Environment and agricultural investment in Lao PDR: An assessment of impacts, gaps and needs of agricultural investors, local authorities and communities affected by investments

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Selected List of Acronyms

BMZ	German Federal Ministry of Economic Cooperation and Development
CDE	Centre for Development and Environment
CSO	Civil society organization
EPF	Environmental protection fund
E-RAI	Environmental regulations and agricultural investment project
FDI	Foreign direct investment
FPIC	Free, prior and informed consent
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
LAK	Lao kip (currency)
LIWG	Land Information Working Group
MAF	Ministry of Agriculture and Forestry
MONRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
MRLG	Mekong Region Land Governance project
NUOL	National University of Laos
RAI	Responsible agricultural investment
SDC	Swiss Development Cooperation
TLIC	Turning Land Into Capital policy
UN FAO	Food and Agriculture Organization of the United Nations
VFI	Village Focus International
VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests within the Context of National Food Security

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1. Introduction

This report describes the current situation of environmental impacts arising from agricultural investments in northern Lao PDR (Laos), and identifies key gaps and needs of stakeholders for improved planning, management and mitigation of these impacts. At the same time, this report examines the level of awareness and understanding of investors, local authorities and communities regarding domestic laws and regulations governing environment and agricultural investments. Finally, the report provides recommendations for all stakeholders working towards more environmentally sustainable agricultural investment policies and practices in Laos.

The impetus for undertaking this assessment stems from concerns amongst multiple stakeholder groups – government, communities, civil society and development partners – about environmental mismanagement and impacts from agricultural investments in northern Laos. In particular, Laos' transition from subsistence to commercial agricultural production, combined with increasing areas of land under contract farming arrangements, has posed a challenge in terms of regulating investments and enforcing environmental standards. Within this context, the Lao-German Land Program initiated the E-RAI project[1] to examine the interrelated issues of environmental protection and agricultural investment, with a particular focus on land tenure security, across northern Laos. The E-RAI project analyses the cumulative environmental impacts of both land concession and contract farming investment models, and unpacks stakeholders' strategies and responses for managing or addressing environmental impacts.

The E-RAI project was implemented from July 2018 - February 2019 by a local civil society organisation (CSO), Village Focus International (VFI), supported by the GIZ Land Program in Laos on behalf of the Federal Ministry of Economic Cooperation and Development (hereafter BMZ), in partnership with the Lao Ministry of Planning and Investment (MPI), the National University of Laos (NUoL) and the Land Information Working Group (LIWG) Secretariat.

This report, which represents a key output of the E-RAI project, aims to provide an up-to-date overview of the different typologies of agricultural investment models in northern Laos, as well

[1] The 'E-RAI' project is an acronym for the Environmental Regulations and Agricultural Investment project.

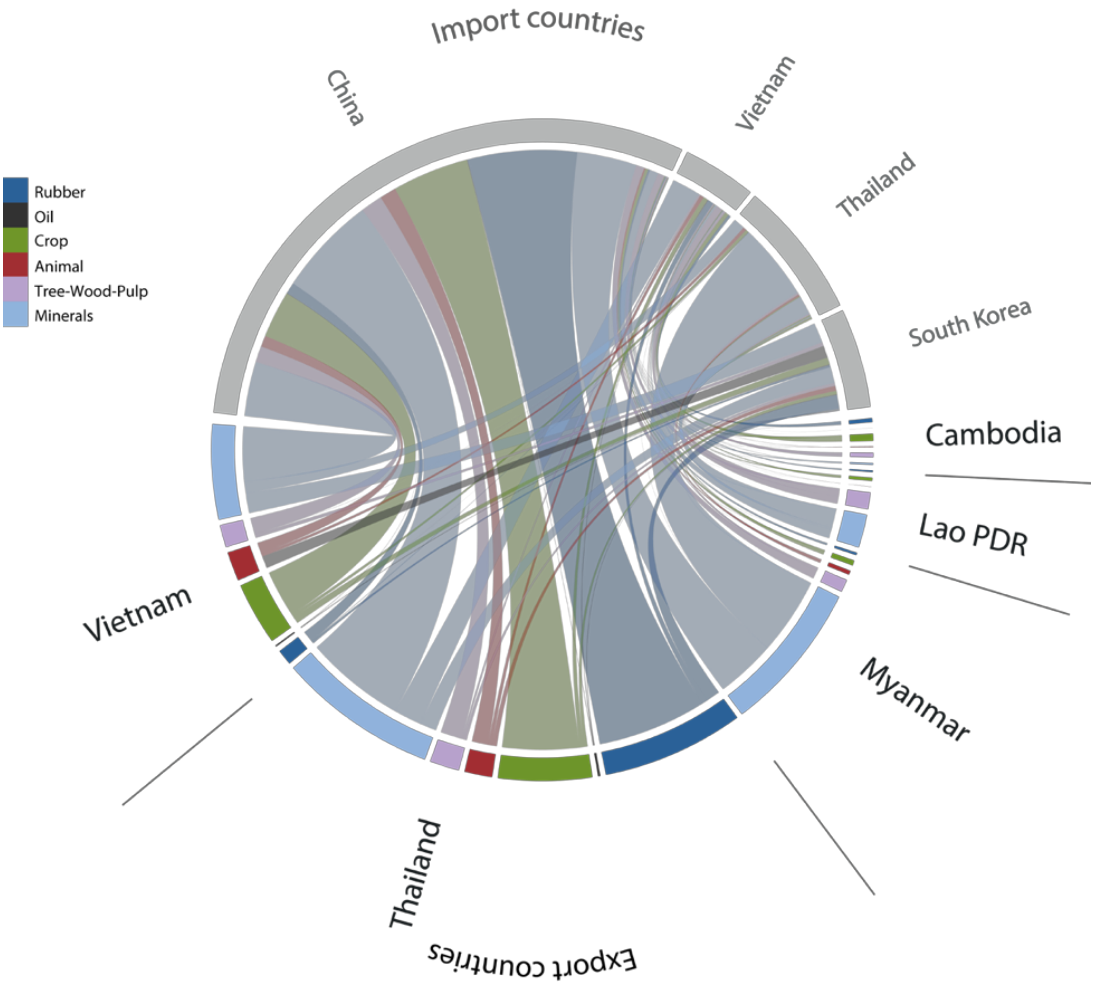
as identifying the key actors involved. By examining a variety of commercial crops across three northern provinces, this report aims to provide a detailed picture of how and why environmental impacts arise from certain agricultural investments, and to document the various responses and strategies of communities, investors and local government agencies to plan, mitigate and address environmental impacts.

1.1 Context of agricultural investment

Globally, investments in agriculture have grown over the past decade to keep up with rising demands for food, fuel, feedstock and specialty agricultural products. In the lower Mekong region (Cambodia, Lao PDR, Myanmar, Thailand and Vietnam), commercial agricultural investment in 'cash crops' has dramatically altered the landscape, bringing economic growth as well as negative social and environmental impacts. According to the Mekong State of Land report (2018), in the last decade, agricultural land across the Mekong region increased by more than 9 million hectares (~21 percent). This increase in agriculture has also ushered in a new era of monoculture cash cropping; six crops alone now account for 80 percent of all agricultural land in the Mekong region – rice, cassava, maize, sugarcane, rubber and oil palm (Ingalls *et al*, p.3).

An important dimension of the investment landscape in the region is the transboundary nature of trade and investment flows. China, Vietnam and Thailand function both as investors in agriculture and other land-based investments, as well as importers, processors and exporters of key agricultural commodities. China is, by far, the largest end-market for regional exports of agricultural commodities (see Figure 1 below).

Figure 1: Trade flows of key commodities across the Mekong Region



Source: Mekong State of Land Report Brief, 2018, p.7.

The ensuing debate about agricultural investments has been polarising, with many development institutions and civil society organisations arguing that large-scale agricultural investments often lack transparency, possibly violate human rights, cause social conflicts, environmental degradation and land loss for local communities (Cotula, 2016). On the other hand, proponents of agricultural investment highlight the potential for positive impacts such as economic growth, employment opportunities, technology transfer and increased productivity. Environmental issues have often been at the forefront of such debates, underpinned by key issues of land tenure security, environmental justice and natural resource rights.

In Laos, research on agricultural investment and environmental impacts has tended to focus on large-scale land concessions. National-level data on land concessions is available, for example, with a land concession inventory jointly compiled between 2007 - 2011 by the Centre for Development and Environment (CDE) and the then National Land Management Authority (NLMA) under the Ministry of Natural Resources and Environment (MONRE), with support from GIZ, the Swiss Agency for Development and Cooperation (SDC), and BMZ (Schoenweger *et al*, 2012)[2]. While this data is comprehensive, a key limitation is that it excludes all areas under contract farming. As a result, the national picture of agricultural investment - particularly in northern Laos, where contract farming dominates - is incomplete. This assessment aims to address this gap in the literature by examining *both* concession and contract farming models of agricultural investment within the context of domestic policies and regulations.

Readers should note that this report is complemented by the E-RAI Legal Analysis Report, which analyses and identifies gaps in the current domestic policy, legal and regulatory frameworks relating to agricultural and forestry investment, land and the environment. The team recommends these reports to be read in conjunction, as together these documents provide a dual policy-implementation perspective on the current situation.

1.2 Environmental protection and agricultural investment in Laos

In Laos, the Turning Land into Capital (TLIC) policy (*nayobay han din pen theun*) has been the driving force behind land-based investment over the past ten years (Dwyer, 2007). Under the TLIC policy - which was not formalised into one policy document but is mentioned in several policy documents - Laos increasingly opened the door to foreign direct investment (FDI), especially land-based investment. Promoting private sector investment has remained linked to the national government's goals of poverty reduction and socio-economic development. Since the introduction of TLIC, land-based investment (agribusiness, hydropower, mining, infrastructure) has increased rapidly. While domestic investment accounts for approximately 30 percent of investment in Laos, the majority of investors are regional investors from China,

[2] While this inventory includes all land concessions for plantations, mining, hydropower and infrastructure projects, this report focuses only on agricultural investments.

Vietnam, Thailand and South Korea, together accounting for 60 percent of total concessions in Laos (Ingalls *et al*, 2018).

