biodiversity conservation and community development. Large-scale investors in particular face mounting scrutiny, with concerns being raised about the potential negative impacts and investors increasingly being held accountable for their actions.

Within this context, the Transformative Land Investment Project is helping land- and forest-based investments become more economically, socially and environmentally beneficial by integrating inclusive development, sustainable food systems and agroecology principles into their practices, policies and business models. The project is funded by the Swiss Agency for Development and Cooperation and implemented in Lao PDR by RECOFTC and Land Equity International, in collaboration with government agencies, civil society organizations and the private sector.¹

This report presents the findings of a survey undertaken to help focus the Transformative Land Investment Project's services on pressing issues and opportunities. The survey assessed a large cross-section of land- and forest-based investments in Lao PDR. The aim was to ascertain how and why investors are improving—or would like to improve—their

investments, what challenges they encounter and what support and incentives they would need to promote more socially inclusive, environment-friendly and economically profitable practices, in alignment with the ASEAN Guidelines on Responsible Investments in Food, Agriculture and Forestry.

The survey's findings will serve as a baseline for assessing changes in investment models and practices and will be used to develop actionable recommendations for promoting more socially, environmentally and economically sustainable land- and forest-based investments in Lao PDR.

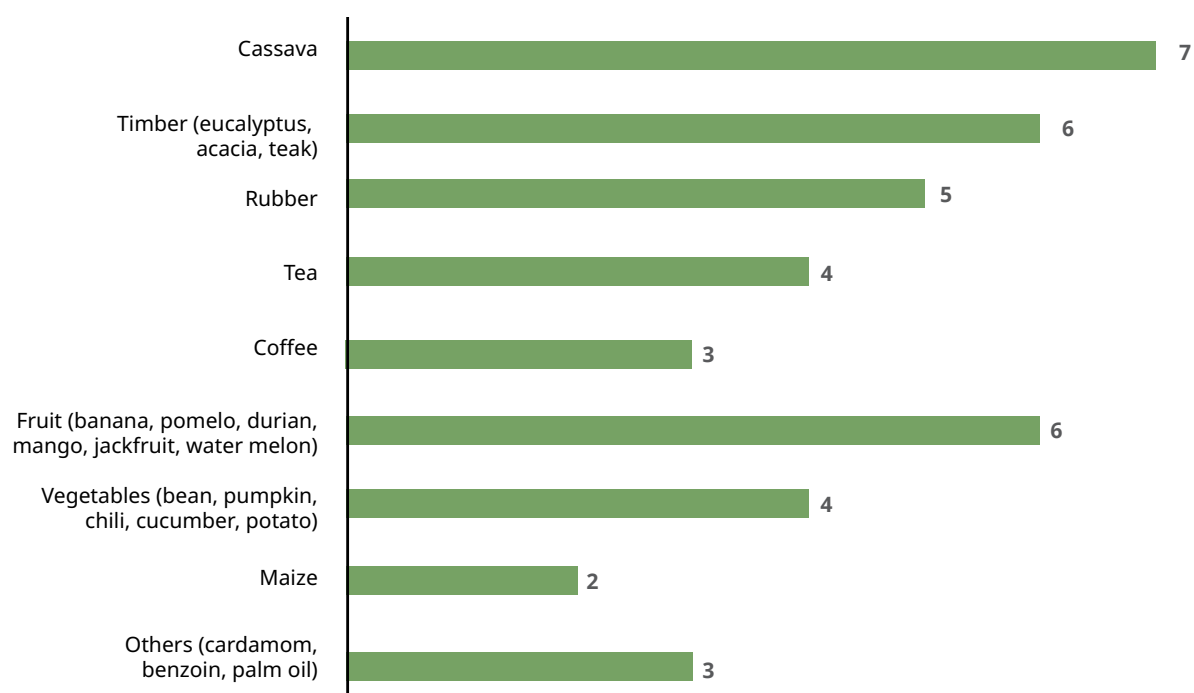
Methodology

RECOFTC and Land Equity International identified 37 agriculture and forest investors that are representative of the national context in terms of the diversity of their business models, commodities produced, end markets, geographies of operation and business origins (see table 1 and figure 1).

Table 1. Overview of the diversity of investors assessed in this study

		Number of investors
Origin of investment	Domestic	18
	Foreign	15*
	Hybrid	4
Business model	Own cultivation	11
	Outgrowers	9
	Hybrid	17
Processing	None	12
	Primary	10
	Primary and secondary	15
Duration of operation in Lao PDR	Fewer than 5 years	9
	5–10 years	10
	More than 10 years	18
Number of employees	Fewer than 500	29
	More than 500	8

Note: * = Foreign investments are mainly from China (10x), Viet Nam (3x), Thailand (3x), Malaysia (1x) and Sweden (1x).

Figure 1. Variety of crops produced by the 37 companies the study assessed

Note: The total number across all crops exceeds 37 because some companies invest in multiple sectors.

Between September and November 2022, staff from RECOFTC and Land Equity International and a consultant hired by Land Equity interviewed representatives of each investor individually, using a standard needs-assessment form from the Transformative Land Investment Project.

The first set of questions covers an investor's characteristics. This includes name, legal form, entity type, number of employees, significant shareholders and location of headquarters. It also covers each investor's years of operation in Lao PDR, the value chain engaged in, end markets and any external standards and guidelines the investor has adopted.

The second part of the form focuses on practices that investors have adopted, or envision adopting, in four areas:

- Good governance, such as building up the capacities of local government or traditional leadership and strengthening local land rights in the community.
- Environmental stewardship, such as conserving natural resources, promoting or adopting climate-smart production practices or conservation agriculture, reducing waste, using circular production, reducing chemical inputs and preventing the conversion of forests.
- Local development, such as supporting the formation of cooperatives or collective farmers' organizations, building up the capacity of smallholders, women or youth and supporting livelihood diversification.
- Benefits to the wider society, such as shortening supply chains, producing high-quality nutritious foods and prioritizing local and national markets.

The third part of the form focuses on constraints, support required and incentives for investors to improve their practices.

Clusters of investors

The diversity of the 37 investors included in the survey enabled RECOFTC and Land Equity International to group the investors into five relatively homogenous clusters based on their size, duration of operation in Lao PDR and production system. The criteria were defined as follows:

Company size

- Small: fewer than 500 employees (permanent and seasonal)
- Large: more than 500 employees

Duration of operation in Lao PDR

- New: less than five years
- Established: five or more years

Production system

- Perennial: timber, rubber, coffee, tea, fruit trees, banana, benzoin and palm oil
- Annual: beans, pumpkin, cucumber, potato, watermelon

The following analysis considers both the overall situation among all investors as well as the adoption of different practices by each of the five clusters. Table 2 provides an overview of the characteristics of the five clusters. Table 3 lists the companies in each cluster. Figure 2 shows where the operations of investors in these clusters are located in Lao PDR.

Table 2. Overview of the five clusters of investors

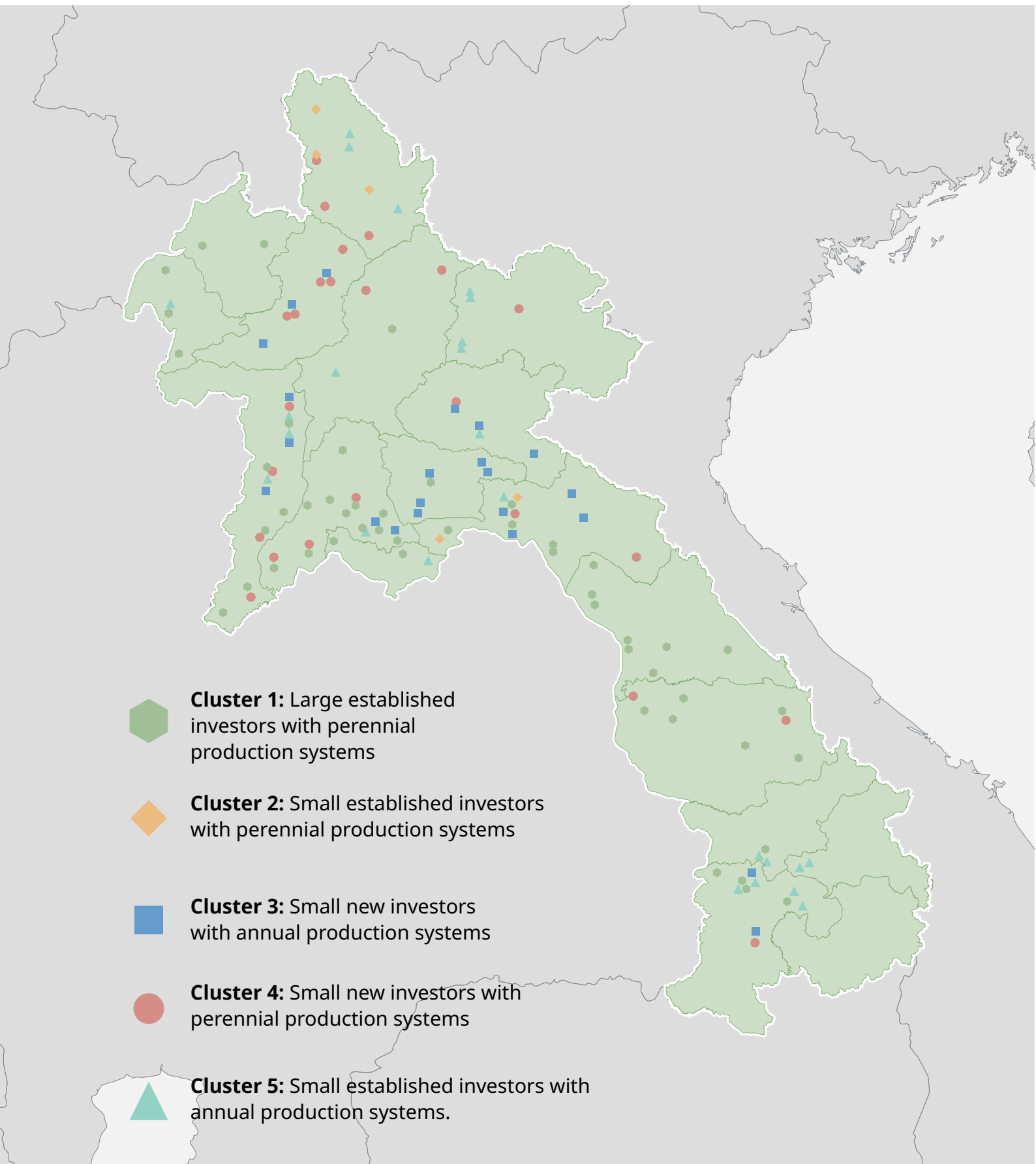
	Investor size		Duration of operation		Production system	
	Small	Large	New	Established	Perennial	Annual
Cluster 1*		X		X	X	
Cluster 2	X			X	X	
Cluster 3	X		X			X
Cluster 4	X		X		X	
Cluster 5	X			X		X

Note: * = Although it was not a criterion used to define this cluster, all eight members are foreign investors.

Table 3. Distribution of 37 land- and forest-based investors among five clusters defined by the investors' size, duration of operation in Lao PDR and production system

Cluster	Description	Investors
Cluster 1	Large established investors with perennial production systems — 8 investors (only foreign investors)	Lao Thai Hua Rubber Co. Ltd Yunnan Rubber Investment Co. Ltd Viet Lao Rubber Co. Ltd Daklak Rubber Co. Ltd Paksong Highland Sole Co. Ltd Burapha Agro-Forestry Co. Ltd Mekong Timber Plantations Co. Ltd Sun Paper Holding Laos, Ltd
Cluster 2	Small established investors with perennial production systems — 12 investors	Green Agriculture Co. Ltd Bolaven Plateau Coffee Producers Cooperative Saffron Coffee Louis Dreyfus Company Bolkiah Pomelo Plantation Co. Ltd Xinyuan Pomelo Plantation Social Development Agroforestry Co. Ltd Somnuek Laothang Tea Factory Thiphavong Tea Processing Co. Ltd Huamjai Co. Ltd (Lao) SNS Charcoal Company Singthoun Wood Processing and Concrete Factory
Cluster 3	Small new investors with annual production systems — 7 investors	China-Lao International Trade Industrial Co. Ltd Ketsana Trading Import-Export Co. Ltd Xin Tianyang Bioengineering Co. Ltd Tao Zhonggan Agriculture Promotion Co. Ltd Shandong Longsheng Import and Export (Group) Co. Ltd Hailin Soybean Plantation Com. Ltd Lao AgroTech Public Co. Ltd
Cluster 4	Small new investors with perennial production systems — 3 investors	Jingfeng Agriculture High-tech Development Co. Ltd Bolikhamxay Farming Co. Ltd Phongsaly Promotion Integrated Agriculture Co. Ltd
Cluster 5	Small established investors with annual production systems — 7 investors	Lao-Thai German Starch Co. Ltd (KPN Tapioca Starch Co. Ltd) Changjiu Cassava Starch Co. Ltd TTL Lao Cassava Starch Factory Co. Ltd Paklai Cassava Starch Factory Xinda Agriculture Promotion Co. Ltd Kietthisack Agriculture Development Import-Export Co. Ltd Mavongsa Agriculture Promotion Co. Ltd

Figure 2. Location of operations of the 37 investors assessed for this study



Note: Colour indicates the cluster to which each investor belongs.

Findings: Investor practices

Practices contributing to good governance

Figure 3 shows the proportions of investors in each cluster that are adopting practices, in each of six categories, that contribute to good governance. Table 4 highlights practices in each of these categories.

Overall, most investors (75 percent) are promoting sustainability, production quality and good health and safety practices by training farmers on standards, such as the International Organization for Standardization (ISO) standards, Forest Stewardship Council standards, good agricultural practices, good manufacturing practices and sanitary performance standards.