While these investments have brought economic growth, some rural communities have also experienced adverse environmental impacts, such as soil erosion and degradation, air pollution, and contamination of soil and water sources by agro-chemicals. As noted by The World Bank (2017), the transition of Laos' agricultural sector from smallholder subsistence agriculture to greater commercial orientation has "posed increasing environmental and community health risks in rural areas caused by the expanding use of chemicals fertilizers and the pesticide trade" (p.73).

A key focus of Lao economic and trade policy-makers in recent years has been on improving the investment climate, after Laos continued to perform poorly in the Ease of Doing Business rankings, falling continuously from 134th place in 2014 to reach 141st out of 190 economies by 2017. Despite a highly challenging environment for private sector enterprises, strong natural resource-based economic growth has occurred, driven by increasing investment in extractive industries. However, the constraining business environment has contributed to limited job creation in non-resource sectors, which are critical to generating employment and entrepreneurial opportunities (*ibid*). Further, the 2016 Enterprise Survey identified that "informal practices"[3] such as non-compliance with laws and regulations, as well as widespread tax evasion, remain some of the biggest problems reported by firms in the country (cited in The World Bank, 2018). In an effort to address these barriers, the government of Laos has taken several steps towards improving the business climate. The Ministry of Planning and Investment (MPI), for example, has been designated as the lead Ministry to improve the ease of doing business in Laos, in line with a recent Prime Minister's Order (February, 2018/PMO 02) that aims to streamline procedures and strengthen coordination mechanisms amongst departments in order to facilitate business. The government has also announced a goal to improve Laos' ranking in the Ease of Doing Business Index to a two-digit ranking by 2020 (The Vientiane Times, 24 September, 2018).

Specifically for land-based investment policies, public statements made by the government indicate a shift away from promoting large-scale land investments (i.e. – land concessions)

[3] The report notes that there are four main types of problematic informality in Laos' business sector - see Section 5 for further details.

towards encouraging potentially more inclusive investment models, such as smallholder land leasing (1+4), contract farming (2+3), and Outgrower schemes. While 'Outgrower scheme' is a relatively new term in Laos, these models have the potential to be more inclusive than land concessions, by sharing risks inherent in agricultural production and avoiding a permanent transfer of land and resource rights (Sylvester, 2018, p.30). The shift away from large-scale land concessions towards more inclusive, smaller-scale models is also supported by article 12.6 of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (commonly known as the VGGT), which states that governments "should encourage [investment] partnerships with local tenure right holders".

At the same time, the government of Laos has taken steps to address negative environmental impacts arising from investments, including agricultural investments.[4] At policy-level, this is indicated by several new policies and strategies containing provisions for promoting "green growth", "quality investment", "green agriculture" and promoting industrial plantations as part of the regeneration of forests to achieve 70 percent forest cover. At the same time, several key pieces of legislation have been recently drafted and / or revised, including the Decree on Pesticide Management (2017), the Investment Promotion Law (revised in 2016) and the Party Resolution on Land Management (2017).

One of the ways the government of Laos has responded to negative environmental impacts is by banning or placing temporary moratoriums on certain commercial crops. For example, Prime Minister's Order No. 013 (2012) placed a moratorium on rubber and eucalyptus concessions, while A Prime Minister's Order in 2017 placed a ban on investment in banana plantations in six northern provinces. (A following Prime Minister's Order in July 2018 allowed expansion of organic banana plantations). While this action is well-intentioned, an unintended effect is that it creates an ever-changing and potentially confusing legal and regulatory landscape, which may damage investors' and smallholders' confidence to invest long-term in sustainable commercial agriculture. The national order prohibiting investment in banana plantations (2016), for example, led to some banana investors simply 'disappearing', leaving some contract farming communities to deal with a host of environmental damages to soil and water, as well as lost sources of income. These communities have first-hand experience with a significant gap identified in the

[4] 'Agricultural investment' refers to commercial agriculture, including agro-forestry, tree plantations, and crop production. Agricultural investments in livestock (meat and dairy production) and aquaculture were excluded from this assessment.

legal framework: there is currently no domestic law on contract farming. There is a Law on Contracts (No.01/NA, 2008) but it does not specifically cover contracts for agricultural production between producers, traders and / or investors. See the E-RAI Legal Analysis Report for further discussion.

Figure 2. Jin Shui banana plantation in Houn district, Oudomxay province.

Source: Soulinda Manysoth

Finally, while this report and the E-RAI project focuses on agricultural investments, it is important to note that agriculture and forestry sectors worldwide generally lag behind extractive industries in terms of environmental safeguards and standards. In Laos, the hydropower and mining sectors have long-established standards, including the Standard Environmental and Social Obligations, or SESO, developed by the Ministry of Natural Resources and Environment

(MONRE), which forms the basis for project-specific environmental and social obligations[5]. The SESO requires project developers in Laos to meet a host of obligations, including to develop and implement an Environmental Management System in accordance with ISO 14001, as well as providing adequate budget for environmental and social monitoring by MONRE and other government organizations (MONRE and EMSP, 2015). While standards for environmental sustainability and environmental management systems have been put in place by some multinational agribusinesses operating in Laos, however studies show that many more transboundary investors are not yet meeting international standards (see, for example, Kenney-Lazar, 2016; Baird & Barney, 2017; Sylvester, 2018).

2. Methodology

2.1 Overview

The field research for this assessment was conducted in three northern provinces between 29 October - 17 November 2018. VFI collaborated and conducted research together with a small team from the Faculty of Economics and Business Management (FEB) at the National University of Laos (NUoL), with MPI line agencies, and with support from the GIZ Land Program in Laos. This research comprised fieldwork in Luang Namtha province (Sing and Long districts), Oudomxay province (Houn district) and Houaphan province (Viengxay district).

The research methodology was largely qualitative, using semi-structured interview questionnaires and focus group discussion guides. Formal workshops were held with Province and District agencies, namely PPI, PAFO, PONRE, POIC and DPI, DAFO, DONRE, and DOIC. Informal workshops were held with communities affected by agricultural investments, including (when possible) men's, women's and village authorities' focus groups. In-depth semi-structured interviews were held with nine agricultural investors (see Section 3 below for selection criteria of investments)[6], which were selected in consultation with MPI and its line agencies. This data

[5] The SESO should supplement specific requirements in individual concession agreements. In principle, SESO can apply to concessions for agricultural investments, but in practice these are mainly applied for energy-related concession agreements.

[6] Note that in this report, agricultural investors are alternatively referred to as companies or agribusinesses - 'investor' in this report does not mean an institutional investor, rather an enterprise that is acquiring rights to use or own land and resources.

collection was supplemented by quantitative data on investment trends, consumption patterns, land area, and demographic data at village level.

The **key stakeholder groups** involved in the fieldwork are:

- Communities (villages or cluster of villages) affected by agricultural investments;
- Private sector representatives: agricultural investors and agribusinesses, both foreign and domestic, including concession, smallholder-led and contract farming models; and
- Provincial and district government agencies.

See Section 3 on 'typologies of agricultural investment' for further descriptions of each agricultural investment included in the study. See Annex 1 for a summary of stakeholders involved in the study.

2.2 Objectives and Research Methods

The overarching objectives of the assessment were three-fold:

1. Assess stakeholders' (local government, agricultural investors and communities) awareness, perceptions and understanding of domestic environmental legislation related to agricultural investment in Laos;
2. Identify the key environmental issues according to local government, agricultural investors and communities, and;
3. Identify the gaps and needs of agricultural investors, communities and local authorities to manage or address environmental impacts related to agricultural investment.

The qualitative research tools were jointly developed by VFI and NUOL teams, and were structured around **three thematic areas**:

1. Access to and provision of information about regulations, laws and environmental impacts of investments;
2. Understanding and awareness of environmental issues (including laws and regulations) related to agricultural investment;
3. Stakeholder groups' (local government, agricultural investors and communities) strategies to cope with or resolve environmental issues, both together and individually.

A number of **sub-themes** were also identified and integrated into the data collection tools:

- Stakeholder engagement

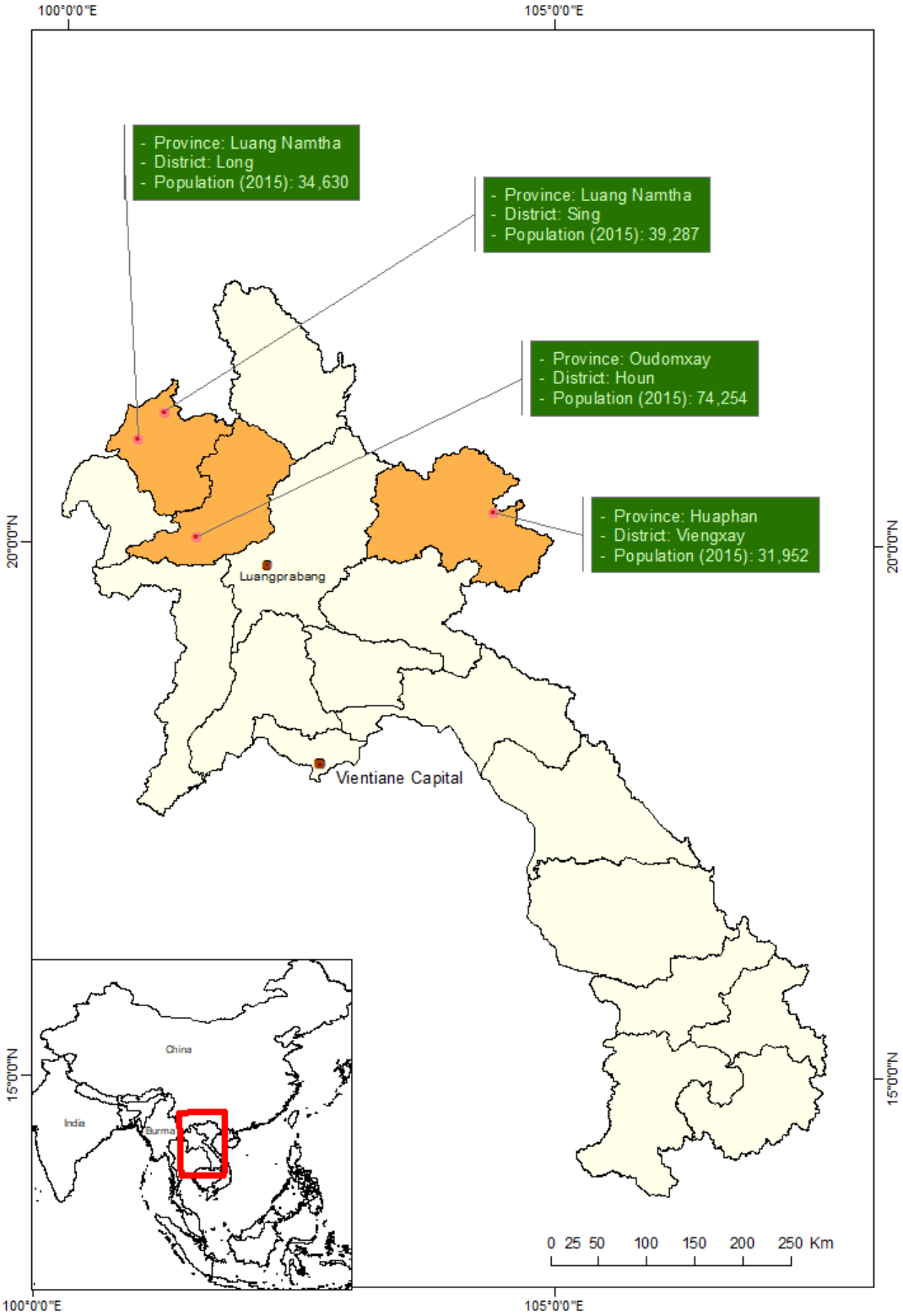
- Monitoring and reporting
- Conflict mediation and grievance resolution

Some of the key **guiding research questions** that this study attempts to answer are:

- Are key stakeholders (agricultural investors, government, communities) able to easily access information about environmental laws, regulations and impacts? If so, how is this information provided?
- To what extent are stakeholders aware of and understand domestic laws and regulations relating to the environment and agricultural investment?
- Are key stakeholders, especially investors, aware of any environmental impacts created by agricultural investments?
- What are the main strategies and responses of stakeholders to manage or address environmental impacts?
- What interventions should be prioritised to improve stakeholders' awareness and understanding of environmental laws and regulations? What interventions are needed to mitigate or resolve negative environmental impacts arising from agricultural investments?

2.3 Fieldwork Sites

The map below shows key information from the provinces and districts included in fieldwork for this assessment.



Source: Open Development Laos based on fieldwork data from Village Focus International.

2.4 Limitations

The limitations of this fieldwork varied depending on the province. Interviewees' availability was a challenge in all research areas, as some private sector representatives were not available due to other business commitments, while availability of community members was also sometimes constrained due to livelihood commitments, particularly harvesting. Women especially had a heavy workload which sometimes prevented them from attending focus group discussions. As a result, while the research team strove to achieve even representation from men and women in focus groups, male participants often outnumbered females. Business confidentiality presented another challenge, as some companies were unwilling to share some key investment documents or certain details about their investment arrangements. As such, the research team could not verify the reliability of some information and data that was shared during interviews.

Another limitation is that the research did not interview 'middlemen' (*nai na*), who play various roles in contract farming arrangements, such as a broker, 'paperwork manager', collector or trader of commodities. Middlemen are important actors which have nonetheless proved difficult to 'pin down' for interviews due to their flexible working schedules and rather opaque nature of their role(s). Further research on contract farming investments should aim to capture more data (especially micro-economic data) to investigate the role(s) and responsibilities of middlemen in agricultural investment.

Language barriers presented a key issue in Luang Namtha specifically. All investors interviewed were Chinese, and in some cases, this caused significant communication issues that impacted upon the useability of information from interviews. While all companies interviewed had a staff member who could translate between Chinese and Lao, these staff members did not have fully fluent language skills and were not professional translators, meaning that gaps in information and understanding still existed. Further, these translators often were neither in a management position in the company, nor in a technical position, meaning some information provided is questionable in accuracy due to their lack of understanding of the subjects discussed.

On the community side, all villages interviewed in Luang Namtha were from the Akha ethnic group, and therefore most community members did not speak Lao language. The research team had to either rely on the Village Head (*Nai Ban*) or another community member to translate, or, in some cases, the DPI representative accompanying the team. As a result, most information received in community focus groups was filtered -- either through a community

member or an authority figure. The team is therefore not confident that the information translated is an honest representation of what community members spoke about amongst themselves before translation, or whether some opinions were left out. Language barriers presented a particular concern in women's focus groups in Luang Namtha, since ethnic women generally have lesser Lao language capacity compared to men. Women participants were therefore selected by village authorities partially by their ability to speak some Lao language. While this pre-selection facilitated communication to some degree, it also meant that some female focus group participants were not engaged in agricultural investment, but rather held other positions of authority.

See Annex 2 for a sample semi-structured questionnaire used by the research team for interviews with communities, agricultural investors, and local authorities.

3. Typologies of Agricultural Investments

The table below summarises the nine agricultural investments examined during the fieldwork. Fieldwork site selection was based on the following factors: location (limited to three northern provinces), crop type (limited to commercial crops), type of land lease (contract farming, land concession[7], and / or a mixture of these types), size (area), and investor origin (either domestic or foreign).

These investments were purposefully selected to ensure a representative sample of different types of land tenure arrangements, a variety of commercial crops, varying investment sizes and a diversity of investors operating across northern Laos.

[7] A land concession is the process of giving authorization to individuals or legal entities to operate business with the right to use state land, based on terms and time limit specified in the contract (Decree on State Land Lease or Concession, No.135/PM, 25 May 2009). For simplicity, concessions and land leases are often referred to as 'land deals.

Company Name and Details	Type of Investment	Main Product(s)	Size	Location
Houaphan				
Yuni Coffee Company. American-owned agribusiness (small enterprise) operating since 2015.	Contract farming (2+3 model with limited inputs)	Coffee	Contracts with 2 villages, informal agreements with 6 others	Xon and Viengxay Districts. HQ in Sam Neua District.
Huathon Agriculture Promotion Company. Lao-owned agribusiness (small enterprise) operating since 2003.	Concession	Coffee (previously maize)	15 ha.	Viengxay District. HQ in Sam Neua District.
Huaphan Trading Company. Joint venture between Lao provincial government (30%) and private Vietnamese investors in Hanoi (70%). Small-Medium Enterprise, operating since 1990s, Lao-government owned since 2014.	Contract farming with “rights to harvest bamboo” quota agreement / allotment from the provincial government	Bamboo (some maize & soybean)	Bamboo collection agreements with 8 villages.	Across Houaphan Province, a factory in Viengxay District, and HQ in Sam Neua district. Processing factory in Hanoi.
Luang Namtha				
Nying Mao Company Chinese company with headquarters in Yunnan operating in Laos for 18 years.	Contract farming (2+3), and an agreement with district government	Sugarcane	6,000+ hectares	64 villages in Long and Sing districts

Sip Song Pan Na Recently established Chinese-owned company beginning operations in Luang Namtha.	2+3 contract farming Agreement with PPI and DPI	Livestock and fodder grass	2,000+ hectares -- unclear how much is currently under development	Sing district
Theu San Chinese-owned company established in 2008.	Smallholder land leasing (1+4)	Rubber	565 hectares across eight village clusters	Long district, with potential expansion to Oudomxay province
Suan Yi Chinese-owned company operating in Long district since 2005.	Contract farming. The company takes 70 percent of profits from latex, with communities taking 30 percent.[8]	Rubber	300+ hectares in one village	Long district
Oudomxay				
Jin Shui Chinese-owned banana company with parent company, Kinana, operating in Yunnan.	Smallholder land leasing (1+4) and a concession agreement with Provincial government	Banana	1,057 hectares, with 821 planted.	Planted in 4 villages in Houn district, with an agreement signed in a 5th village and plans to plant soon.
Jian Fong Chinese-owned rubber company operating since 2003.	Contract farming (2+3), under a 60 (company) / 40 (community) profit sharing arrangement[9]. High-level agreement between Chinese and Lao governments.	Rubber	8,300 hectares originally planted, approx. 4,000 hectares currently left.	Originally 40 villages, now 25 villages in Houn district, 5 villages in Bang district. Parent company in Yunnan province.

[8] One 2008 study on rubber farming in Luang Namtha outlined this model as standard in the province, saying the province promotes a 2+3 contract farming mechanism, with 70-30 profit shares (Shi, 2008).

[9] After the community attempted to break the contract with the investor due to lower than expected profits from falling rubber prices, the company and communities re-negotiated for communities to receive 100 percent of the profit. This process is ongoing, with local government moderating. The company reported, however, that if rubber prices increase, they intend to return to the 60-40 model.

4. Key Environmental Issues by Province

This section provides a brief overview of the demographics, geography and agricultural investment context of each province, and highlights key environmental issues in each of the three provinces.

Houaphan Province

Houaphan province is divided into ten districts and is extremely mountainous, with an average elevation of 1,000 meters. Houaphan is also famous for its caves in Viengxay District, which played a key role as the base for the Pathet Lao revolutionary leaders during the 1960s-70s. The province is home to many ethnic groups, including Lao-Tai (Lao, Tai Dam, and Tai Deng), Mon-Khmer (including Khmu, Xingmoun, Phong and Mouy), and Hmong-Mien (including Hmong, Iu Mien), most of whom rely on agricultural land and forest resources for their livelihoods. Agriculture is the main livelihood activity in the province, primarily upland rice and cash crops such as maize, cassava and coffee, since suitable land for paddy rice is limited.

The landscape in Houaphan is a mosaic of forest and agricultural lands. A 2015 land cover classification of the province shows forest covering 92.7 percent of the province, with 39.4 percent of this area classified as "regenerating vegetation"[10] (PAFO Houaphan, 2017). Few industrial forest plantations exist in Houaphan, compared to other provinces in northern Laos. Cash crops cover approximately 36 percent of the total agricultural area. Maize is the most abundant cash crop in Houaphan, with other crops such as coffee, cassava, jatropha, teak and rubber cultivated on a much smaller scale.

Since 2005, upland maize production coupled with government efforts to eradicate shifting cultivation practices have dramatically changed the landscape. Cultivation of maize as a cash crop is generally done under contract farming arrangements (2+3) with domestic or Vietnamese maize collectors / traders, or smallholder-led (i.e. - farmers supply all land, labour and agricultural inputs). In some cases, maize has also been replacing subsistence upland rice farming. Although maize production has had temporary livelihood improvements through greater access to cash, longer-term negative environmental impacts such as soil degradation and

[10] "Regenerating vegetation" is a key forestry term used in Laos: this describes areas which do not currently meet forest cover definition but are expected to regrow to standing forest.

deforestation have also been documented. In general, fieldwork findings indicate that pesticide use is low due to strict local government enforcement. Maize in Houaphan is produced, harvested, dried and de-husked at the village level, and sold to traders / collectors who then sell to buyers in Vietnam. A maize value chain analysis by the Wildlife Conservation Society (WCS) in 2015 showed that most maize is processed into animal feed in Vietnam, and major buyers of maize in Vietnam include giant conglomerates such as Cargill and Charoen Phokpand (CP). It is likely that demand for maize as animal feed will continue to grow as meat consumption - especially of pork - in both Vietnam and China is increasing.