Fewer than half of the investors (43 percent) said they respect the rule of law by following instructions, rules and regulations and by avoiding corruption. Some investors said they find it difficult to respect procedures due to their complexity and cost or because the procedures are unclear and frequently changing. There is also scope for most investors to improve other practices that contribute to good governance. For example, few investors can afford to focus on building up the capacities of local government and traditional leaders through training, study tours and awareness-raising. Investors also make limited efforts to strengthen local land rights and engage in policy dialogue.

Figure 3. Proportion of investors in each cluster that are using practices, in each of six categories, that contribute to good governance

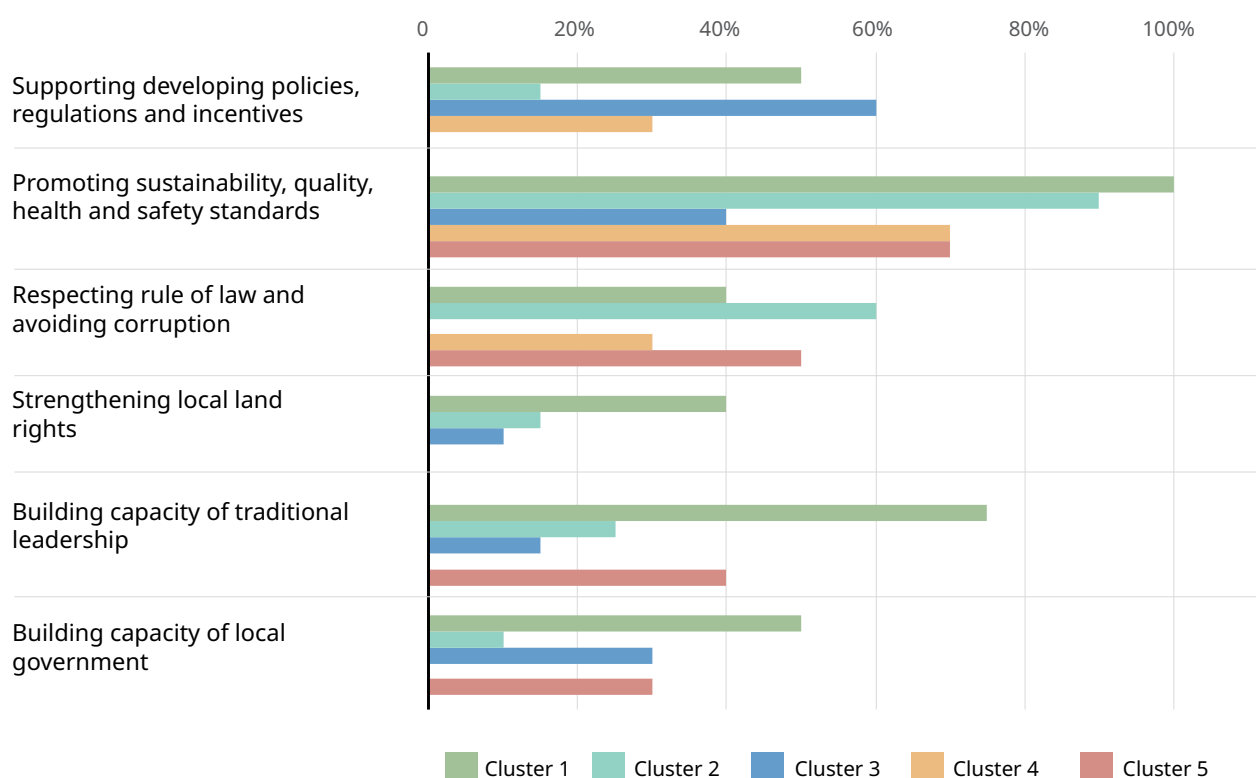


Table 4. Overview of investors' contributions to good governance, with examples of practices adopted in each of six categories

- Green indicates that at least 70 percent of investors in the cluster are adopting practices in a category.
- Yellow indicates that 31–69 percent of investors in the cluster are doing so.
- Blue indicates that only up to 30 percent of investors in the cluster are doing so.

	Cluster 1 Eight large established investors (all foreign). Perennial production.	Cluster 2 Twelve small established investors. Perennial production.	Cluster 3 Seven small new investors. Annual production.	Cluster 4 Three small new investors. Perennial production.	Cluster 5 Seven small established investors. Annual production.
Building up capacity of local government	Study tours; contributing computer equipment; raising awareness of laws relating to community rights and child labour	Study tours; engaging government in companies' processes	Few study tours	Not a priority	Few study tours
Building up capacity of traditional leadership	Annual trainings; study tours on technical production and processing; training on free, prior and informed consent	Capacity-building of producer groups; legal awareness	Not a priority	Not a priority	Not a priority
Strengthening local land rights in the community you operate	Compensating landowners affected by concessions; developing tools and posters for awareness-raising	Enlarging land allocation to producer groups; helping farmers to acquire land certificates	Rare support during land lease	Following the government's process on land acquisition and land lease from villagers	Not a priority
Respecting rule of law and avoiding corruption	Following instructions, rules and regulations	Following procedures and refusing corruption	Not a priority	Following regulations	Following regulations
Promoting sustainability, quality and/or health and safety standards and best practices within your supply chain	Training farmers on production quality and related standards; running contests with awards; adhering to ISO, Forest Stewardship Council or organic standards	Adhering to organic and fair trade standards; good agricultural practices, or sanitary performance standards; avoiding contamination; following CITES requirements; promoting agritourism; improving silviculture	Some apply organic production or comply with sanitary performance standards (for the Chinese market) and good agricultural practices	Setting up demonstration sites; adhering to sanitary performance standards for the Chinese market	Adhering to good manufacturing practices and vietnamese starch processing standards
Supporting government in developing policies, regulations and incentives (for example, on responsible business)	Attending public consultations; China's Eradication of Opium Program (alternative livelihood options to replace opium cultivation)	Occasional consultations	Occasional consultations	Occasional consultations	Occasional consultations

Analysis by cluster

Table 4 shows how the different practices related to governance are distributed among the five clusters of investors and the extent to which investors in each cluster are applying these practices. The colour coding in the table gives an overall picture of how well each cluster of investors is performing. Cluster 1, whose members are all foreign investors, is doing relatively well. All other clusters are quite weak in promoting good governance. The smaller and newer companies may lack the resources or capacities needed to support policy development, capacity-building and other good governance initiatives. The primary focus for all clusters is on the sustainability, quality and/or safety of their products.

Cluster 1: Large established investors with perennial production systems (all foreign)

All the investors in this cluster promote product quality and safety standards, and most of them (75 percent) also build up the capacities of traditional leaders on production techniques. Half of the investors engage in capacity-building of local governments through study tours on production and processing techniques. Half also attend local public consultations.

Only 40 percent of investors indicated that they respect the rule of law by following instructions, rules and regulations and by refusing corruption. The same proportion of investors seek compensation for landowners affected by land concessions and develop awareness-raising tools and posters to strengthen local land rights. These large established foreign investors appear to be experienced, committed and able to devote themselves to promoting good governance with a long-term perspective.

Cluster 2: Small established investors with perennial production systems

Most investors in this cluster (90 percent) promote sustainability, quality and/or health and safety standards and best practices within their supply chains. They do so by adhering to different certification standards, such as fair trade or organic standards, good agricultural practices, sanitary performance standards and the requirements of CITES certification² or by linking to agrotourism. Market requirements, particularly those of the Chinese and Vietnamese markets, often drive compliance with such standards.

Most investors (60 percent) said that they follow the government's rules and regulations and avoid corruption, but only 15 percent engages with the authorities on the development of policies, regulations and incentives. Few of these investors support capacity-building of traditional leaders (25 percent) or local authorities (10 percent). Capacity-building focuses mainly on technical topics to help farmers improve productivity. Similarly, these investors provide little support for communities to access land rights. Only 15 percent of them said they did this and did so by engaging with local authorities to promote the allocation of land to farmers.

Cluster 3: Small new investors with annual production systems

As newly established small companies, these investors have limited capacity to influence local governance. Despite this, a majority of them (60 percent) attend and contribute to local public consultations. Fewer than half of these investors (40 percent) promote quality and safety standards, such as good agriculture practices, sanitary performance standards and organic farming. Fewer than a third of them (30 percent) provide some capacity-

building for local governments through study tours to learn about production and processing techniques. A smaller proportion (15 percent) seeks to build up the capacities of traditional leaders on production techniques. Only 10 percent of the investors contribute to strengthening local land rights. They do so by adhering to the principle of free, prior and informed consent. The investors in this cluster struggle to avoid “under-the-table” fees, and none of them said they can fully respect the rule of law.

Cluster 4: Small new investors with perennial production systems

Most investors in this cluster (70 percent) are keen to promote sustainability, quality and/or health and safety standards and best practices. They do so using technical demonstration sites where government officials and farmers can learn and exchange information and through adherence with the sanitary performance standards for the Chinese market. But few of them (30 percent) consult with the government on the development of policies, regulations and incentives. Only 30 percent said they are respecting the rule of law and avoiding corruption. Understandably, none of these investors can yet afford to pay attention to capacity-building of local government and traditional leadership or to strengthening local land rights in the communities where they operate. The only exceptions to this relate to investors following the land-acquisition and land-lease procedures in combination with an investigation from the relevant government authorities.

Cluster 5: Small established investors with annual production systems

Most investors (70 percent) in this cluster promote product quality, safety or sustainability by complying with good manufacturing practices, good agricultural practices, sanitary performance standards for the Chinese market or CITES certification requirements. One investor also aims to promote sustainability by developing agritourism linked to the production of benzoin resin and handicrafts. About half of the investors indicated that they respect the rule of law by strictly following the Law on Investment Promotion and other provincial regulations and operational requirements. Only a few investors (30 percent) work on building up the capacities of traditional leaders (40 percent) or local authorities. In these efforts, their focus is on regularly meeting with government staff and on increasing awareness of technical issues to be considered to improve production. None of these investors engage in policy development or in strengthening local land rights (the exception being some “garden certificates” for benzoin resin producers).

Practices contributing to environmental stewardship

Figure 4 shows the proportion of investors in each cluster that are adopting practices, in 15 categories, that contribute to environmental stewardship. Table 5 highlights the practices reported by the investors in each of these categories.

Figure 4. Proportion of investors in each cluster that are using practices, in 15 categories, that contribute to environmental stewardship

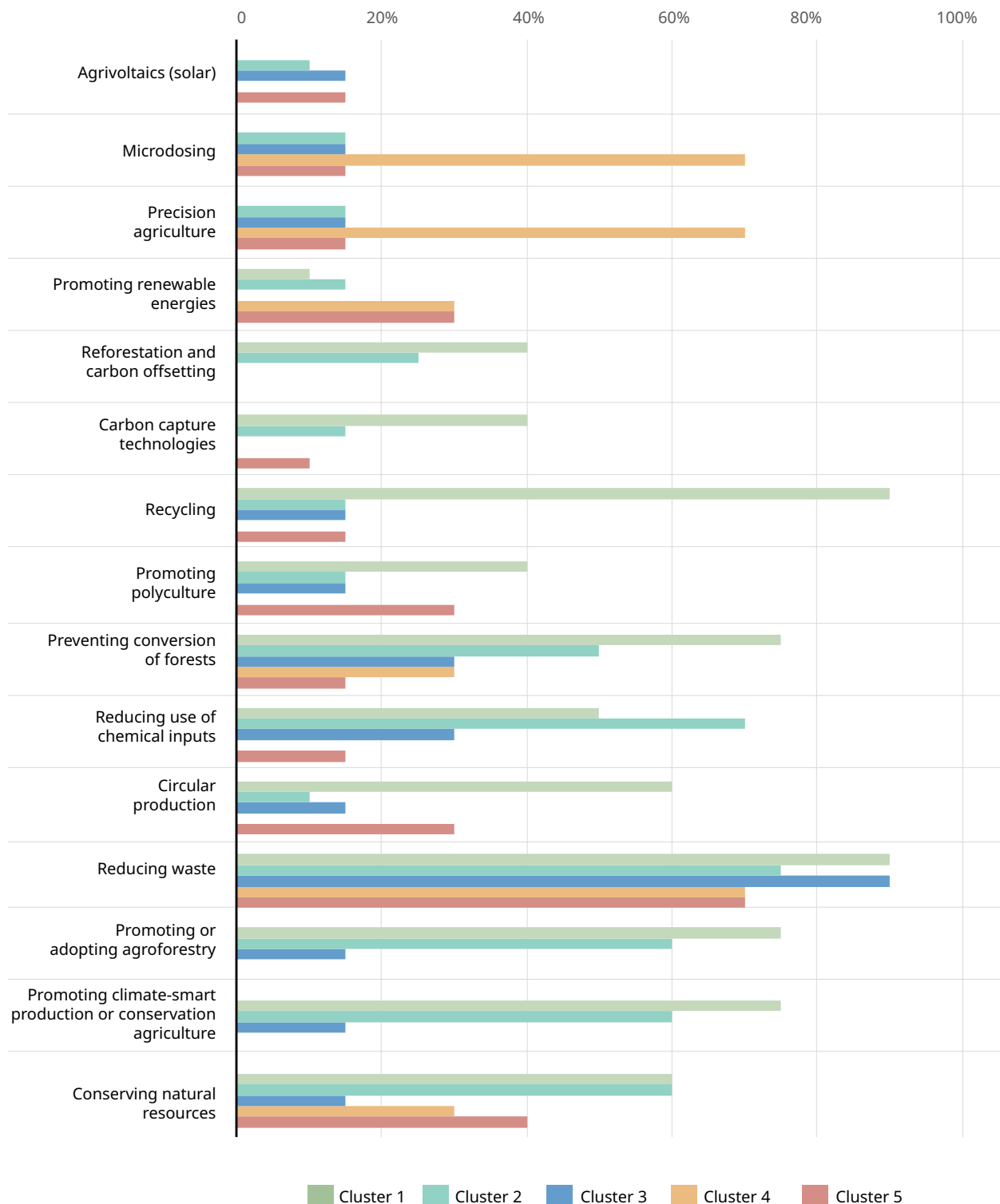


Table 5. Overview of investors' contributions to environmental stewardship, with examples of practices adopted in each of 15 categories

- Green indicates that at least 70 percent of investors in the cluster are adopting practices in a category.
- Yellow indicates that 31–69 percent of investors in the cluster are doing so.
- Blue indicates that only up to 30 percent of investors in the cluster are doing so.