Luang Namtha Province

Luang Namtha province is divided into five districts and borders both Myanmar and China externally, as well as Bokeo and Oudomxay provinces in Laos. Luang Namtha's 953,383 hectares are predominantly mountainous, and the province is a popular eco-tourism destination for that reason. Luang Namtha is a primary producer of both rubber and sugarcane, both of which have expanded rapidly since the early 2000s (PAFO Luang Namtha, 2017). The province has vast ethnic diversity, with roughly twenty ethnic groups present. Around 89 percent of households in Luang Namtha were employed in the agriculture sector in 2011 (PPIO, 2015), higher than the national average of 72 percent, as calculated in the 2015 census.

Gross forest cover in Luang Namtha has decreased significantly due to expansion of agriculture -- at an average rate of 8,705 hectares per year between 2000 and 2015, according to Department of Forestry statistics (PAFO Luang Namtha, 2017). Forest cover as of 2015 stood at 89 percent of the province (846,571 hectares), of which roughly 31 percent was regenerating vegetation, as a result of shifting cultivation undertaken by most of the population (Luang Namtha PRAP, 2018). Deforestation from 2005-2015 mostly occurred in the study areas of Sing and Long district, as well as in Namtha district, all of which are close to the Chinese border.

In the early to mid 2000s, rubber investments -- both led by smallholders and foreign investors, mostly Chinese-- boomed, as a result of both Lao and Chinese government policies. In Laos, the provincial government promoted investment in rubber as an alternative to shifting cultivation, and as a way to increase farmers' incomes. In China, very little land for rubber expansion drove rubber investors abroad, and those companies were given incentives and subsidies through the Opium Replacement Special Fund (Shi, 2008). Like most boom crops, rubber experienced a cycle of boom and bust in Luang Namtha. At their highest point, rubber prices reached roughly

14 Chinese yuan (CNY) per kilogram around 2009-2011, dropping below 3.5 CNY in 2014 (Vongvisouk & Dwyer, 2016). Proximity to China, and the prevalence of Chinese rubber investors in Luang Namtha, made smallholders particularly dependent on the Chinese rubber market. As prices dropped, many farmers stopped planting rubber or tapping existing trees. Conversion to other crops, largely banana, also took place, although the provincial government unsuccessfully tried to dissuade farmers from converting rubber land (Vongvisouk & Dwyer, 2016).

Following the banana ban in multiple Lao provinces in 2017, many banana companies left Luang Namtha, leaving large swaths of trees in their wake. At present, some previous banana land has been cleared and turned into other crops (such as sugarcane, rubber or maize), while other areas are still home to unmaintained banana trees and their accompanying plastic waste.

Oudomxay Province

Oudomxay province is divided into seven districts, and shares an internal border with Phongsaly, Sayaboury, Luang Prabang, Luang Namtha and Bokeo provinces. Oudomxay also has a 22.5km border with China in the north. According to provincial estimates, forested land covers approximately 91 percent of total land, of which about 48 percent is classified as 'regenerating vegetation' (PAFO Oudomxay, 2017). A Provincial Governor Order No. 90 (2014) supports the province´s intention to safeguard forests, biodiversity and natural resources. The Order was intended to restrict encroachment into conservation and protection forests, promote practices to limit forest fires, and strengthen forest law enforcement.

The majority of the population relies on subsistence agriculture, primarily shifting cultivation for upland rice and other crop cultivation. A 2015 land cover survey noted that agriculture covers almost seven percent of the land, comprising a mix of rubber, banana plantations, rice (upland and paddy), maize, sugarcane, Job's Tears, coffee, beans and sesame, among other crops. According to Provincial statistics, maize is the most abundant cash crop in the province - Oudomxay is the second-largest producer of maize in Laos. In Oudomxay, maize is primarily cultivated under contract farming arrangements (2+3) and exported to China to be processed into animal feed for livestock.

Additionally, rubber plantations expanded in Oudomxay province in recent years, particularly in Xay, Beng and Namo districts. Commercial rubber plantations are mostly under contract farming

arrangements, either 1+4 or 2+3, with smallholders and companies splitting the profits according to an agreement (usually either 60 percent (smallholder) and 40 (rubber company) or 70/30). However, low market prices for latex combined with a moratorium on new rubber concessions (Prime Minister's Order No.13, 2013) are expected to curb rubber cultivation in the future.

Finally, particularly in Houn district, there was previously rapid expansion of banana plantations under smallholder leasing arrangements (1+4). Banana plantations also occupy some of the most fertile agricultural lands in the province. Negative social and environmental impacts of banana cultivation - especially caused by improper use of agro-chemicals - led the provincial government to stop issuing new investment permits for planting banana, which laid the foundation for the Prime Minister's ban (Prime Minister's Order No. 483, March 2017) on the establishment of new banana concessions and a plan to phase out banana production in six northern provinces (Phongsaly, Luang Namtha, Bokeo, Oudomxay, Luang Prabang, and Sayaboury) and Vientiane province.

5. Results of the Assessment

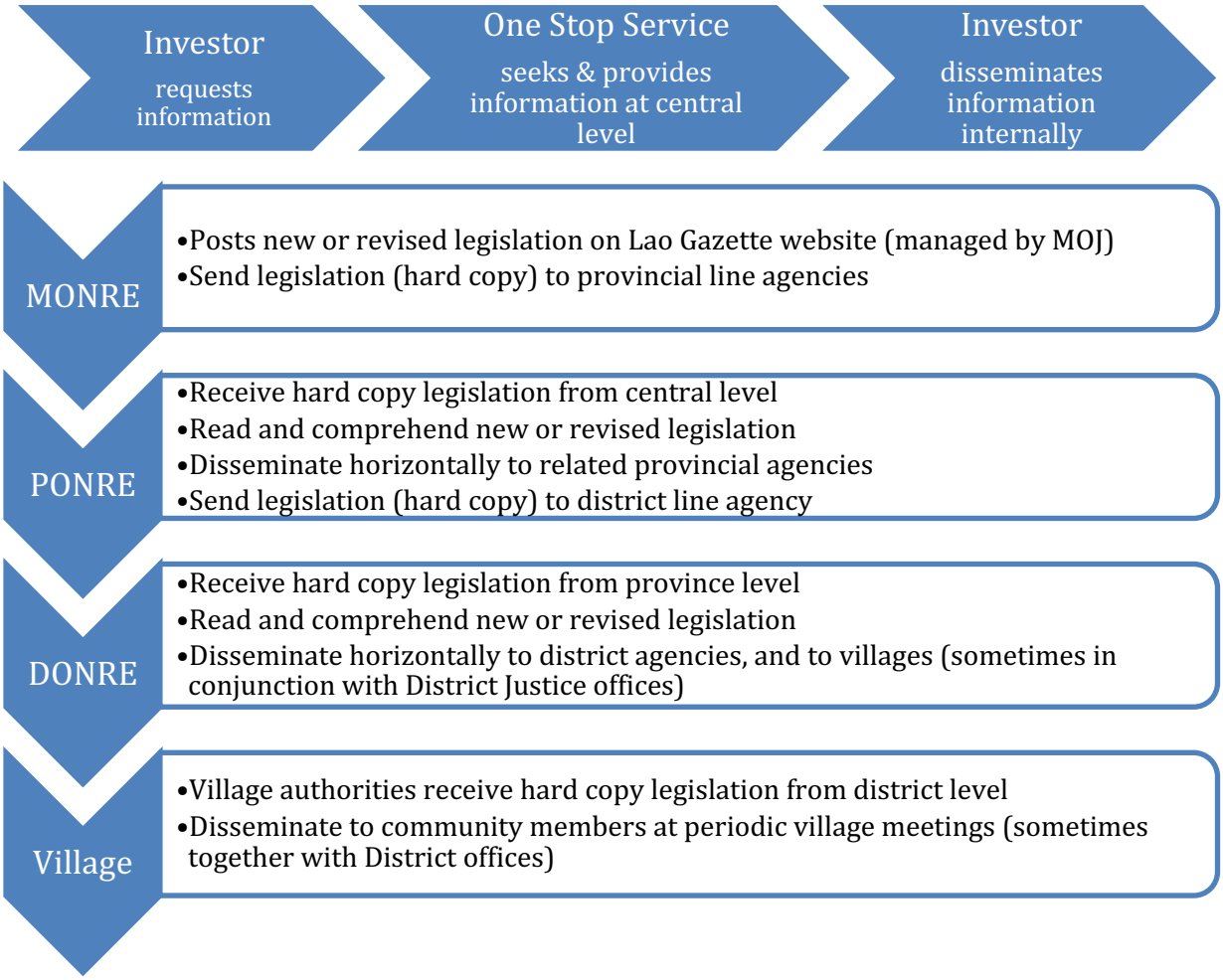
This section synthesises key findings and results from fieldwork across three provinces. This section is structured around the three themes outlined above, and also highlights responses by stakeholder groups to address or mitigate key environmental issues.

Theme 1: Access to, and Provision of, Information on Environment and Agricultural Investment

Strengthening communication channels for updated legal information

A key finding regarding legal information provision and access is that the main channels for receiving and sharing information differed depending on local contexts. The flowchart below summarises the requirements for information provision (in this case, for updated environmental legislation affecting investments) as enshrined in Lao laws:

Diagram 1: Process of Updated Legislation Reaching Investors and Communities



Source: analysis of domestic laws and regulations by the research team[11].

Some key gaps identified in the communication process are outlined below:

- There are no timeframes specified for dissemination of new or revised legislation;
- There is no guidance on effective *methods* of legal dissemination – for villages, using communications tools such as infographics may aid understanding of complex legal information;
- It is unclear in the laws whether (or how) local levels can ask clarifying questions after receiving details of the legislation; and
- Requirements for a two-way information flow between the central One Stop Service and investors could be strengthened – at present, it is unclear how legal information should be proactively disseminated to investors at provincial and district levels.

[11] See Annex 4 for the full list of legislation governing legal information dissemination at all levels.

While this flowchart shows the information dissemination process as outlined in Lao laws, assessment of the on-the-ground situation showed somewhat different processes. Some provincial agencies reported that they most often sought information directly from websites, such as the Ministry sites or the Lao National Gazette, as dissemination of new legislation from central level "may take several months". Although the Division of Information in each local agency should nominally hold all relevant laws and regulations relevant to their sector, interviews with local government agencies indicate that these laws are not regularly updated following the process above. The vertical coordination amongst central, provincial and district levels could be strengthened to ensure that consistent, accurate and full information is received and can be passed on to communities and investors in a timely manner.

Access to environmental information for communities

Some areas of unclarity were identified in the methods for providing information to communities about agricultural investments and the potential environmental risks. Firstly, there was inconsistency amongst agencies regarding how (and how much) information should be provided to communities about a proposed agricultural investment. Although communities are required to be informed of environmental risks by the "project developer" during the ESIA process[12], there are currently no requirements for ESIAs for contract farming models, even if it covers a large area of land. As such, there are no clear requirements for information disclosure by investors to inform contract farming communities of potential environmental risks or hazards.

Secondly, the responsible party for delivering environmental impact-related information also varied according to agency (and province) – some officials stated that investors should be the ones to provide information to villages, while others stated that it was the role of their agency to provide such information.

Finally, following the legal procedures for legal dissemination does not guarantee that communities will understand the content. In many villages in Luang Namtha and Oudomxay provinces, community members recounted that district government had visited to disseminate information on laws or agriculture, in most cases several years ago. While a handful of villages

[12] According to Ministerial Instruction on the Process of Environmental and Social Impact Assessment of the Investment Project and Activities (No. 8030/MoNRE, 2013), which specifies that "project affected persons" should be consulted during the ESIA process.

could recount the general topic that was discussed (for example, pesticide use, and land use planning), most villages could not remember exactly the information that was presented to them. Women in one village in Oudomxay province recalled a government official coming to read a law “about the environment” out of a book. They did not understand the content at the time, nor remember much about what was told to them. As noted above, efforts should be made to ensure that information disseminated to communities is culturally and linguistically appropriate, using communications tools where possible, and that information provision is ongoing.

Legal information and advisory services for investors

Few investors reported major issues in accessing legal information. Most investors received relevant new laws or regulations directly from district contacts, albeit in Lao language, which posed a linguistic problem for some foreign investors. In Luang Namtha province, one official at the Planning and Investment Office took on the responsibility of trying to translate legal and awareness materials into Mandarin, which he spoke after learning abroad in China. Companies called him for advice frequently, and he reported that, while he tried his best to manage the needs of Chinese investors and effectively communicate with them, he requires more human and technical resources to effectively provide all the information needed. In both Luang Namtha and Oudomxay provinces, Chinese investors interviewed reported not being able to understand some communications in Lao language from government, and they employed a myriad of improvised strategies (such as relying on students to interpret), which created an uncertainty as to whether they were strictly complying with the legal requirements for investors in Laos.

Linguistic Barriers to Accessing & Providing Legal Information

One Chinese company in Luang Namtha had a stack of papers sent from government, written in Lao language, that they did not understand and, as a result, did not address. This same company shared that they have “no reporting requirements” to the government, however a district government official corrected them, saying their office has been informing the company it is overdue in submitting a report. No one at the local DPI office spoke Mandarin, and the company’s translator was unable to read and write Lao language. Linguistic barriers cannot be separated from the issue of foreign investors’ access to and understanding of environmental regulations – this practical issue requires further policy attention.

For a coffee investor in Houaphan province, a major issue was the limited environmental advisory services available for investors setting up businesses in Laos. Local consultancy

services for legal and practical advice, particularly on environmental standards and legalities, were limited or expensive for some Small-Medium Enterprises (SMEs) to access. The investor suggested that increasing the accessibility to these services - whether by a private sector legal firm or a CSO - would help prospective investors better understand and adhere to environmental regulations as well as ease the burden of establishing a new business under Lao laws.

"Informal practices" outside the legal framework

Another key informational issue for investors related to "unforeseen costs". These costs - which come in a variety of forms requiring fee payment - are not enshrined in laws or regulations and so cannot be accurately predicted, yet several investors noted that these 'informal practices' are a routine part of doing business in Laos.

The World Bank's 2016 Enterprise Survey, for example, identified "practices of firms in the informal sector" as the biggest problem reported by firms operating in the country, and notes that addressing these and other challenges will be critical to generate inclusive growth. A follow-up report by The World Bank in 2017 found that there were four main types of "problematic informality" in Laos' business environment:

- inadequately registered enterprises that "fly under the radar";
- widespread tax evasion;
- irregular adherence to complex and burdensome regulations; and
- a culture of noncompliance with basic rules and standards (*ibid,* p.1).

In line with fieldwork findings of the E-RAI team, the World Bank goes on to recommend "eliminating unnecessary regulations and streamlining others" as well as increasing transparency and consistency in the tax and regulatory systems, and improving monitoring and evaluation practices. See Section 6 (Recommended Next Steps) for further elaboration.

Theme 2: Awareness and Understanding of Environmental Laws and Impacts Related to Agricultural Investment

Effects of new regulations on the private sector and communities

Some agricultural investors noted that domestic regulations governing agricultural investments were restrictive, contributing to a difficult investment climate. In particular, investors emphasized

that banning, placing moratoria or restricting certain agro-forestry products (i.e. – PM15, PM13) had a range of unintended negative effects on their business. For example, PM15, which banned timber exports, has many positive effects on reducing illegal logging and unsustainable forestry practices, with World Wide Fund for Nature (WWF) reporting significant improvements in law enforcement and a 90 percent drop in the export of logs from Laos to Vietnam between 2015 and 2018 (Mongabay, 28 December 2018). However, one investor noted that the company has experienced lengthy delays in exporting processed bamboo, as customs officials were reluctant to make an authoritative decision about whether bamboo fell under the restrictions of PM15.

Figure 3: Semi-processed bamboo in Houaphan awaits approval for export to Hanoi

Source: Justine Sylvester.

In Oudomxay and Luang Namtha provinces, interviewees confirmed that following the 'banana ban', several banana investors (Chinese-owned companies) had left the province, leaving behind office equipment, empty buildings and trucks as well as debt, plastic waste, wastewater ponds and degraded land riddled with banana tree stumps. In Luang Namtha, communities had subsequently cleared the land to replace it with another cash crop, or for new banana seedlings

to regrow. Communities interviewed explained that the companies had “disappeared”, often without making final payments to farmers. Only one village reported being informed by district officials about the new policy, while other communities were not aware that this was a widespread government initiative, rather than an individual company’s choice.

It is not clear yet how reparations will be sought for the environmental and livelihood damages left in the wake of the ‘banana ban’, nor which crop will fill the economic gap. This concern was recently echoed by some Provincial Assembly members, who noted that local authorities have found it difficult to implement the moratorium, citing widespread contract farming arrangements between investors and farmers, which “require detailed measures to manage” (The Vientiane Times, 8 January, 2019).

Figure 4 - Community members in Sing district, Luang Namtha, clear land following ‘disappearance’ of banana investors

Source: Christina Cilento

Consultation with local stakeholders

Some investors suggested that the private sector should be consulted during development of legislation that may affect them. Many investors were not aware that public comment is required by Lao law (Law on Making Legislation, NA/019, 2012), suggesting that more outreach needs to

be done by policy-makers when developing legislation, to ensure this does not unduly constrain the private sector, including agricultural investors.

Similarly, some district officials noted that legislation was often made without consulting them, resulting in laws that did not fit with their local context and were difficult to implement. In one interview, a local official noted that “in the Land Law there are only three types of land identified, but in practice there are many more types of land… the people who released this kind of policy have not been to the actual province so they don’t know the real situation!”

At the same time, investment decision-making for concession areas was usually made at central level. In some districts, PAFO and DAFO officials were then asked in turn to identify areas of ‘empty’ land that could be allocated to investors; this administrative responsibility often collided with on-ground-realities of customary land use. A Provincial official in one province further noted that although there is now a national Land Allocation / Land Zoning Master Plan, there is not (yet) a province-level equivalent in his province, nor do most districts have a land zoning master plan, which sometimes made it difficult to reconcile top-down decisions with local level realities.

In Luang Namtha province, while provincial authorities did report that both provincial- and district-level land use plans exist, they explained that the context of contract farming complicates adherence to these plans. In the vast majority of investments examined in this province, investors first went to communities to survey potential land, then returned to the province and/or district for approval. This approach meant that the government’s ability to adhere to land use plans is limited: *while the plan is top-down*, *the reality of contract farming often operates in a bottom-up fashion.*

Understanding and implementation of investment monitoring procedures

In recent years, efforts towards more robust monitoring of companies have been made by government and development partners in Laos, notably through the Quality Investment Promotion (QIP) program under the GIZ Land Program in Laos, as well as the Centre for Development and Environment (CDE) quality investment initiative. Local government agencies are mandated to provide support to companies to improve not only compliance with domestic laws but also to improve business practices, in line with national priorities and international standards for responsible agricultural investment.

There was a high level of understanding amongst local government about legal requirements for monitoring investment projects, with most officials able to outline the basic steps of environmental monitoring, namely:

- Due diligence before signing the contract (involving “a team of relevant agencies”);
- Monitoring during operations (to check if the investor is following the feasibility study and contract);
- Periodic environmental checks (conducted bi-monthly by environmental and natural resource offices at province and district levels); and
- Special checks if any incidents are reported.

Most district staff agreed that they had “enough knowledge and people” to conduct monitoring – however all emphasised that the budget they receive is not sufficient. Most district offices reported that they lacked sufficient monitoring tools and technologies - as a result, their inspections predominantly consist of site observations, rather than technical or scientific assessments. Of the investors surveyed, only one interviewee reported that their company contributes to the state budget for monitoring and follow up (in Houaphan province).

In turn, inadequate equipment contributes to a lack of understanding amongst local government agencies about the specific environmental impacts of investments in their provinces and districts. While local governments do take efforts to monitor environmental impacts, lack of equipment for testing soil, water, and air quality makes it challenging to prove investors’ impacts. Taking action against these impacts without proof is difficult, thus limiting government’s ability to hold companies to standards outlined in laws and resolve environmental impacts. Government interviewees expressed a desire for more conclusivity in their monitoring, so they could better understand environmental challenges in their jurisdictions.