	Cluster 1 Eight large established investors (all foreign). Perennial production.	Cluster 2 Twelve small established investors. Perennial production.	Cluster 3 Seven small new investors. Annual production.	Cluster 4 Three small new investors. Perennial production.	Cluster 5 Seven small established investors. Annual production.
Conserving natural resources	Avoiding cutting big trees; protecting watersheds and river banks; protecting wildlife	Conserving trees and water sources; promoting shade trees; organic and fair trade production	Ecotourism	No deforestation in conservation areas	No deforestation in conservation areas; following requirements for environmental and social impact assessment
Promoting or adopting climate-smart production practices or conservation agriculture	Adhering to the Verified Carbon Standard or ISO standards; protecting big trees and buffer zones of protected forest	Organic and fair trade production; shade trees; promoting internal control system	Not applied	Not applied	Not applied
Promoting or adopting agroforestry	Conserving big trees	Organic and fair trade production; shade trees	Not applied	Not applied	Not applied
Reducing waste	Good management of plastic bags and other waste; production of biogas from waste; wastewater management; using wood residues to grow mushrooms	Waste management; composting; using wood residues for charcoal production	Using cassava chip waste to make compost; feeding soybean waste to cattle	Clear waste management; no use of plastic bags	Producing biogas from cassava starch waste; adhering to waste management standard (Viet Nam)
Practising circular production	Good waste management	Not applied	Not applied	Not applied	Not applied
Reducing use of chemical inputs	Limited use of chemical inputs including herbicide; focusing on organic production	Only using herbicide in the first two years; using organic fertilizers	Using compost or organic fertilizer; compliance with good agriculture practice standards	Not applied	Not applied

	Cluster 1 Eight large established investors (all foreign). Perennial production.	Cluster 2 Twelve small established investors. Perennial production.	Cluster 3 Seven small new investors. Annual production.	Cluster 4 Three small new investors. Perennial production.	Cluster 5 Seven small established investors. Annual production.
Preventing conversion of forests	Conserving big trees; protecting water sources; occasional reforestation	Conserving big trees, and trees near water sources; avoiding deforestation	Growing soybeans in rice fields after rice is harvested	In conservation areas	In conservation areas
Promoting polyculture	Intercropping maize and rice in the first five years	Integrated farming	Diversification with fruit trees	Not applied	Integrated farming
Recycling	Managing and re-using factory wastewater; using wood residues	Using waste water	Not applied	Not applied	Not applied
Use of carbon capture technologies in processing*	Adhering to the Verified Carbon Standard; using alternative fuel (electric)	Avoiding burning wood	Not applied	Not applied	Biogas
Reforestation and carbon offsetting	Adhering to the Verified Carbon Standard	Encouraging tree-planting by farmers	Not applied	Not applied	Not applied
Using or promoting renewable energies	Biogas	Solar panels	Not applied	Not applied	Biogas
Precision agriculture	Not applied	Improved irrigation	Not applied	Using sprinkler	Not applied
Microdosing	Not applied	Not applied	Not applied	Microdosing	Not applied
Agrivoltaics	Not applied	Solar panels	Not applied	Few solar panels	Solar panels

Note: *The responses given indicate that most investors did not properly understand the term “carbon capture technologies” and the potential use of such innovations.

The most common practice, adopted by 75 percent of the investors, is waste reduction. This includes avoiding the use of plastic bags, producing biogas, improving wastewater management and making better use of residues, such as by using waste wood for mushroom cultivation or charcoal production. More than half of the investors (54 percent) are reducing chemical inputs. Almost half (46 percent) conserve natural

resources by not cutting big trees, protecting watersheds and river banks, promoting agroforestry (40 percent), preventing the conversion of forests (43 percent) and protecting wildlife.

Few of the investors (35 percent) have adopted climate-smart production practices, such as adhering to the Verified Carbon Standard and the ISO standards; recycling (27 percent) or promoting polyculture (21 percent), such as by intercropping maize and rice. Few of the investors are using carbon capture technologies in processing (18 percent, although, see the note in table 5), offsetting carbon emissions through reforestation (18 percent), practising circular production (16 percent); promoting renewable energies, such as biogas and solar panels (16 percent), practising precision agriculture (13 percent) or microdosing (11 percent).

Analysis by cluster

Table 5 shows how the different practices related to environmental stewardship are distributed among the five clusters of investors and the extent to which investors in each cluster are using each category of practices. The colour coding in the table gives an overall picture of how well each cluster of investors is performing.

Cluster 1 and cluster 2 are performing relatively well. The other clusters have adopted fewer practices. In most cases, the investors have no guiding sustainability framework, with focus on forests or the environment as part of their business model. Sustainability is mainly driven by product standards set by buyers or government regulations. The main area of focus across all clusters is waste reduction.

Cluster 1: Large established investors with perennial production systems (all foreign)

Almost all the investors in this cluster (90 percent) practise waste reduction and recycling by using waste from wood processing for mushroom cultivation, processing wastewater, producing biogas or recycling plastic. Most of them (75 percent) also invest in climate-smart production through the Verified Carbon Standard, organic compost, protection of big trees, adherence to the ISO standards and growing coffee under shade trees. The same proportion of investors have adopted agroforestry (mainly intercropping with big trees) and avoid the conversion of forests by maintaining old trees.

A smaller portion of these investors are conserving natural resources, for example, by protecting big trees (60 percent), practising circular production (60 percent), reducing use of chemicals (50 percent), promoting polyculture by intercropping (40 percent); reducing use of wood for fuel, as an example of reducing carbon emissions (40 percent) and undertaking reforestation and carbon offsetting by planting trees or adhering to the Verified Carbon Standard (40 percent). Only 10 percent of the investors promote the use of renewable energy, such as biogas. None of them supports precision agriculture, microdosing or combined agriculture and solar power production, most likely because such practices are not applicable to their business model.

Cluster 2: Small established investors with perennial production systems

Most of these investors focus on reducing waste (75 percent) and their use of chemical inputs (70 percent). They mainly do so by adhering to organic, fair trade and internal control system standards, repurposing coffee cherry waste as cherry tea or cherry flour, promoting compost, biochar and ash as fertilizer, recycling water, avoiding use of plastic bags, adding value to small-diameter timber (with finger-jointing technology), using waste wood for drying kilns and charcoal production and restricting herbicide use to the first two years of cultivation.

A smaller majority of these investors (60 percent) conserve natural resources by maintaining large shade trees, planting new trees and protecting water sources. The same proportion cite these practices as examples of agroforestry and climate-smart production. Half of the investors said they prevent the conversion of forests, while a quarter of them said they promote reforestation. Only 15 percent of these investors are practising polyculture (integrated farming system), reducing carbon emissions (prohibiting wood burning), using renewable energy (solar panels) or applying microdosing or precision agriculture.

Cluster 3: Small new investors with annual production systems

Being at the initial stage of their relatively small investments, most (90 percent) of these investors mainly focus on waste reduction and recycling in compliance with Lao-specific good agricultural practices, for example, by using cassava or soybean waste for compost. Some of them (30 percent) have reduced the use of chemicals by using organic compost fertilizer.

Less than 15 percent of the investors are conserving natural resources (by promoting ecotourism); practising climate-smart production (through greenhouse and organic production of vegetable and tree fruit), practising agroforestry and polyculture (intercropping with big trees), using wastewater (according to the standards of the Provincial Office of Natural Resources and Environment) or practising precision agriculture, microdosing or agrivoltaics. So far, none of these investors is considering carbon capture technologies, carbon offsetting or the use of renewable energy.

Cluster 4: Small, new investors with perennial production systems

Most (70 percent) of these investors are reducing waste, using microdosing when applying fertilizer and practising precision agriculture, such as with sprinklers to irrigate watermelons. Fewer companies (30 percent in each case) conserve natural resources (for example, by banning deforestation in the conservation areas for village water sources); prevent the conversion of forests; and promote renewable energies where electricity is not available. And none of these investors is promoting climate-smart production or conservation agriculture, adopting agroforestry, practising circular production, reducing use of chemical inputs, promoting polyculture, undertaking reforestation and carbon offsetting or using agrivoltaics.

Cluster 5: Small established investors with annual production systems

As in other clusters, most (70 percent) of these small investors focus on reducing and

reusing waste, for example, by producing biogas from waste from a cassava starch factory or offering this waste to local pig farmers. In response to market demand, one investor applies Vietnamese waste management standards and carefully disposes of plastic bags and boxes of insecticides. A small proportion of investors considers such measures to be examples of circular production (30 percent), recycling (15 percent) and technologies for reducing or mitigating carbon emissions (15 percent).

Fewer than half (40 percent) of the investors said they promote the conservation of natural resources. They said they did this by following the Ministry of Natural Resources and Environment's requirements for environmental and social impact assessment and by avoiding deforestation in conservation areas. Fewer investors in this cluster (15–30 percent) promote polyculture (integrated farming system), reduce the use of chemicals, prevent deforestation (in the forest conservation areas) or practise precision agriculture, microdosing or agrivoltaics. None of them has ever considered reforestation and carbon-offsetting, climate-smart production or agroforestry (the only exceptions being some benzoin resin cultivation sites).

Practices contributing to local development

Figure 5 shows the portions of investors in each cluster that are adopting practices in ten categories that contribute to local development. Table 6 highlights the practices in each of these categories.

Most of the investors (81 percent) focus on improving the transparency in the supply chain and related pricing. About half of them (51 percent) improve smallholders' access to production inputs, such as seedlings, fertilizer, insecticide and tools.

A similar portion (48 percent) support the capacity-building of smallholders, women and youth, although a few of them focus only on women or youth. Nearly half of the investors (48 percent) also try to address barriers to participation in supply chains by adhering to fair trade standards. A few investors pay quality premiums to their suppliers (40 percent).

Fewer than a third of the investors are adopting traceability systems, improving food security and nutrition through increased incomes or promoting livelihood diversification (30 percent in each case). Even fewer investors are setting up local producer groups (24 percent) or offering preferential treatment to minority groups (13 percent).

Figure 5. Proportion of investors in each cluster using practices in ten categories that contribute to local development

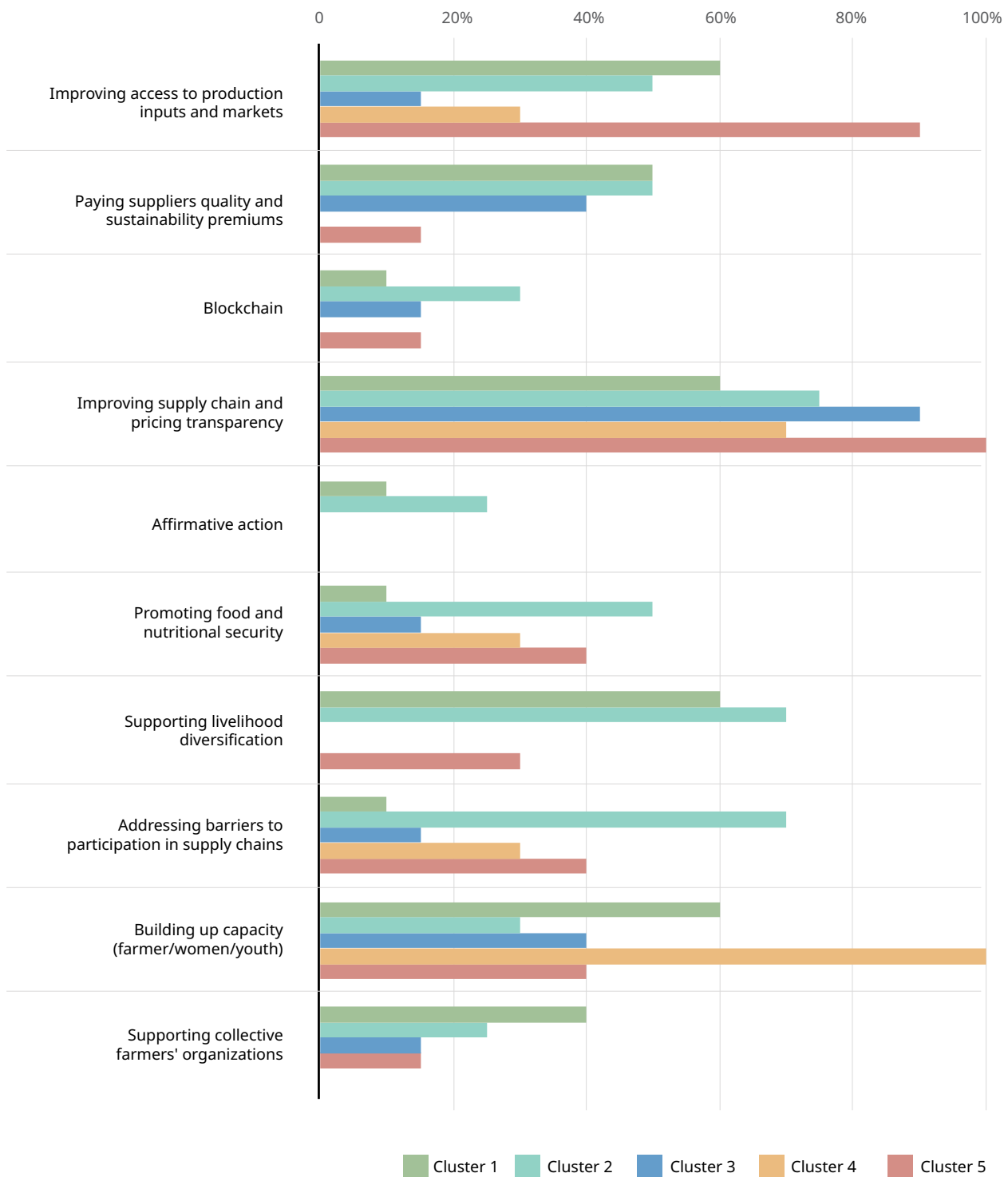


Table 6. Overview of investors' contributions to local development, with examples of practices adopted in each of 15 categories

- Green indicates that 70 percent of investors in the cluster are adopting practices in a category.
- Yellow indicates that 31–69 percent of investors in the cluster are doing so.
- Blue indicates that only up to 30 percent of investors in the cluster are doing so.