Mechanisms for communities to report and resolve environmental issues

Despite recent improvements to investment inspection and monitoring procedures, one key challenge remains: ensuring effective and accessible mechanisms for non-state actors to report environmental risks or damages. This issue links to a key underlying challenge of access to justice for communities affected by adverse environmental impacts.

Several agricultural companies in this study tended to adopt a 'wait and see' approach to receiving reports of environmental hazards, rather than taking an environmental risk management approach. Whether this is due to lack of resources or understanding, or other reasons, is unclear. In Luang Namtha province, for example, three investors reported that, while they were "unfamiliar" with domestic laws, they were confident that if their operations were contravening Lao laws or causing environmental damages, the local government (or communities) would have informed them.

On the community side, there was a high level of self-reliance in addressing negative environmental impacts from investments. While multiple villages reported water contamination by chemicals that made their water unusable, their solution was straightforward: they don't use the water. Instead, they have turned to accessing other sources of water (that might be further away), or buying bottled water for drinking[13]. In other cases, when some community members were getting sick (thought to be a result of pesticide use), they went to the hospital on their own and paid the bill themselves, but did not report this issue to any companies or ask for assistance in medical care. These cases exemplify that while communities are facing negative outcomes likely traceable to agricultural investments, reporting these outcomes, and seeking assistance in addressing them, is not common practice.

Monitoring and Managing Agro-Chemical Use

In multiple provinces, government officials highlighted challenges regarding the regulation of agro-chemicals, especially pesticides. While certain chemicals have been banned in Laos, local government agencies were not confident that these chemicals have truly been phased out. A few officials noted that, when they go to monitor investment sites or stores selling chemicals, the sites and stores hide or re-label illegal substances. Monitoring chemicals coming across the border from China was another challenge raised in both Oudomxay and Luang Namtha provinces. Border control offices, while charged with ensuring no illegal imports, in practice often lack the knowledge and equipment to conduct thorough inspections of chemicals entering Laos. As a result, the burden for ensuring no illegal substances are used falls on PONRE and DONRE officials, who felt the issue could be addressed more effectively starting at the border. The use of Chinese on chemical labels was another issue raised, as this both prevents government from knowing what a substance is, as well as limiting community members' ability to properly follow instructions for using the product.

[13] It should be noted that in one village in Oudomxay province, water levels have decreased and there are less fish due to chemical pollution, but the community still uses this water to drink and shower, because they have no other options. The ability to switch to other water sources when existing sources are contaminated is therefore not a luxury all can access.

In general, grievance redress mechanisms (GRM) - particularly for dealing with environmental impacts - need to be further developed in Laos. At present, many agricultural companies resolve complaints either directly with villagers, or informally via phone or through village meetings. However, the resolution process, proposed solutions and outcomes are not well documented, and processes are not consistently applied across cases. As investment continues to expand in Laos, and as more local level agreements are negotiated, increasing numbers of contractual conflicts may result, so a well-designed GRM needs to be a priority – both judicial (led by local government) and external (led by private investors).

Theme 3: Stakeholders' Strategies for Addressing Gaps and Needs

Reactive approaches to environmental impacts

The team documented a wide range of stakeholder responses and counter-measures for addressing environmental impacts. However, a key finding was that most responses were *reactive* (i.e. – addressing environmental damages after they occurred), rather than *proactive* (i.e. – risk assessment or pre-investment impact assessments).

At the same time, few companies in this assessment were required to conduct ESIAs, since these are required only for concession models of investment. Interestingly, all companies interviewed in Luang Namtha, all of which operate under contract farming models, reported having conducted an ESIA[14], and some reported having meetings with communities to share results. One Chinese company reported this ESIA was conducted in accordance with Chinese regulation. Despite this step being completed, though, no company interviewees could give examples of what risks were highlighted in the report, or how they took action to avoid the impacts the assessment identified. It seemed that the assessments were undertaken in a "check the box" manner, without much follow-up. As such, a gap in practice remains in the pre-planning stages to assess the risks of environmental impacts, and to put environmental safeguards in place.

[14] The terms 'EIA' and 'ESIA' are used interchangeably in several Lao laws and policy documents. The requirements for investors refers to 'environmental and social impact assessment', so in this report we use the term ESIA.

Figure 5 - Trucks of sugarcane at the Lao-China border in Sing district, Luang Namtha province

Source: Christina Cilento

Despite a predominately reactive approach to environmental issues, there are numerous cases of local government agencies taking steps (albeit after issues were identified) to address environmental impacts; these cases should be noted and good practice examples could be shared as learning tools for improving environmental risk management. See Recommendation 3 for related details. In Houaphan province, for example, Viengxay District authorities took punitive actions against an industrial chicken farm after villagers lodged complaints with DONRE about wastewater being dumped into the river, and other waste not being properly disposed. The chicken farm was subsequently investigated and shut down after it failed to improve its environmental management practices.

Similarly, in Sangthong District, Vientiane province, a Chinese-owned banana plantation has received ongoing media attention after its operations contaminated the nearby Ton River with chemical run-off, causing more than 300 kilograms of fish to die (The Vientiane Times, January 8, 2019). Both PAFO and PONRE agencies were involved in the following actions taken against the investor, including a requirement to replenish the dead fish for three consecutive years, hire an independent environmental consultant to carry out a social and environmental impact assessment and submit it to PONRE for approval. The company would face shutdown of its operations if it does not comply with the assessment.

Strengthening sustainable environmental practices under contract farming

According to interviews, the highest priority for agricultural investors is a guaranteed (and good quality) supply of agricultural products. For villagers, it's a guaranteed market, at an agreed price. One good practice example of community-investor agreement is the model of Yuni Coffee Company, and to a lesser extent, the Huaphan Gan Ka model for bamboo - both of these agricultural products are organically produced and are underpinned by a written contract that was negotiated and signed by both smallholders and investors as a mutual commitment to produce and purchase agricultural products at regular intervals. As a result, farmers were confident that the company would return to purchase their organic products, while investors were assured of a guaranteed supply. Long-term confidence to invest sustainably in agriculture was strengthened on both sides by a fair contract.

However, the absence of a definitive contract farming law in Laos, combined with a lack of legal guidance on how to make fair contracts, causes confusion and inconsistency across villages, districts, agencies and even between individuals. It also contributes to difficulties in enforcement and legal recourse.

This assessment highlighted the diversity of approaches and practices for agreeing on contract farming arrangements. In several cases, the District (DAFO) drafted the contract, stamped and signed it, and helped negotiate the content (although usually on behalf of the company, not the villagers). In other cases, the District was not involved in negotiating at all, with some officials noting that this was a deliberate choice "so that they would not have to resolve any grievances later". Some contracts were made directly between investors and villagers, some between investors and head of households, while others were made just with the Village Head. The 'official' nature and legal status of these contracts was also variable - some were stamped by

the Village Head and the investors, while some also had a DAFO stamp. In some other cases, the agreements were simply verbal. In Oudomxay province, some large-scale 2+3 agricultural investment contracts were reviewed by local justice offices. In other provinces, the justice agencies were not involved at all. This inconsistency could be improved by more concrete legal guidance, which should be jointly drafted by MAF and MOJ agencies, with inputs from relevant external stakeholders.

Economic benefits versus environmental impacts

Many communities interviewed for this study reported that the overall economic benefit of investments outweighed any negative environmental impacts. In Luang Namtha province, for example, one smallholder described persistent air pollution from the pre-processed latex, which was stored in his village, by saying “it’s smelly, but it’s worth it. We can get money.” Several investors also presented a similar view, saying that they felt their investments were ultimately beneficial for the development of communities, so environmental consequences could be rationalized by economic growth generated.

In a handful of villages, loss of biodiversity and declining access to non-timber forest products (NTFPs) was reported, although communities balanced this loss with the fact that they now have enough household income from commercial crops to purchase food at the market. Environmental issues such as declining access to NTFPs and air quality may be manageable and tolerable in the short-term due to increased material benefits, however to attract sustainable investment, a cost-benefit analysis can facilitate sound decision-making. Capacity building is needed for communities and local government agencies to conduct simple cost-benefit analysis before approving investments (i.e. - accounting for long-term environmental and social costs as well as short-term gains).

Environmental impacts of investments need to be contextualized in the larger understanding that agricultural investments do, in reality, often raise the quality of life of the communities they affect. All communities interviewed in Luang Namtha and Oudomxay provinces reported a higher standard of living after working with investors, including being able to buy a motorbike, or send children to school. Efforts to minimise environmental impacts of investments should therefore not sacrifice economic benefits for communities. An approach that allows for economic development, while protecting vital natural resources, is necessary, coupled with awareness raising about the long-term value of sustainable natural resource management.

Environmental and health impacts of agro-chemical use

While the impact of pesticides was discussed in interviews with all villages, no communities had truly successful and well-established strategies for minimizing the negative impacts of pesticides. Multiple villages shared that they did receive information about safe use of chemicals (including wearing gloves and masks) from companies, government, or health centers; however, many villages said they did not normally follow these precautions because they are too cumbersome. Villages who did not use protection from chemicals recounted experiencing peeling skin, rashes, fatigue, shortness of breath, itchiness, or passing out. On the positive side, many villages were able to explain that chemicals should not be mixed too close to water sources, and should be properly disposed of, but awareness and access to proper disposal mechanisms are still limited – one village reported that they dispose their chemical packaging by either burning or burying it.

Health impacts of agro-chemical use have begun to be documented and shared across Laos (see: Bartlett, 2016), but misinformation and improper handling practices persist. In one village in Oudomxay province, for example, a community member died, and a doctor attributed that death to agro-chemical use. However, some interviewees were skeptical about if chemicals were really the cause of negative health impacts experienced, and the community at large was not entirely receptive to the doctor's advice, because they felt that doctors always attribute health issues to chemicals, without much evidence. In another village, a doctor diagnosed a community member as having gotten ill because of chemicals, to which the Village Head responded that "if doctors do not have proof, they should not say things like that". Without adequate equipment, knowledge and budget to scientifically test chemical presence in water and soil, and to conclusively prove that this can be damaging to health, local government agencies and medical staff face an uphill battle in convincing some communities to adopt preventative measures.