	Cluster 1 Eight large established investors (all foreign). Perennial production.	Cluster 2 Twelve small established investors. Perennial production.	Cluster 3 Seven small new investors. Annual production.	Cluster 4 Three small new investors. Perennial production.	Cluster 5 Seven small established investors. Annual production.
Supporting cooperative formation and collective farmers' organizations	Setting up producer and managerial committees	Setting up farmers' groups	Not a priority	Not a priority	Not a priority
Building up the capacity of smallholders, women and/or youth	All farmers in the company, including women and youth, have a chance to be trained	Capacity-building, including among women and youth	Encouraging equal participation of women and youth	Training young and female workers; training on production techniques (nursery and planting)	Training young and female workers on crop management
Addressing barriers to participation in supply chains (for specific social groups)	All ethnicities are involved in the supply chain	Fair trade and equitable benefit-sharing	Not a priority	Not a priority	Direct trading with producer
Supporting livelihood diversification	Intercropping; improving market access (with a road); harvesting of non-timber forest products	Diversified activities and handicraft production	Not a priority	Not a priority	Some intercropping
Promoting food and nutritional security	Not a priority	Through increased incomes	Not a priority	Banana	Through cash from crops
Affirmative action (such as preferential treatment given to minority groups)	Not applied	Plantations mainly in ethnic minority areas	Not a priority	Not a priority	Not a priority
Improving supply chain and pricing transparency	Farm gate price is transparent, and farmers can sell to any trader	Fair trade; transparent pricing	Farm gate or factory gate price is based on market price	Supplying at local and export market with market price	Farm gate or factory gate price is based on market price

	Cluster 1 Eight large established investors (all foreign). Perennial production.	Cluster 2 Twelve small established investors. Perennial production.	Cluster 3 Seven small new investors. Annual production.	Cluster 4 Three small new investors. Perennial production.	Cluster 5 Seven small established investors. Annual production.
Blockchain and supply chain control	Using a traceability system but not yet digitalization	Traceability inspection	Not applied	Not applied	Not applied
Paying suppliers quality and sustainability premiums	Paying a bonus to farmers with good production systems	Organic and fair trade premiums	Higher prices for better quality (white and clean cassava or roots)	Not applied	Occasionally
Improving smallholder access to production inputs and markets	Providing seedlings	Supplying compost, organic fertilizer or tools	Not a priority	Not applied	Providing inputs (seed, fertilizer, insecticide) and buying products directly at the farmers' production areas

Analysis by cluster

Table 6 shows how the different practices related to local development are distributed among the five clusters of investors and the extent to which investors in each cluster are using each category of practices. The colour coding in the table gives an overall picture of how well each cluster of investors is performing.

All investors promote transparency of supply chains and prices. A significant area of weakness is their lack of attention to addressing food and nutritional security.

Cluster 1: Large established investors with perennial production systems (all foreign)

A majority of the investors (60 percent) provide capacity-building to local villagers with equal access for smallholders, women and youth. Only one company (Mekong Timber Plantations) offers specific training for women. The same proportion of investors said they contribute to livelihood diversification, with a focus on intercropping and collection of non-timber forest products. In the context of livelihoods, one investor mentioned supporting basic infrastructure (roads and electricity) development, which helps to improve access to markets.

More than half (60 percent) of the investors provide their producers with seedlings as production inputs. The same proportion said they contribute to supply chain transparency but only in relation to transparency about market prices. Half of the investors offer premium prices for better-quality products.

Fewer than half (40 percent) of these investors support smallholders to form informal producer groups and product-selling groups. About 10 percent of them believe that they contribute to food and nutritional security because they provide their suppliers with income. With the exception of Mekong Timber Plantations, which addresses the needs of certain social groups, the investors do not have specific labour requirements and are open to anyone willing to participate in their activities.

Cluster 2: Small established investors with perennial production systems

Most of these investors (75 percent) focus on improving supply chain and pricing transparency by encouraging farmers to produce premium-quality products (coffee) for better prices, by not withholding pricing information and by offering market prices when buying at the farm gate.

A large proportion of the investors (70 percent) address barriers to participation in supply chains by fairly sharing the benefits of rubber sales between producers and the investor and by offering direct trading opportunities that are also open to any new producers who are interested. The same proportion of investors support handicraft production as a way for farmers to diversify their livelihoods.

Half of the investors in this cluster believe they promote food security and nutrition, though this is rather simplistically perceived as following fair trade standards. The same applies to the 50 percent of investors offering premium prices for quality and sustainability. Half of the investors also improve smallholders' access to production inputs and markets by supplying farmers with compost and organic fertilizer and, in some cases, linking farmers and local collectors to international markets.

Fewer than a third (30 percent) of the investors offer technical training to local staff and workers on, for example, rubber and coffee production and processing. Capacity development is available for most communities working with the investors as labourers or producers. But in most cases, there is no explicit aim of ensuring equal opportunities, except for some socially inclusive investors in the coffee value chain.

Only 30 percent of the investors address supply chain control, either through inspections for traceability purposes that may be linked to sanitary and phytosanitary measures or through efforts towards brand development. However, none of the investors is using a digital system for this. A quarter of the investors said they take affirmative action with employment. But this is only in relation to fair trade standards and to the employment of ethnic minorities in the coffee value chain. A quarter of the investors also support collective farmers' organizations, such as coffee cooperatives and farmers' groups that are often formed in collaboration with district authorities.

Cluster 3: Small new investors with annual production systems

Most of these investors (90 percent) are transparent about pricing, which they base on competitive, market prices. About 40 percent of the investors pay a premium for higher-quality produce. The same proportion provides capacity-building to smallholders, including women and youth, and ensures that farmers have equal access to training. Only 15 percent of the investors are supporting the formation of producers' groups;

applying supply chain controls with a traceability system; providing seedlings and fertilizers to farmers; addressing barriers to participation in the value chain; and promoting food and nutritional security, such as by focusing on off-season, high-value vegetable and fruits. None of the investors is supporting livelihood diversification or taking any kind of affirmative action.

Cluster 4: Small new investors with perennial production systems

All investors in this cluster provide capacity-building to communities, particularly on how to run their respective business models and including production techniques and farm management. Most of them (70 percent) also practise pricing transparency by sharing market price information with farmers. Fewer than a third of the investors trades directly with farmers or provide farmers with inputs, such as seedlings, fertilizer or herbicide (30 percent in each case). The same proportion of investors stated that they contribute to food security and nutrition as an indirect benefit derived from farmers' income. None of the investors in this cluster mentioned contributions in terms of livelihood diversification, blockchain, premium payments and promoting collective farmers' organizations.

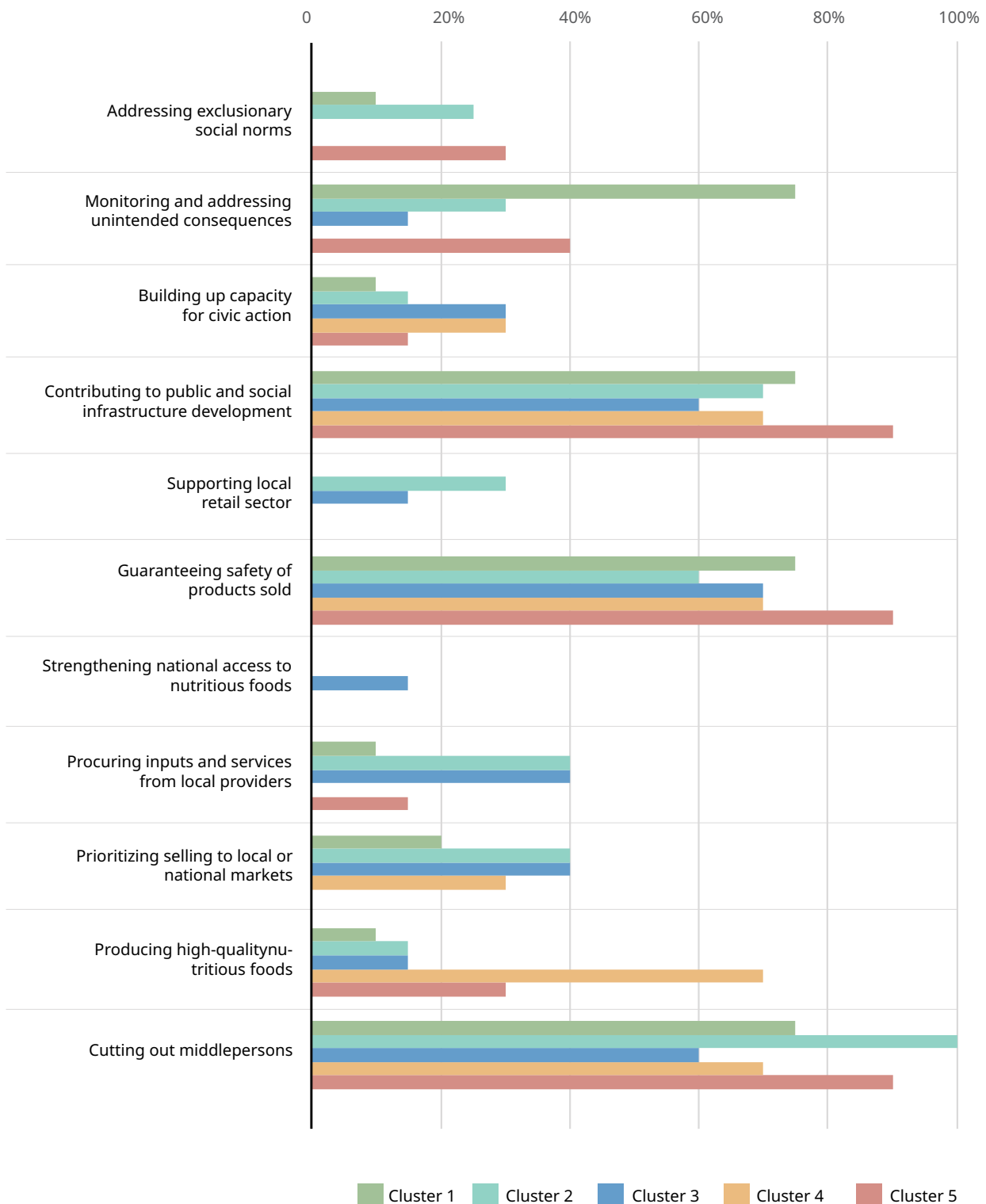
Cluster 5: Small established investors with annual production systems

All investors in this cluster ensure transparency of market prices and offer guaranteed competitive prices to producers. Most of them (90 percent) also distribute seedlings, fertilizers and other production inputs to farmers. Fewer than half of them (40 percent) train young workers and staff on production techniques and farm management. The same proportion trades directly with farmers to ease their participation into the value chain. Once again, these investors only considered their contributions to food and nutritional security in terms of indirect benefits linked to income-generation, although farmers can also benefit from easier access to the cash crops produced and marketed locally. About a third of these investors (30 percent) promote livelihood diversification through handicraft production and intercropping. Few of the investors (15 percent) are working with local authorities on the formation of producers' organizations or are considering product traceability systems. Despite dealing mostly with smallholders from ethnic minority groups, none of the investors mentioned taking any affirmative action.

Practices contributing to the wider society

Figure 6 shows the proportions of investors in each cluster that are adopting practices in 11 categories that contribute to the wider society. Table 7 highlights practices in each of these categories.

Figure 6. Proportion of investors in each cluster that are using practices, in 11 categories, that contribute benefits to the wider society



Most investors (87 percent) are working to shorten their supply chains. For example, they encourage farmers to sell directly to their factories, particularly where they are nearby and thus have low transportation costs. A majority (70 percent) of the investors also guarantee the safety of their products by adhering to various standards. The same proportion of investors contribute to public and social infrastructure development, such as by supporting construction of a school, meeting room or road.

However, many other social initiatives have room for improvement. For example, only about a third (30–35 percent) of the investors focus on producing high-quality nutritious foods, selling to local or national markets, procuring inputs and services from local providers, monitoring and addressing unintended consequences of their own or their suppliers' operations or addressing exclusionary social norms. And only 13 percent of investors support the local retail sector or provide capacity-building for civic action.

Table 7. Overview of investors' contributions to the wider society, with examples of practices adopted in each of 15 categories

- Green indicates that 70 percent of investors in the cluster are adopting practices in a category.
- Yellow indicates that 31–69 percent of investors in the cluster are doing so.
- Blue indicates that only up to 30 percent of investors in the cluster are doing so.

	Cluster 1 Eight large established investors (all foreign). Perennial production.	Cluster 2 Twelve small established investors. Perennial production.	Cluster 3 Seven small new investors. Annual production.	Cluster 4 Three small new investors. Perennial production.	Cluster 5 Seven small established investors. Annual production.
Cutting out middlepersons and shortening supply chains	Encouraging farmers to sell directly to the investors' factories, especially if they are nearby and thus have low transport costs			Direct trade with producers	Direct trade with producers
Procuring inputs and services from locally owned providers	Not a priority	Not a priority	Cassava; soybean	Fish; banana	Beans; pumpkin
Prioritizing selling to local and national markets	Not a priority	To some extent	Investors trying to sell to CP Lao, but this company requires high-quality dried cassava chips for its feed processing	Fish	Not a priority
Procuring inputs and services from locally owned providers	Not a priority	Compost	Some	Not a priority	Not a priority
Strengthening access of national consumers to nutritious foods, clean energy and so on	Not a priority	Not a priority	Not a priority	Not a priority	Not a priority

	Cluster 1 Eight large established investors (all foreign). Perennial production.	Cluster 2 Twelve small established investors. Perennial production.	Cluster 3 Seven small new investors. Annual production.	Cluster 4 Three small new investors. Perennial production.	Cluster 5 Seven small established investors. Annual production.
Guaranteeing safety of products sold	Adhering to sanitary performance standards, ISO standards and Chinese standards	Adhering to organic and fair trade standards	Adhering to sanitary performance standards for the Chinese market	Adhering to sanitary performance standards for the Chinese market	Adhering to sanitary performance standards for the Chinese market
Supporting the local retail sector	Not applied	To some extent	Not applied	Not applied	Not applied
Contributing to public and social infrastructure development	Cash and in-kind support to villages and districts for schools, meeting rooms, roads, bridges, social activities and village development funds		Contributing cash to village development funds	Basic infrastructure (road and meeting room)	Cash for social events and maintenance of infrastructure (schools, temples and roads)
Building up capacity for civic action	Some training and study tours	Information exchange	Not a priority	Not a priority	Not a priority
Monitoring and addressing unintended consequences of own and suppliers' operations	Participatory monitoring with villages and district authorities	Some traceability	Not a priority	Not a priority	Close follow-up with village authorities
Addressing exclusionary social norms	Respecting local social norms with contributions to social activities and festivals		Not a priority	Not a priority	Not a priority

Analysis by cluster

Table 7 shows how the different practices related to the wider society are distributed among the five clusters of investors and the extent to which investors in each cluster are using each category of practices. The colour coding in the table gives an overall picture of how well each cluster of investors is performing. All clusters are strong on shortening supply chains by cutting out intermediaries, ensuring the safety of sold products and contributing to local infrastructure. All are weak on most other criteria.

Cluster 1: Large established investors with perennial production systems (all foreign)

Most (75 percent) of these investors promote shorter supply chains by buying products directly from producers and adhere to the ISO standards, sanitary performance standards, Forest Stewardship Council standards and organic standards to guarantee safety and other features of their products. The same proportion of investors also support construction and maintenance of local infrastructure, such as schools, meeting rooms, bridges and roads, and contribute to disaster response and village development funds. And 75 percent of these investors also monitor unintended consequences of their operations through regular collaboration with local authorities.

In contrast, only 20 percent of these investors prioritize selling to local and national markets. And only 10 percent invest in building up capacity for civic action, such as wildfire protection; addressing exclusionary social norms (for example, with social insurance for pregnancy); procuring inputs and services locally (only Sun Paper Holding Laos does this) or producing high-quality, nutritious food (one investor promotes fish ponds). None of the investors supports the local retail sector or emphasizes improving national consumers' access to nutritious foods.

Cluster 2: Small established investors with perennial production systems

All of these investors trade directly with communities and farmers and offer fair prices, but often their statements on pricing are general and no specific agreements are negotiated. Most of the investors (70 percent) provide villages with support for infrastructure development and social events to maintain good relations. Examples include cash contributions for a village school, meeting hall or road improvement; building village bridges; providing a clean water source and community health clinics; and contributions to agriculture funds managed by provincial authorities.

More than half (60 percent) of the investors adhere to organic and fair trade standards and the strict traceability required by sanitary performance standards. Some of the investors are also open to selling products on the local and national markets (40 percent) and to procuring inputs or services from locally owned providers (also 40 percent). Fewer than a third of the investors (30 percent) indicated that they support the local retail sector, but they did not provide examples. The same proportion of investors monitor and address unintended consequences of their operations, while 25 percent addresses exclusionary norms.

Only 15 percent of the investors contribute to the production of nutritious food, mainly fruits for export. This low figure is expected because most of this cluster's members produce things, such as tea, coffee, wood and charcoal, rather than foodstuffs. The same proportion of investors said they work to build up capacities for civic action, but this is limited to providing local people with technical information.

Cluster 3: Small new investors with annual production systems

Although these investors are small and new, most of them (70 percent) intend to guarantee product safety by adhering to sanitary performance standards for the Chinese market and good agricultural practice standards for the national market. Around half of the investors buy products directly from producers (60 percent) and contribute to public and social infrastructure, such as road maintenance or a village development fund (60 percent). Fewer than half prioritize selling to local or national markets (40 percent) or procure local supplies and services (40 percent). Only 15 percent produce or strengthen national access to high-quality nutritious foods (through off-season vegetable and fruit production), support the local retail sector or monitor unintended consequences of their operations.

Cluster 4: Small new investors with perennial production systems

Overall, the societal scope aligns with the business model and maintaining local relations. Most of the investors (70 percent) buy their products directly at the farm gate, thus cutting out intermediaries. The same proportion contributes to local infrastructure

development (roads and meeting halls) and cultural events. A few of them (30 percent) provide training to strengthen civic action.

Most of these investors (70 percent) produce nutritious foods, with a focus on bananas, for which they guarantee safety through adherence to the Chinese sanitary performance standards (they do not supply the national market). Some combine their banana plantations with fishponds for local consumption. None of these investors procures inputs and services from local providers or supports the local retail sector. Similarly, they do not monitor unintended consequences of their operations, nor are they concerned about addressing exclusionary social norms.

Cluster 5: Small established investors with annual production systems

As with the other clusters, most of these investors (90 percent) encourage farmers to sell directly to the factory, but farmers also have the option of selling to other traders according to their preference. These investors buy products from villages for the same price as at the factory gate. In some cases (40 percent), having such a presence at the village level also helps investors to monitor and address any unintended consequences of their operations.

These investors (90 percent) guarantee product safety by adhering to good manufacturing practices and sanitary performance standards for the Chinese market and good agricultural practices standards for the national market. Most companies (90 percent) also contribute cash to improve public and social infrastructure, such as a road, school, temple or village meeting room, as well as for cultural events at the village level.

About 30 percent of the investors produce high-quality beans, pumpkins and other vegetables intended for regional markets. One investor buys raw material inputs from local traders. None of the investors prioritizes selling to local markets or supporting the local retail sector.

Summary of all progress in each cluster

Table 8 shows to what extent each cluster of investors has adopted practices to promote good governance, environmental stewardship, local development, benefits to the wider society and to all four of these areas combined. Investors in cluster 1 are generally adopting more practices than those in all the other clusters. They are particularly strong in terms of good governance and environmental stewardship. Investors in cluster 2 are performing best in relation to local development and the wider societal benefits.

Table 8. Portion of practices relating to good governance, environmental stewardship, local development and wider societal benefits that investors in each cluster have adopted to varying degrees

- Green indicates the proportion of practices adopted by at least 70 percent of the investors.
- Yellow indicates the proportion of practices adopted by 31–69 percent of investors.
- Blue indicates the proportion of practices adopted by less than 30 percent of investors.

	Cluster 1 Eight large established investors (all foreign). Perennial production.	Cluster 2 Twelve small established investors. Perennial production.	Cluster 3 Seven small new investors. Annual production.	Cluster 4 Three small new investors. Perennial production.	Cluster 5 Seven small established investors. Annual production.
Good governance					
Environmental stewardship					
Local development					
Wider societal benefits					
Overall					

Findings: Future perspectives

The 37 investors' survey responses highlight their hopes and ambitions in relation to their contributions to good governance, environmental stewardship, local development and benefits to the wider society. Their responses also detail internal and external constraints that limit their ability to make such contributions.

Annex 2 provides the investors' responses. What follows is a summary of their key points.

Good governance

To promote good governance, investors aim for improvements in awareness and capacities, compliance with procedures and regulations, monitoring and information management and access to markets and finance. The internal constraints include the lack of human and financial capacities, limited cash flow, a lack of understanding of rules and regulations and difficulty in accessing soft loans. External constraints include high transaction costs, low-quality support from local authorities, limited monitoring of illegal harvesting, limited access to relevant policies and data from the government and lack of external support to facilitate the formation of farmers' groups.

Environmental stewardship

The investors plan to further reduce the use of chemicals, conduct environmental and social impact assessments, promote renewable energy and implement best practices. Internal constraints include high investment costs, climate change impacts on coffee productivity and weak technical skills among local workers. The external constraints include a lack of technical support from the government, unclear requirements and processes for environmental and social impact assessments, limited capacities of investors to comply with environmental standards and limited technical capacities of local government staff.

Local development

In terms of local development, investors seek to improve infrastructure, promote collective action and support livelihood diversification. Internal constraints include limited financial resources and opportunities to expand investments. The external constraints include lack of clear guidelines on how to promote local development, limited budgets of local governments and a lack of access to soft loans.

Benefits to the wider society

Investors aim to benefit the wider society by increasing minimum wages, diversifying employment and income-generating activities, improving technical skills and knowledge and supporting social activities. Internal constraints include difficulties in raising awareness and gaining the commitment of farmers and conflicts between households aiming to sell to different companies. External constraints include poor monitoring

of side-selling and the theft of rubber and limited understanding of contract farming among local communities.

Support and incentives that each cluster requires

The investors outlined the support and incentives that they need.

Cluster 1: Large established investors with perennial production systems (all foreign)

Investors in this cluster said the government should reconsider how to promote and incentivize foreign direct investment and the commercialization of agriculture. They want imports of equipment and machinery to be tax-free, and they need clearer instructions on the additional payment of fees.

In terms of bureaucratic support, these investors want more transparency, better monitoring of product collection permits and illegal trade and for authorities to better enforce the laws and policies. They also want more simple and clear instructions and dissemination of updated laws and regulations relevant to investment, along with timely support from the government at all levels. Some of these investors also mentioned a need for facilitation for conflict resolution, the ability to obtain annual operational permits at the provincial level and a need for capacity-building of government officials, for example, on digital technology.

The investors would like technical support for their better understanding of and accessing carbon markets, including support to comply with China's special subsidy on agriculture and carbon markets. They also seek technical support for controlling pests and diseases, solving social constraints in villages (such as theft) and encouraging villagers to manage their livestock better because the animals often damage plantations.

Cluster 2: Small established investors with perennial production systems

Investors in this group want the government to reduce the value-added tax and other taxes and fees that are higher than in neighbouring countries. They also want the government to simplify the process for environmental and social impact assessments, reduce related costs and improve the process and instructions for land leases.

In terms of export logistics and documentation, investors cited the need to improve working efficiency and support for product collection and marketing. The investors are keen to meet product quality standards so they can promote their company in international markets. Some said they want technical support on organic production (in this case, tea) and related market promotion, as well as land allocation for organic tea plantations. Some also said they want to understand the opportunities and modalities for accessing carbon markets.

Cluster 3: Small new investors with annual production systems

Investors in this cluster want greater access to finance, support to help small and medium-sized enterprises to recover from losses caused by the COVID-19 pandemic and reduced costs for environmental inspections. They also want the government to reduce

transportation taxes and fees, such as the fee of 50,000 Lao kip (USD 3) per truck moving from one province to another.

On the bureaucratic side, the investors want the government to disseminate relevant information, provide clear investment guidelines and procedures, including agricultural land-use planning and allocation; and provide support with logistics and documentation for exports. They also want better coordination with the government to accelerate the documentation process of investments. The requested technical support includes assistance with branding and with setting up a cassava starch processing factory.

Cluster 4: Small new investors with perennial production systems

Investors in this cluster said the COVID-19 pandemic had prevented them from exporting products to China. This had resulted in big losses and reduced their access to credit at banks in Lao PDR.

In terms of bureaucratic support, these investors called for improved access to soft loans. They also want clarity and transparency on bureaucratic fees. And they would like the authorities to process documentation more quickly and provide timely support, such as with the export processes. Some of these investors also want support with fruit production techniques.

Cluster 5: Small established investors with annual production systems

Investors in this cluster said fiscal incentives are crucial and that the value-added tax (of 7 percent) on exports makes it more profitable to sell in the domestic market. These investors also said they want access to credit, including low-interest loans.

In terms of bureaucratic support, they want the government to disseminate information, coordinate and support investors and, in one case, support the monitoring of illegal harvesting of fresh cassava roots. These investors want technical support on monitoring export procedures, engaging with village authorities and monitoring production and collection at the village level. Investors in this cluster also mentioned needing technical support in relation to carbon credits and starch processing.

Endnotes

- 1 The project is also active in Ethiopia, Ghana, Mozambique and Myanmar in collaboration with the Center for International Forestry Research (CIFOR), the Dutch Development Agency (SNV) and World Agroforestry (ICRAF).
- 2 CITES is the United Nations Convention on Trade in Endangered Species of Wild Fauna and Flora.