In Luang Namtha province, a group of older women noted that they did not take any precautions regarding chemical use (even eating sticky rice after handling chemicals without washing their hands) justified by the fact that "they already have husbands and children". Younger women of child-bearing age, however, did not spray chemicals because "they need to protect their bodies more because they are not yet married". Similarly, in two other villages, women (even elderly women) reportedly did not use chemicals at all, to protect the health of children, families, and

the women themselves. Practices with pesticide use thus vary widely across villages, pointing to a lack of standardized understanding and strategies for mitigating negative impacts.

The government has taken steps to reduce the harmful impacts of agro-chemicals, including promoting “clean and green agriculture” and organic agricultural production, as well as issuing the 2016 Decree on Pesticide (No.258/MAF, 2017), however fieldwork findings indicate that a policy-implementation gap remains in some cases.

Other key factors influencing stakeholders’ environmental strategies

Across the provinces, stakeholder groups’ responses indicated that there were several issues influencing the quality and consistency of environmental sustainability in agricultural investments. Key amongst these issues were:

- Land tenure security;
- Quality of infrastructure, and;
- Reliable market access.

Land tenure and environmental conditions are closely related: land tenure can promote land use practices that harm the environment or can serve to protect and enhance the environment. Numerous studies and international guidance documents show that secure land tenure encourages smallholders and land-based investors to implement more sustainable land use practices. See, for example, the International Finance Corporation’s (IFC) Guidance Notes on Environmental and Social Sustainability (2012), and the UNCTAD-IFC ‘Knowledge Into Action’ Notes 11 and 14 on environment and land (2017). As noted by the United Nations (UN) Food and Agriculture Office (FAO), unclear land tenure frameworks and unevenly enforced ‘rules’ for investing can lead to environmental degradation, while lack of clear rights can reduce the incentive to implement long-term sustainable resource use (FAO, 2002). Both investors and communities in this assessment highlighted land tenure security as a key issue underpinning the sustainability of agricultural investments. Yet a small minority of communities in this assessment reported that they had land titles / certificates. Clearer land tenure security - whether ‘formal’ land tenure documents (i.e. - certificates or titles) or clearer recognition of customary land rights[15] - would promote environmental sustainability in the long-term.

[15] Customary tenure is broadly defined as the local rules, institutions and practices governing land, forests and fisheries that have, over time and use, gained social legitimacy and become embedded in the

At the same time, some investors requested increased clarity in the land tenure frameworks to reduce risks of conflicts with communities. Some investors even indicated that they entered into contract farming arrangements because it was clear that villagers were previously using the land before it was designated a concession area, and they did not want to risk a social conflict. Clear and guaranteed land leasing rights for companies were also a consideration for environmental sustainability: there are cases of banana investors who, after suddenly losing their rights to operate plantations in northern Laos, simply packed up and left, leaving behind waste, contaminated soils and water sources for the Lao government and farmers to deal with.

Land Survey and Mapping Practices

One investor interviewed undertook detailed land mapping and planning in their investment area, including outlining divisions between each farmer's land. While the investor showed this map to the research team, local government in that area reportedly have not been given a copy. While land mapping at local levels may have positive effects on tenure security if conducted in a participatory manner and harmonised with land registration efforts, the practice of companies undertaking land mapping themselves was raised as a concern by local governments. In Oudomxay province, for example, officials were concerned that future land conflicts could arise as a result of companies conducting independent land surveys, without government involvement.

Some investors and local government officials interviewed noted that the geography of northern Laos contributed to a challenging investment climate, with steep slopes and poor infrastructure. Investors particularly noted that the condition of roads added significantly to their transport costs.

Finally, smallholders and investors are highly vulnerable to price fluctuations. In Houapanh province, for example, maize was previously the prevalent "boom crop" in the province, but since the global price drop two years ago, villagers noted that "hardly any traders come to purchase maize". This uncertainty of market access resulted in many villagers choosing to stop growing maize. Farmers noted that they are "waiting for advice" from government or other organisations, or waiting to see market changes to dictate what the next "boom crop" should be. This constant cycle of 'boom and bust' leads to unsustainable land use practices, as soils

fabric of a society (Palmer et al., 2009 cited in Ironside, 2017). Customary tenure exists amongst all ethnic groups throughout rural Laos, and guides the use and management of a range of land types.

become depleted and can lead to deforestation as productive land becomes scarcer (Houapanh PAFO, 2017).

6. Recommended Next Steps

This section elaborates the implications of key findings, and identifies several potential next steps for all stakeholders working towards improving environmental standards, management and reducing negative impacts from agricultural investments in northern Laos.

Recommendation 1

Processes for meaningful consultation with local-level stakeholders (including private sector, district and provincial government agencies, communities and grassroots organisations) should be standardised and implemented during legal and policy drafting processes related to agricultural investment and the environment.

The government is currently making efforts to improve the ease of doing business in Laos, as well as revising several key pieces of legislation related to land, investment, forestry, agriculture and environment. Proactively including diverse stakeholder groups in policy and legal decision-making processes would contribute positively to these efforts by ensuring that new or revised legislation is *applicable and able to be enforced in local contexts*. This requires capacity building for more proactive outreach to seek public comments and ensure consultations are meaningful. Public consultation is required by the Law on Making Legislation (No.19/ NA, 2012) which states that domestic and foreign individuals and organisations "in both public and private sectors" (Article 8) should be able to provide comments on draft laws.

There are already extant mechanisms in Laos that allow for public comments on draft legislation. The Lao Official Gazette online[16], for example, has a function that allows comments to be submitted on draft laws which is open to the public. Social media has also been employed as an innovative method for public comments – in 2017, the National Land Law was uploaded to

[16] The Lao Official Gazette website is administered and operated by Ministry of Justice. The site publishes promulgated legislation as well as draft legislation. See: https://www.laoofficialgazette.gov.la/

MONRE's official Facebook Page[17] seeking feedback, although the mechanism for integrating feedback into a revised draft law was unclear.

The Ministry of Justice (MOJ) also recently launched a new Lao Law App (Lao language), which provides all updated laws and notifications from MOJ, and is available free of charge. However, there is no function for public commenting on legislation. The People's Provincial Assembly (PPA), when they receive draft laws, is also mandated to "consult with people (*passason*) using different mechanisms and approaches on a case-by-case basis" (Article 15 of the Law on PPA, No.65/NA, 2015).

An institutionalized multi-stakeholder consultation process and associated platforms would be valuable to ensure that legislation suits local contexts and can be implemented effectively. A good practice example of multi-stakeholder consultation during the legal process was evident in the drafting process of the *Ministerial Instruction on the Approval of the Investment and Mechanism Management of the State and Private Land Leasing for Banana and Annual Crops Plantation* [unofficial translation, 2018]. This case study illustrates how national government (in this case, the Ministry of Planning and Investment) can make efforts to consult with multiple stakeholder groups (investors, civil society, local government, researchers) across five northern provinces. This project involved seeking inputs from relevant stakeholders as well as explaining the Instruction. The project was supported by SDC, MRLG and the GIZ Land Program.

Recommendation 2

A national legal framework to govern contract farming arrangements is needed to strengthen environmental safeguards for all types of agricultural investments. Capacity building for *negotiating* and *enforcing* fair contracts is also needed.

A national legal framework specifically for contract farming should be drafted by relevant government agencies (i.e. - MAF, MOJ, MONRE, MPI, MOIC), following public consultation processes described above. Two recurring environmental management themes emerged with respect to contract farming: firstly, investor-community contracts rarely contain provisions for environmental restoration and land rehabilitation after the investment ends (see

[17] The draft National Land Law was uploaded in October 2018. MONRE's Facebook page can be viewed here: https://www.facebook.com/monre.gov.la/

Recommendation 6). Ideally, contracts should include requirements for investors to restore the land and other natural resources to its original state (i.e. – following the “do no harm” principle outlined in the VGGT), and should provide avenues for redress if the investment causes environmental harms. Secondly, many smallholders are transitioning from subsistence agriculture, and have little experience in negotiating contracts for commercial agricultural production. There is a lack of independent guidance or legal support available to them during contract negotiations, which hinders their ability to negotiate for stronger environmental standards.

While there is a Lao Law on Contracts (No.01/NA, 2008), it does not specifically cover contracts for agricultural production between producers, traders and / or investors. In Thailand, the recent Contract Farming Promotion and Development Act (May, 2017) could serve as a useful template for developing a version of the law specifically for the Lao context. The Thai Contract Farming Act contains several useful sections outlining core provisions that should be in contracts, as well as establishes a legal basis for fair negotiations.

The Act is also an attempt to address imbalances in knowledge, power and resources between investors and family farmers. For example, Section 21 outlines the basic provisions that need to be included in a legal contract, and also states that “a contract farming agreement must be in writing, in the easy-to-understand Thai language and, where it contains technical terms, accompanied by explanatory notes”. Sections 33 and 34 also establish a Dispute Mechanism for resolving disputes resulting from contract farming. The Act is also accompanied by an infographic (in Thai language) to facilitate easier understanding by people without legal backgrounds.

Figure 6 – Snapshot of Thai Contract Farming Promotion and Development Act (2017) infographic.

Translation of key points: (1) agribusiness operators must first **register** with the Ministry of Agriculture and Cooperatives, (2) agribusiness operators must prepare draft **contracts**, and farmers have the right to add more details into the contract or cancel the contract, (3) agribusiness operators must establish a **grievance mechanism**, (4) laws will be enforced and **penalties will apply** for violators of the law.

Source: Mekong Region Land Governance Repository (RCSD) via the Thai Contract Farming Promotion and Development Commission.

Recommendation 3

Case studies of stakeholders' approaches to addressing environmental impacts from agricultural investments should be collected, documented, shared, and used as learning tools for policy-making and implementation.

Across Laos, print media and online sources have documented a myriad of negative environmental impacts from agricultural investments. One of the most prevalent cases which

has come to the forefront of public discourse is the improper use of agro-chemicals (particularly on banana plantations). One media outlet that regularly covers agro-chemical use notes that it "has seriously affected the environment and local people, [and] has been reported time after time in recent years" (The Vientiane Times, 8 January, 2019).