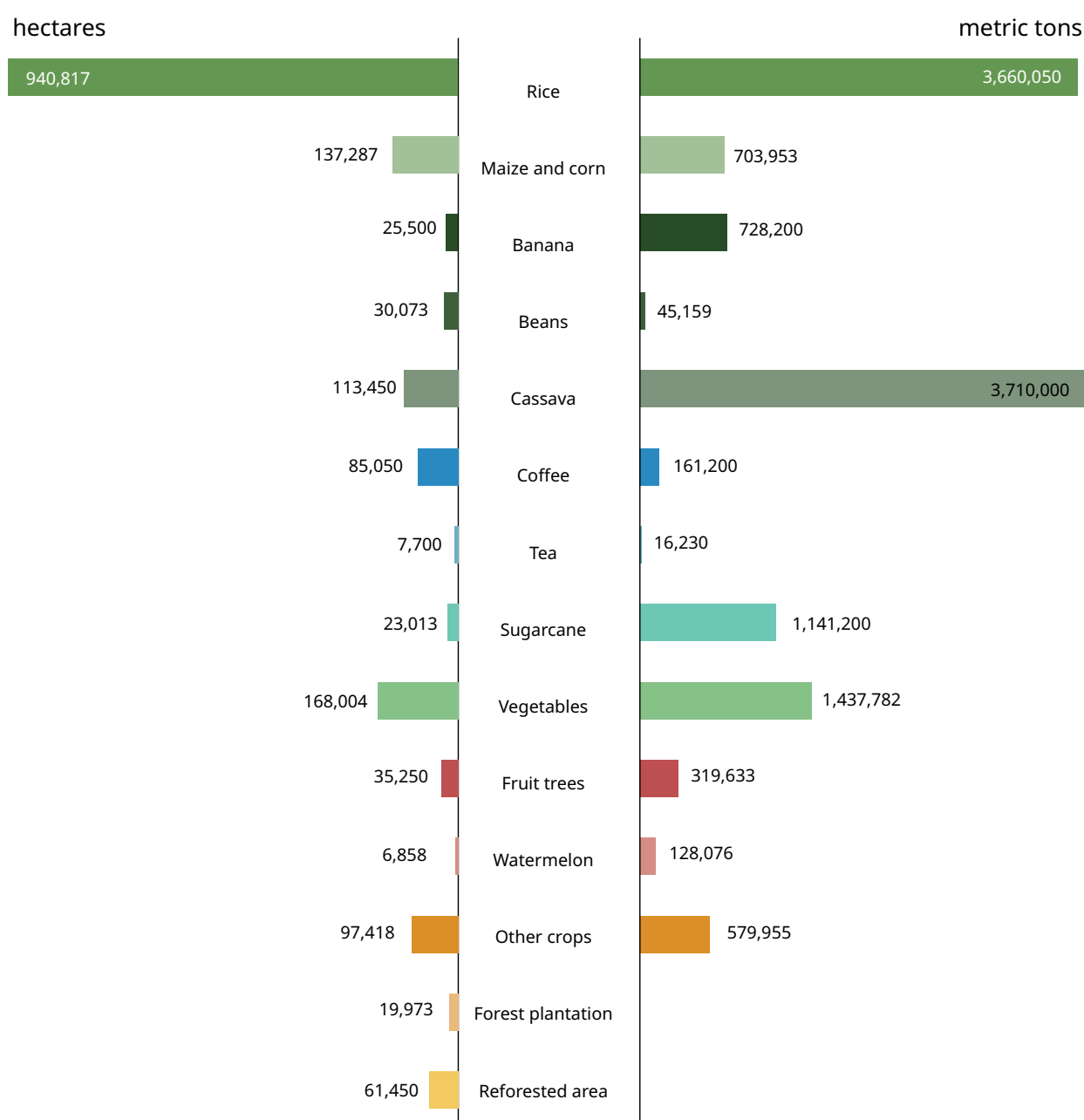
References

- ITC. 2020. Draft Lao Coffee Export Road Map – First Consultation.
- ITC. 2023. UN COMTRADE and ITC statistics. International Trade Center. Available at www.trademap.org/.
- LVPPP. 2017. *Improving policies for forest plantations to balance smallholder, industry and environmental needs in Lao PDR and Vietnam*.
- MAF. 2022a. *Agriculture yearbook 1975–2015 and Agriculture yearbook 2021*. Ministry of Agriculture and Forestry. Vientiane, Lao PDR.
- MAF. 2022b. *Statistical Yearbook 2010–2021*. Ministry of Agriculture and Forestry. Vientiane, Lao PDR.
- Manoloum, T. 2022. *Study on potential and opportunities for rubber processing development in Laos linking to regional and global value chain*.
- MOIC. 2022. Export data from Lao PDR (2017–2022). Ministry of Industry and Commerce. Vientiane, Lao PDR.
- Newby, J. 2021. Cassava: Boom crop or sustainable livelihood? Available at <https://docplayer.net/218816048-Cassava-boom-crop-or-sustainable-livelihood.html>.
- Smith, H., Lu, J., To, P.X., Mienmany, S. and Soukphaxay, K. 2020. *Rubber plantation value chains in Laos: Opportunities and constraints in policy, legality and wood processing*. Report produced for ACIAR project FST/2016/151 — Advancing Enhanced Wood Manufacturing Industries in Laos and Australia and Forest Trends.
- World Bank. 2022a. World Development Indicators database. Available at <https://databank.worldbank.org/source/world-development-indicators>.
- World Bank. 2022b. *Development of the agribusiness potential in the Laos–China railway corridor*. World Bank Group, Washington, D.C. Available at <http://documents.worldbank.org/curated/en/099555008262242083/P1778530b6d1670690826a036cf3037a8f8>.

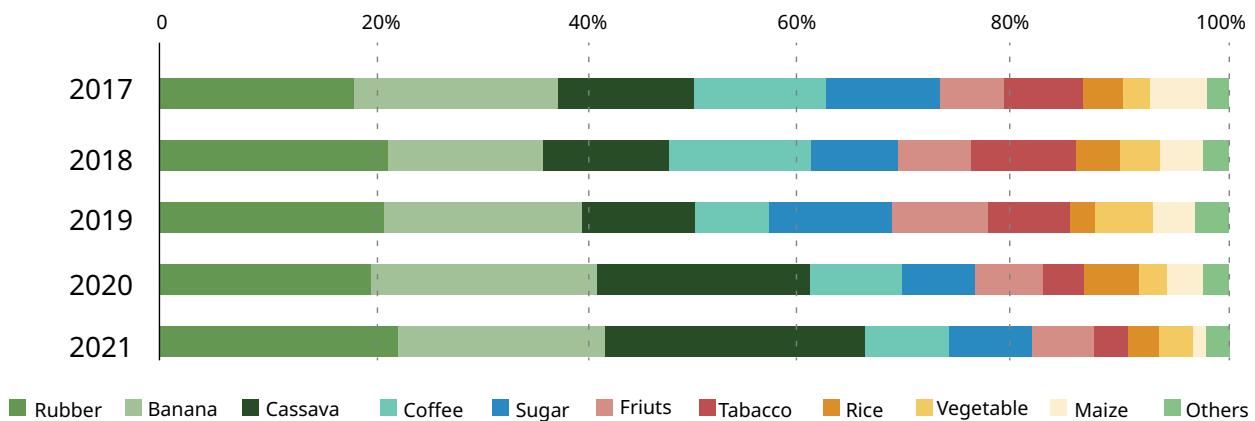
Annex 1 Sectoral context for key commodities

Figure A1 and figure A2 give an overview of the relative importance of different commodities to Lao PDR in terms of their production area, production quantity and export values. Following the charts is a summary of the situation in Lao PDR's cassava, coffee, rubber and timber sectors.

Figure A1. Left: Area of Lao PDR (hectares) used for different crops and forest planting, 2021 Right: Quantity (metric tons) of crops produced in Lao PDR, 2021



Source: MAF, 2022a.

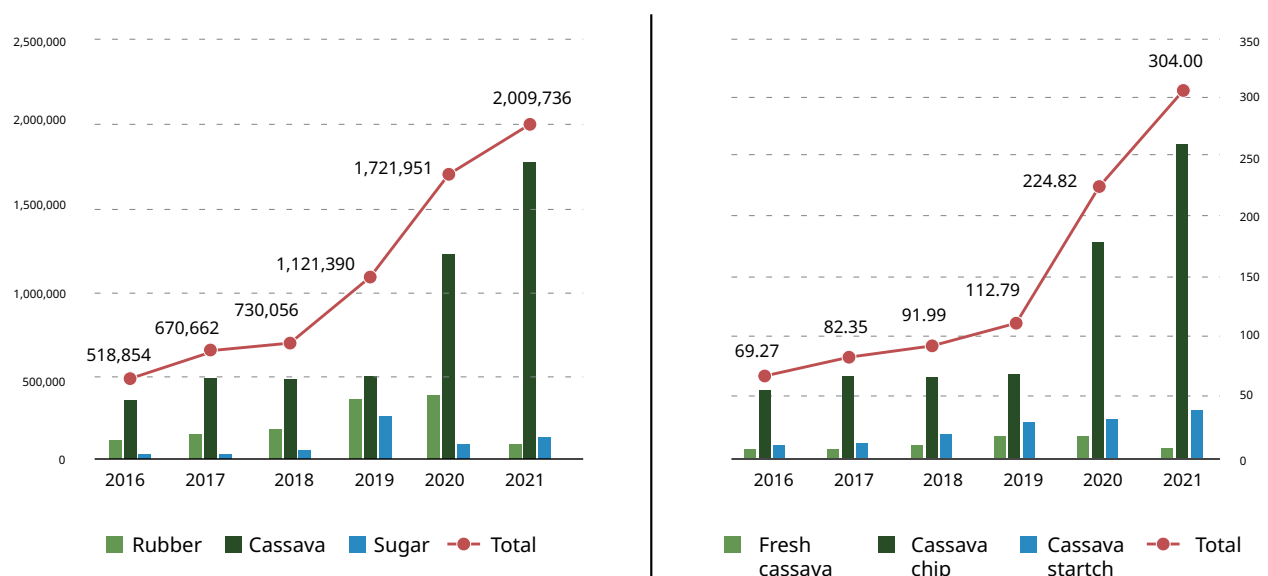
Figure A2. Composition of Lao PDR's agricultural exports, 2017–2021, by value (USD millions)

Source: MAF, 2022a.

Cassava value chain

Southeast Asia has only around 13 percent of the global cassava area and accounts for 25 percent of production, but it dominates the global trade, producing nearly all of the cassava exported worldwide (Newby, 2021). The global demand for this cassava includes markets for substitutes for maize, sorghum, wheat, potato starch and sugarcane in the food and feed sectors.

In 2021, Lao PDR was the world's second-biggest cassava exporter by value after Thailand, accounting for 15.8 percent of the USD 1.9 billion total value of global cassava exports (ITC, 2023). It exported 2,009,736 tons of fresh cassava, dried cassava chips and cassava starch, with a total value of more than USD 304 million (figure A3), making cassava the country's most valuable agricultural export.

Figure A3. Volume (left) and value (right) of cassava products exported from Lao PDR, 2016–2021

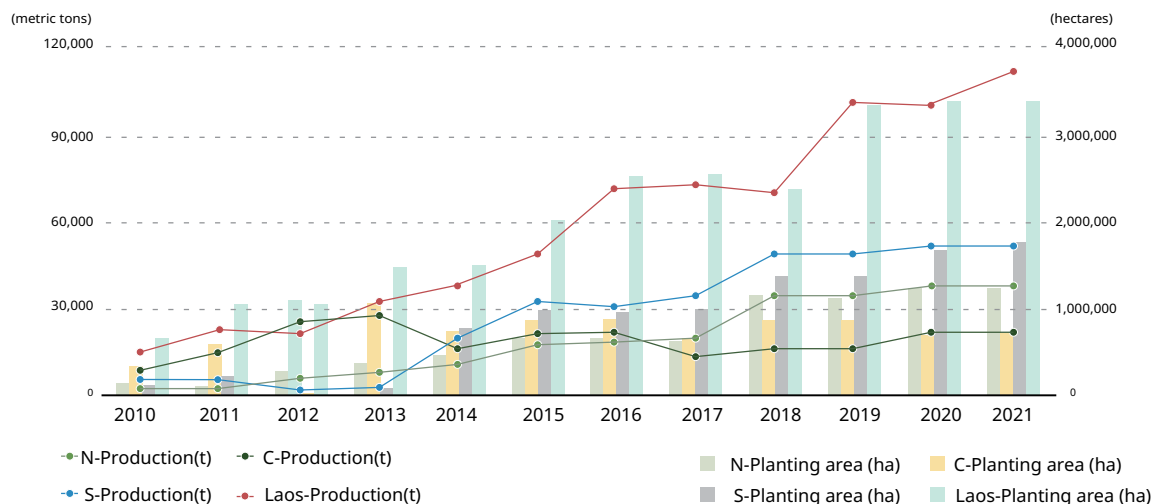
Source: MAF, 2022a.

In 2021, China, Thailand and Viet Nam were the main importers of cassava from Lao PDR. Dried chips accounted for more than 82.7 percent of all the cassava exported, with cassava starch and fresh cassava accounting for only 12.8 percent and 4.5 percent, respectively. Thailand imported about 76 percent of Lao PDR's cassava exports, and most (94.1 percent) of this was in the form of dried chips. Fresh cassava accounted for 5.1 percent and cassava starch was 0.8 percent. In the same year, China imported 70,616 metric tons of cassava products, of which 99.8 percent was cassava starch. Local and Chinese traders export cassava from Lao PDR to China through Thailand and Viet Nam and directly to China's Yunnan Province. In China, cassava is distributed to animal feed factories and other food industries.

By 2021, the total cassava planting area in Lao PDR had reached 113,450 hectares, with an average increase in area of 47.4 percent since 2010. Cassava production grew over that period by an average rate of 61.8 percent, to reach 3,710,000 metric tons. Production increased by an average of 117.6 percent per year in the northern provinces, compared with 24 percent and 89.2 percent in the central and southern regions, respectively (figure A4). Cassava is almost all produced by smallholder farmers through contract farming or outgrower schemes. In 2022, smallholder farmers benefited from a then-high farm gate price of cassava, with net incomes of about 8 million kip (USD 475) per hectare.

With increased demand in China, better regional connectivity and the government's attraction of investment in cassava dried chip and starch processing, the cassava plantation area in Lao PDR has been increasing dramatically. In 2022, there were 23 dried cassava chip-collecting companies and starch factories (World Bank, 2022b), with about ten others in the process of being approved and established. The factories are operated by local or foreign agribusinesses or joint venture enterprises. The cassava starch factories can produce between 50 and 550 metric tons per day. They hire 100–300 local villagers per factory during harvesting season. Because all processing equipment is imported from China, the factories can achieve the standards required by the Chinese market.

Figure A4. Cassava production (metric tons) and planting area (hectares) in Lao PDR, by region, 2010–2021



Note: N = northern; C = central; S = southern.

Source: MAF, 2022b.

Despite the positive trends, there are concerns for the sector's development. These include technical issues, such as the limited adoption of good management practices, long-term soil degradation, land-use change and deforestation and the monitoring of land resources. There is limited research and development to mitigate pests, diseases, floods and droughts linked to climate change. There is also limited information on land-use planning for the agroecological suitability of cassava production.

There are also value chain and marketing risks and uncertainties in the longer term, such as the export of fresh cassava roots without value addition, limited market information and challenges with communicating and linking with other end markets. Lao PDR also faces high competition from neighbouring countries.

And there is a lack of enabling support to the sector. There is no strategic framework for the sector's development, limited guidance on contract farming and production, a limited market information system and limited access to credit. The monitoring of environmental issues by local governments is weak. And exporting cassava is burdensome in terms of transportation, logistics and documentation.

Coffee value chain

Although there is an emerging coffee market in some big cities, most of Lao PDR's coffee is exported. It is an important product, accounting for 9.7 percent (USD 95.3 million) of Lao PDR's agricultural exports in 2021. The country was ranked 36th globally for coffee exports by value in 2021 (ITC, 2023).

Between 2017 and 2021, Viet Nam was the main market for unroasted coffee beans, accounting for 57.3 percent (USD 247.7 million) of Lao PDR's exports (figure A5; ITC, 2023). Thailand was the top importer of finished coffee, accounting for 84.6 percent (USD 24.5 million) of exports. In the same period, China and Japan were among the other main importers of Lao coffee.

Lao PDR's coffee sector developed rapidly over the past two decades. From 2011 to 2021, the area planted with coffee increased from 54,775 to 83,320 hectares, while coffee production increased from 52,010 to 161,200 metric tons (MAF, 2022a). The coffee production system is rather conventional and is shaped by the financial constraints that smallholders face. It is characterized by extensive and inconsistent planting, poor tending, limited use of chemical or organic fertilizer (manure), as well as limited use of chemical pesticide or other phytosanitary products.

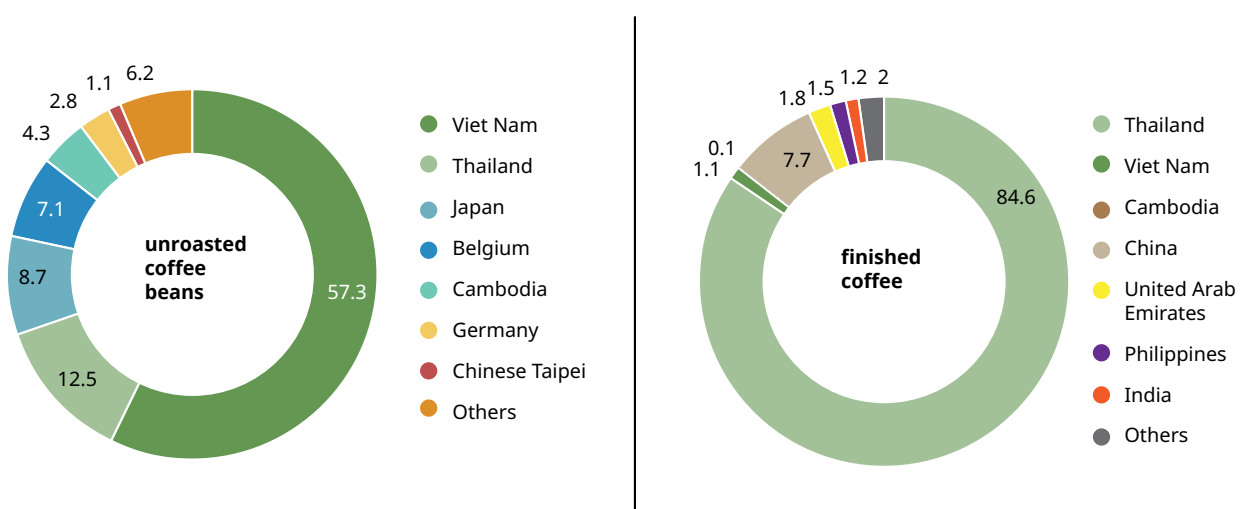
Most (96 percent) of Lao PDR's coffee is produced on plantations in the Bolaven Plateau in the southern provinces of Champasack, Sekong and Saravan. Smallholder farmers, groups and cooperatives account for most of the production. In recent years, coffee production switched from the robusta species (now about 80 percent of total production) to the higher-value arabica species (about 20 percent of total production). There has also been an increase in large-scale industrial plantations and an expansion of coffee areas in the north of the country.

By 2021, there were 16 registered private international companies involved in coffee farming in Lao PDR. The biggest planters are all foreign companies: Paksong Highland from Thailand, with 3,100 hectares; Outspan-Olam from Singapore, with more than 1,100 hectares, and three large Vietnamese companies with between 500 and 1,000 hectares. Other large foreign investors are from Canada, China, India, Malaysia and Taiwan. Foreign-owned firms are more involved in the farming of arabica coffee for niche markets (ITC, 2020).

Lao PDR has favourable coffee-growing conditions, limited use of chemical inputs (with good agricultural practices and organic coffee as niche products) and good links with specialty coffee markets. However, there are concerns regarding the sustainable development of the coffee sector. These include:

- Low productivity of robusta production due to many factors, including coffee trees being too old and outbreaks of pests and diseases linked to climate change
- Lack of consistency in harvest and post-harvest quality control for robusta coffee
- Limited availability of organic fertilizer
- Limited access to finance and technical information to improve productivity and product quality
- Global market price volatility and increased competition from other coffee-producing countries, particularly in the region
- Limited availability of local labour
- Conversion of coffee-growing areas to other cash crops, such as cassava
- The need for a more supportive enabling environment with respect to logistics, transportation and export procedures
- Conversion of coffee-growing areas to other cash crops such as cassava
- The need for a much supportive enabling environment with respect to logistics and transportation and export procedures

Figure A5. Main importers, by value, of unroasted coffee beans and finished coffee from Lao PDR, 2017–2021



Source: ITC, 2023.

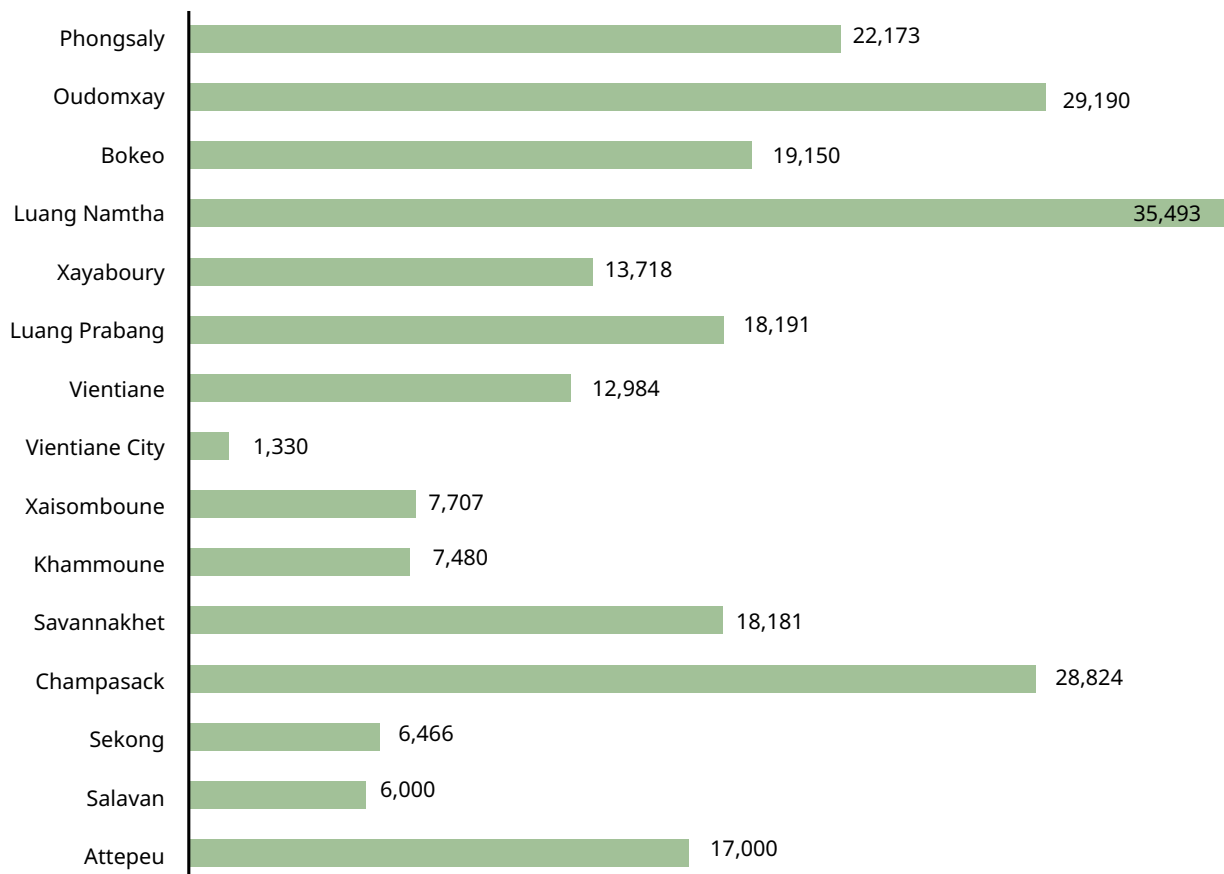
Rubber value chain

The global area of rubber plantations is about 13 million hectares. The main product is natural rubber latex, which is used by the automotive, aviation and health care industries, among others. There is also growing use of rubberwood from old plantations for sawn wood, furniture and veneer products.

Asia produces about 90 percent of the world's natural rubber. Most of this (80 percent of the global supply) is produced by several million smallholders who manage an estimated 11 million hectares of land. Companies own or control the remainder (Smith et al., 2020).

In Lao PDR, rubber plantations have been booming and now cover approximately 294,123 hectares in 16 provinces (figure A6). Land concessions and leases account for about 45 percent of this total, while outgrower schemes and 2+3 contract farming account for 35 percent and 20 percent, respectively (Manoloum, 2022). The provinces with the largest areas of rubber plantations are Luang Namtha, Oudomxay and Champasack, which together account for 36.8 percent of the total area.

Figure A6. Rubber plantation area (hectares) in provinces of Lao PDR, 2018



Source: Smith et al., 2020.

China and Viet Nam account for more than 90 percent of total foreign investment in the rubber sector. Although rubber latex markets are volatile, there is some resilience within the production system. Lao PDR's rubber latex production chains are export-driven, with most natural rubber undergoing only primary processing before being exported. In 2021, Lao PDR's rubber latex exports were valued at USD 269 million, accounting for 1.6 percent of the global natural rubber market (ITC, 2023), while its rubberwood was valued at USD 1,050 million. By the end of 2022, there were 69 rubber-processing factories in Lao PDR whose annual capacity varied between 50 and 300,000 metric tons (Manoloum, 2022).

Challenges in Lao PDR's rubber value chain include a lack of a rubber-producing standard, limited technical extension and gaps in both the quality and quantity of skilled smallholder rubber producers and processors. Circular rubber production is not yet in practice. There is only primary processing into rubber blocks and no further value addition through processing for final products. The pricing system for rubber latex in the local market is also unclear. Prices fluctuate, and there is high competition for raw latex among rubber-processing factories. Access to the Chinese market is another constraint because China's import quota system is only open to companies participating in the Chinese government's Opium Replacement Program.

There is also a lack of detailed information on land-use planning, contract farming and smallholder plantations. Land allocation, plantation ownership and investment models for rubber are diverse, reflecting discrepancies in the land-allocation process between different levels of government and among different agencies at the same level. Land is granted to investors on paper, but the companies are unable to access an equivalent suitable area on the ground. Finally, smallholder producers and investors face financial constraints particularly during the pre-harvesting period.

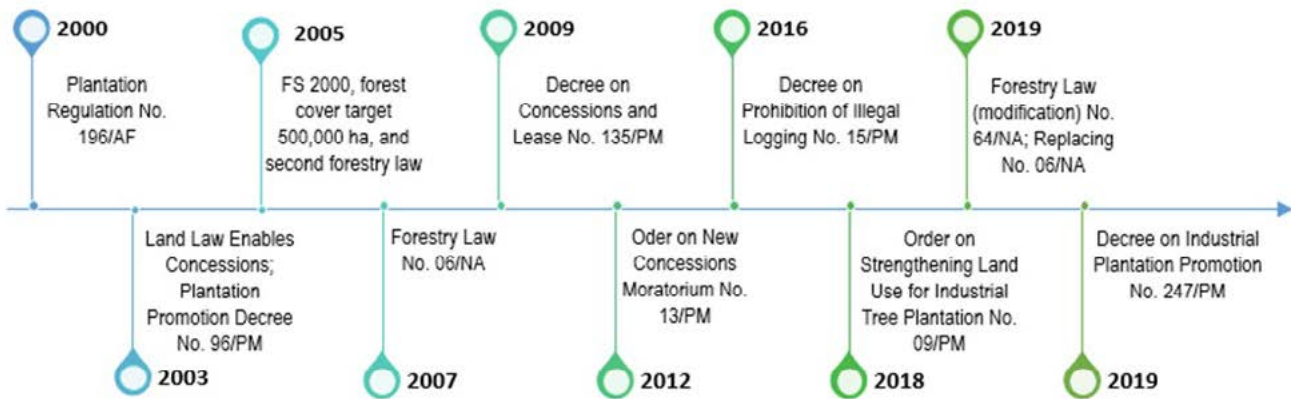
Timber value chain

Lao PDR's forestry sector has undergone significant changes in recent years (figure A7). With many challenges facing this sector, the government set an ambitious target in 2015 to increase forest cover to 70 percent by 2020. This deadline was later postponed to 2025. In early 2016, Prime Minister Order No. 15 was issued regarding: "Tightening timber harvest management and inspection, timber transport and business." Since this decree came into force, illegal logging and associated forest loss have declined measurably. At the same time, there has been a surge in foreign direct investment in the forest sector, motivated by government policies to promote such investment, land leases and concessions.

Several policies have also promoted land use for industrial tree plantations. Investment models for establishing tree plantations include individual outgrower schemes, contract farming, state land leases and concession investments. Domestic and international

investors, and joint ventures between them, are keen to secure more land for developing plantations. Forestry policies have promoted the privatization of land and forests, leading to an increase of private investment in tree plantations.

Figure A7. Development of Lao PDR's forest sector laws and policies, 2000–2019



Source: WWF, 2021; LVPPP, 2017.

By 2020, the total area of tree plantations through concessions and outgrower schemes was approximately 446,000 hectares, growing rubber (54 percent of the total area), teak, eucalyptus, acacia, agarwood and other species. Another 54,000 hectares of plantations are needed to reach the target of 500,000 hectares by 2025.

The central and southern provinces of Savannakhet, Attapeu and Bolikhamxay have received 81 percent of all investment in plantations in Lao PDR. The 130 plantations located there include 106 rubber or rubber-related projects. The others include nine that are growing eucalyptus or eucalyptus with acacia, six that are growing agarwood, two that are growing acacia and one each growing pine and bamboo. The remaining five are commercial tree plantations.

The main wood-based products produced and exported from Lao PDR include pulp or other fibrous cellulosic materials, wood, articles of wood and wood furniture (wood charcoal, plywood, rough wood, etc.) and other furniture and parts. Various production systems co-exist, including some 2+3 or 1+4 contract farming and smallholder farmers with between a few hundred and 5,000 trees per household.

Currently, outgrower smallholder producers have less production technologies and productivity than the large-scale land lease and concession areas. Market and technical information is unclear for smallholder producers supplying Chinese investors in particular. At the same time, local awareness of farm management for commercial industrial tree plantation, forest fire prevention and contract farming should be improved. Issues around land allocation for tree plantations also need to be addressed. These include protecting customary rights, access to land and resources and equitable benefit-sharing.

Limited information on concession management among authorities at the district, provincial and national levels has led to many complicated and overlapping concession areas. There is also a lack of clarity on forest allocation and land-use planning at the

local level and on land leases and concessions for tree plantation approved by the government. This has resulted in many issues, including overlapping land areas and encroachment on areas of natural protection and conservation forest. These practices also have resulted in unofficial endorsements and unfair contract farming. Regulations on investment procedures have not been followed by some foreign investors, with many cases of overlapping areas for concessions.

Most investors in Lao PDR's forestry sector complain about the lengthy, time-consuming and complicated bureaucracy they face, as well as the high and unclear fees charged by different levels of government. Many Chinese investors are interested in tree plantations in Lao PDR, but there is limited information provided to potential investors, and sometimes the information is incorrect. Improvements must be made regarding effective logistics and efficient services for foreign investors in the forestry sector, with a focus on business registration and exporting in particular.

Annex 2 Investors' perspectives

This annex provides the full set of responses that investors made when asked about their expectations and ambitions with respect to their contributions to good governance, environmental stewardship, local development and benefits to the wider society. The following also details the internal and external constraints that the investors said they face in each of these four areas.

A. Good governance

Expectations and ambitions

Awareness and capacity-building

- Disseminate information and research and development findings and demonstrate coffee varieties in collaboration with research institutes to improve company profiles and develop new international market linkages
- Raise awareness among local people on the importance of crop investment and the benefits of landowners and labour hiring
- Encourage communities to better follow instructions from district authorities
- Improve farmers' cooperatives, allocate land for farmers and raise awareness of the importance and benefits of crop investment so as to scale up businesses, increase farmers' incomes and improve the supply to the company
- Improve capacities in terms of the one-door services mechanism

Procedures and regulation

- Improve logistics and infrastructure to facilitate the export of rubber through Cambodia to Viet Nam
- Speed up export logistics and documentation
- Ensure fair service from government officers working at checkpoints by following the export regulations
- Simplify the export procedure to China and accelerate the process while reducing the cost of registration at the General Administration for China Customs
- Strengthen coordination and negotiation between the Lao and Chinese governments to support exporting (for example, of fruit)
- Simplify procedures for the import of processing equipment
- Provide specific instructions and guidelines for the rubber and cassava sectors (such as on the expansion of production areas)
- Clarify value-added tax requirements (an increase from 7 percent to 15 percent is not acceptable)

- Reduce lengthy procedures and related transaction costs
- Avoid different sites being subject to different regulations and practices from local governments
- Expand contract farming or land leases for growing maize and for fruit tree plantations
- Clarify land boundaries to avoid land tenure conflicts
- Improve compliance with investment promotion laws

Monitoring and information management

- Monitor and solve rubber theft
- Monitor and intervene in operations of unregistered traders buying from farmers
- Improve the monitoring, management and documentation of cassava investment and fresh root collection
- Provide clearer land-use zoning, protect formal investors and monitor illegal and unregistered local collectors

Access to markets and finance (credit)

- Increase government support for better access to credit and low-interest loans
- Improve access to finance because companies require long-term financing to cover operational costs
- Increase access to soft loans from banks

Constraints

Internal constraints

- Lack of human and financial capacity and technology to scale up and diversify product development (loans available to small and medium-sized enterprises are too small to cover cash flow)
- Limited cash flow and capital for the collection of fresh cassava roots
- Employees do not fully understand the rules and regulations of the local government
- A complicated process for accessing soft loans from banks
- Difficulty to monitor rubber theft and illegal trading by intermediaries operating without collection permits

External constraints

Most external constraints relate to the expectations mentioned previously.

- Procedures and regulation
 - High transaction costs and unofficial costs to speed up the processing of documents
 - Low-quality support and guidance provided by local authorities
 - Local government staff not complying with laws and regulations and demanding unofficial fees

- Lack of monitoring and transparency of illegal harvesting
 - Duplicative and excessively expensive tax collection system
 - Limited access to relevant policies, instructions and data from the government
 - Slow processing of business documents
 - Delays caused by the complicated structure coordinating across multiple government institutions
 - Lack of external support to facilitate farmers' group formation
- Access to markets
 - Lack of a rubber standard, such as the Standard Vietnam Rubber
 - Limited protection from theft and the illegal trade of rubber
 - Less-demanding neighbouring countries offer higher prices than markets in the European Union
 - Domestic shipping by train has improved, but transportation by road has not, which limits access to regional and international markets (such as Cambodia and Viet Nam)
 - Lack of strict regulations for Thai trucks to enter Lao PDR
 - Lack of a government strategy for developing the sector and protecting local traders (Chinese and Vietnamese traders can buy from farmers; some traders are informal and only come during more profitable price fluctuations)
 - Lengthy sanitary performance standard process to export to China (for example, for durian and jackfruit)
 - Complicated and lengthy export process due to the unfair service provided by some customs officers
- Access to finance (credit)
 - Lack of clear policy and guidance for promoting foreign direct investment
 - Lack of government support for better access to credit and low-interest loans
 - High interest rates for bank loans for agriculture investment
 - Difficulties in accessing soft loans from banks due to the lack of clear information and proper support from relevant sectors
- Investment
 - Limited information on land availability for foreign direct investment
 - Difficult and lengthy approval process for investments (companies often have to find the land themselves among high competition)
 - No clear land-use zoning established by the government to protect formal investors
 - Lack of monitoring of illegal and unregistered local collectors to ensure that a company can regularly collect quality products

- Local authorities unable to clearly explain guidelines or to help solve issues relating to land tenure
- Malfunctioning of the one-door service (There are many contradictory policies and confusing systems under different ministries that are not coordinated well, which makes it difficult for companies to comply with the service and for local authorities to offer the service. This in turn leads to corruption and stimulates a monopoly because only a few companies are willing to comply, often by paying unofficial fees.)
- Different and contradictory methods for assessing concessions boundaries
- Lack of adequate compliance at the district level with the Decree promoting commercial tree planting

B. Environmental stewardship

Expectations and ambitions

Waste management and reduced use of chemicals

- Reduce chemical inputs at an affordable cost
- Improve soil management and fertility
- Continue proper management of trash (plastic bags)
- Promote the safe use of chemicals
- Conduct awareness-raising on the negative impact of pesticides in tea production and enforce related regulations

Environmental and social impact assessments

- Expect the government to enforce such assessments but at lower cost
- Reduce the cost and duration of environmental and social impact assessment procedures

Renewable energy

- Promote biogas production of the waste from a cassava starch factory
- Promote use of solar panels

Best practices

- Develop and scale up best practices, such as arabica coffee production sites, and expand plantation and forest restoration
- Conserve resources and promote the sustainable production and productivity, for example, through the conservation of benzoin resin sites, organic tea production, integrated farming, organic fertilizers and composting
- Train farmers to expand and improve productivity and yields while exploring options to link to ecotourism

- Improve productivity with suitable and economically viable crops
- Comply with national, regional and international standards, particularly those required by the Chinese market and the Lao government (after considering their economic viability)
- Adhere to carbon credit requirements with associated capacity-building

Constraints

Internal constraints

- High investment costs (for example, for rubber, biogas and compost production)
- Serious impacts of climate change on coffee productivity, with much lower yields and much crop damage and production losses
- Lack of technical skills or cooperation among local workers that are needed to follow technical guidelines or organic production to prevent pests and disease in fruit crops (for example, pomelo) destined for international markets
- Little sharing of knowledge and ideas with relevant government offices

External constraints:

- No technical support or information from the government on climate change, land and soil suitability and pest and disease outbreaks
- Lack of Lao standards or guidelines for rubber production
- Unclear requirements and processes for environmental and social impact assessments and related high costs, for example, USD 20,000 per year
- Limited capacity of a company to comply with environmental standards
- Lack of knowledge among some producers in targeted villages on the negative effects of chemical use on human and animal health and the environment
- Limited technical capacity of local government staff

C. Local development

Expectations and ambitions

Infrastructure

- Improve transparency, clarity and collaboration on local development initiatives
- Improve infrastructure development (year-round road access)

Collective action

- Strengthen local skills for timber production
- Increase the number of farmer members, improve group management and improve skills to increase benefits to farmers

- Improve working relations with producers, and increase efficiency of workers and production processes
- Strengthen governance (monitoring and transparency) of farmers' organizations

Livelihood diversification

- Support livelihood diversification with ecotourism and tea cultivation
- Provide technical training on composting
- Promote high-quality products, including through certification, for domestic and international markets, which should increase incomes and so contribute to rural development
- Diversify and increase incomes for farmers so that they don't change crops unexpectedly

Constraints

Internal constraints

- Limited financial resources to promote diversified activities
- Limited opportunities to expand investments
- High cost of maintaining road access to the villages

External constraints

- No clear guidelines available on how to promote local development
- Limited budget among local governments to support basic infrastructure in the project areas
- Hardly any access to soft loans

D. Benefits to the wider society

Expectations and ambitions

- Increase minimum salary to cope with inflation and rising fuel prices
- Clarify trade zones to prevent conflicts among companies over crop collection
- Diversify employment and income-generating activities for local people
- Improve technical skills and knowledge of farmers to offer better income or to attract and retain local workforce
- Continue to support social activities in target villages and maintain good relationships
- Solve the issue of farmers selling products to other traders who did not provide the farmers with the production inputs

Constraints

Internal constraints

- Difficulties to raise awareness and gain commitment of farmers on rubber production, leading to low productivity for a company
- Conflicts arising when different households aim to sell to different companies

External constraints

- Poor monitoring of side-selling and theft of rubber
- Social constraints caused by drug addiction
- Limited understanding of concession agreements within local communities
- Weak cooperation among farmers
- Limited understanding among farmers of the benefits of contractual commercial production, with the village authority unable to persuade villagers to work with a company



RECOFTC is an international nonprofit organization working towards a future where resilient communities with respected rights thrive in forest landscapes that they manage sustainably and equitably. We take a long-term, landscape-based and inclusive approach in supporting local communities to secure their land and resource rights, stop deforestation, find alternative livelihoods and foster gender equality. With more than 36 years of experience, we have built trusting relationships with partners from communities, governments, businesses, academia and civil society organizations. Our innovations, knowledge and initiatives enable countries to foster good forest governance, mitigate and adapt to climate change and achieve the UN Global Goals.

We operate in the Asia-Pacific region, with country offices in Cambodia, Indonesia, Lao PDR, Myanmar, Nepal, Thailand and Viet Nam.



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