Other commonly reported issues are soil degradation and erosion from commercial crops such as maize, air pollution from rubber processing factories and contaminated water sources from factories and mills. The various responses by local government agencies, communities and investors to address these environmental impacts from agricultural investments receive less coverage, although some cases have already been documented on social media (particularly Facebook). Collating and sharing 'better practice' examples or 'case studies' of all stakeholders' approaches to plan, mitigate, address and avoid environmental impacts could serve as a useful learning tool to guide future interventions. One option for facilitating better sharing is to set up and pilot an exchange platform focusing on agricultural investment and environmental protection, where stakeholders can share experiences, case studies and good practices at national and sub-national level.

Recommendation 4

Local agencies require capacity building to strengthen legal knowledge, implementation and enforcement of environmental and agricultural investment regulations.

Although all levels of government play an important role in developing and implementing legislation, officials at district level have key responsibilities for enforcing legislation and standards. The various district agencies involved in the agriculture, forestry, investment, land and environment sectors together have a wide-ranging mandate. Some responsibilities are clearly defined and allocated to certain agencies through legislation - for example, MONRE line agencies are responsible for issuing environmental certificates (Environmental Protection Law / Decree on Environmental Impact Assessment, No.112/PM, 2010), while MAF line agencies are responsible for registering industrial plantations (No. 1849/MAF, 1999 and No.1374/MAF, 2010), and MPI line agencies are responsible for monitoring investments (No. 14/NA, 2016, Investment Promotion Law). Other agencies, such as DoIC also play a key role in contract farming.

However, some areas of responsibility are overlapping or are open to interpretation. For example, district agencies are often the first point of contact for transboundary investors,

particularly for contract farming. District agencies may then play a role in investor-community negotiations and agreements, as well as land surveys and feasibility studies. District agencies are also charged with monitoring soil and water quality, along with their province-level counterparts, as well as monitoring compliance with environmental regulations. District agencies are also frequently involved in grievance redress and conflict mediation related to environmental regulations and investments. This multitude of responsibilities requires district agencies to be well equipped with sound legal and technical knowledge, tools and resources to achieve their mandates (see Annex 3 for an overview of district agencies' mandates). However, fieldwork findings suggest that district agencies are lacking the capacity and resources to effectively carry out their functions.

At the same time, provincial environmental, investment and land agencies should also be included in capacity building efforts. Interventions should focus on strengthening provincial coordination with district government, and also focus on capacity building for deeper legal and policy knowledge.

Finally, local government agencies should be equipped with the tools and training they need to test and measure environmental impacts, including being equipped with the environmental testing kits. Development partners with a focus on agriculture could be key partners in providing technical and scientific training and equipment (such as the FAO, IFAD and financial institutions such as the ADB and the World Bank), as well as relevant experts from faculties at the NUOL. There is plenty of anecdotal evidence about the environmental (soil and water contamination) and health impacts of agro-chemicals, but local government lacks the scientific evidence and tools for identifying and addressing these problems. Local agencies in Oudomxay, Luang Namtha and Houaphan provinces all requested soil and water testing kits to measure the environmental impacts from investments. This will give them the basis for requesting concrete assistance from national government and development projects to address environmental impacts.

Recommendation 5

Institutionalised grievance redress mechanisms are needed to empower communities to report environmental impacts, and capacity building is needed for all stakeholder groups to follow-up and address negative impacts.

Although communities interviewed for this assessment reported some negative environmental impacts arising from investments, they took an independent approach to addressing them. Approaching the district government or company to address the issue was not their first impulse. The result of this self-sufficiency is that both companies and government may be under-informed about the environmental and social challenges some communities face as a result of agricultural investments. Indeed, some investors themselves reported that, because no communities reported negative impacts, there must not be any. They did not, however, have clear systems in place for receiving and resolving of communities' concerns.

Grievance redress mechanisms (GRM) thus need to be established by companies to identify, report and inform on environmental impacts and actions taken to address them. These GRMs should also be open to government to report and communicate with companies about negative impacts arising from their investments. Merely establishing these mechanisms alone might not improve environmental management practices, though. Companies need to publicize these mechanisms and encourage affected communities to inform them of impacts, through collaboration with local government. Otherwise, communities may not be empowered to report impacts to companies or government and continue to face less-than-optimal results. The GRMs should be accessible to communities in their local languages and be usable by individuals with little to no literacy skills. Responsible plantation companies in Laos are already establishing and publicizing village-level grievance mechanisms – for example: Stora Enso Laos, Burapha Agroforestry Company, and Mekong Timber Plantations.

Recommendation 6

Procedures for post-investment environmental management require further clarity, and preventative planning is needed to ensure that environmental impacts can be mitigated *before* an agricultural investment ends.

Local government and communities expressed concerns about how to manage environmental impacts *after* agricultural investments end. For local governments, a key concern was that they have no jurisdiction to "go across the border" to force the absconded investors to rehabilitate damaged land. While the Environmental Protection Law (No.29/NA, 2012) does have provisions for land rehabilitation (Part V), in practice several stakeholders (both local government and companies) interpreted this provision to apply only to hydropower or mining operations. Further,

some local officials reported that, in practice, the funds are sometimes not disbursed to local level agencies for land rehabilitation.

As described in the Investment Promotion Law (No. 14/NA, 2016), MPI line agencies should coordinate and be the Focal Point for other agencies with regards to investment procedures, and make a clear plan for managing investments at the end of project cycles[18]. Particular attention should be paid to post-investment environmental and land restoration. This responsibility should also be enshrined in all original investment agreements (contracts), while additional roles such as testing the final condition of the soil and water, should be clearly defined for each local agency. Sufficient resources should be allocated to enable these agencies to carry out their responsibilities.

[18] At the national level, efforts to strengthen post-investment procedures have been introduced by MPI, by requiring plantation companies to deposit funds for land rehabilitation under the new *Ministerial Instruction on the Approval of the Investment and Mechanism Management of the State and Private Land Leasing for Banana and Annual Crops Plantation* [unofficial translation, 2018] - this Instruction is currently undergoing the approval process.

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Annex 1 – Stakeholder Groups Summary

This Annex outlines stakeholders participating in this research.[19]

Stakeholder Group	Number of Participants
Luang Namtha	
Government workshop	26 total • 16 from province • 6 from Sing district • 4 from Long district
Sing district	
Nying Mao company	2 interviewees
Sip Song Pan Na company	6 interviewees
Village A 50 households	16 total • 13 men • 3 women
Village B 111 Households	27 total • 18 men • 9 women
Village C 56 households	13 total • 9 men • 4 woman
Village D 63 households	10 total • 7 men • 3 women

[19] Note that participation numbers for some villages were difficult to decisively report, due to fluctuating participation from community members. In some villages, participation started high, then trickled; while in others, participation was low to start, then increased as more people gained interest. The numbers reported in this annex are the highest numbers of participants. To protect communities' privacy, we have anonymised actual village names.

Long district	
Theu San company	2 interviewees
Suan Yi company	2 interviewees
Village A 72 households	14 total • 9 men • 5 women
Village B 70 households	14 total • 9 men • 5 women
Village C 105 households	13 total • 6 men • 7 women
Village D 110 households	18 total • 14 men • 4 women
Houaphan	
Government workshop	11 total • 5 from province • 6 from Viengxay district
Yuni Coffee Company	1 interviewee
Huathon Agriculture Promotion Company	1 interviewee
Huaphan Trading Company	1 interviewee
Village A 74 households	11 total • 6 men • 5 women
Village B	9 total • 5 men

55 households	• 4 women
Village C 155 households	8 total • 4 men • 4 women
Oudomxay	
Government workshop	14 total • 9 from province • 5 from Houn district
Jin Shui banana company	3 interviewees
Jian Fong rubber company	4 interviewees
Village A 144 households	29 total • 17 men • 12 women
Village B 745 households	10 total • 8 men • 2 women
Village C 129 households	14 total • 8 men • 6 women
Village D 169 households	33 total • 15 men • 18 women

Annex 2 – Sample Semi-Structured Interview Guide (Agricultural Investors)

Guiding Questions: to what extent are agricultural investors aware and understand domestic laws and regulations relating to agricultural investment? How aware are agricultural investors of the environmental impacts of their investments? What is needed to improve awareness, understanding and mitigate or resolve negative environmental impacts?

1. Background, History and Context of the Investor

Key Questions	Follow-Up Questions 1	Follow-Up Questions 2
How long have you been working at the company? What is your role? What is your business model? (concession, contract farming, leasing? Social enterprise?) Why did you decide to invest in Laos? And why in this district / province? If applicable: can you tell us about payments made for leasing the land (from government or community)?	Do you have investments in other countries / provinces / locations? How many hectares? How did you acquire / identify land here? Who did you originally approach? What was the process? How long did the process take? What evidence or documents do you need when making determinations of land ownership / use?	How did you obtain financial backing (for example: credit or loans from other investors)? Did you receive any support?

If applicable: did your investment have any resettlement impacts? Do you have any key lessons that you would share with other investors planning to invest in Laos?	If so, how did you manage the resettlement process? What do you see as the key challenges or barriers to investing in Laos?	What would you change about the land allocation / acquisition process in Laos?

2. Theme One: access to and provision of information about environmental laws, regulations and environmental impacts of agricultural investments

Key Questions	Follow-Up Questions 1	Follow-Up Questions 2
Where do you mainly get information about Lao laws / regulations related to investment, land, agriculture, forestry, environment? How do you engage / cooperate with the government? What regulations / laws / policies do you follow? What international guidance are you aware of? Which guidance do you follow (including in investor's home country)? Were you involved in consultations with communities? If so, please tell us the details: how much did it cost? What was the timeframe?	Is it easy for you to access these laws? How do you ensure you comply with these? Which agencies? Do local authorities help to monitor? Do you report regularly? To who? For example: VGGTs, PRAI, CSR standards? Have you heard of the term FPIC? What information about your investment did you provide (including positive and negative impacts)? Who did you provide the information to (women, men, vulnerable groups)? How (i.e.	What needs to be done to make it easier for investors to access and understand Lao laws and regulations? How well do you think the community understood your proposed investment? Are there any improvements you would make for next time?

If applicable: do you have an agreement with the community about the price and quantity information for the product, purchasing agreements, and wage information?	– in what language, did you use any communication tools?) Is it written down? With who? Who signed the agreement?	If you had the chance, would you change anything in the contract?

3. Theme Two: understanding and complying with environmental laws, regulations, and impacts

Key Questions	Follow-Up Questions 1	Follow-Up Questions 2
Do you feel that you have a good knowledge of the existing laws and regulations related to your investment?	If yes, why are you confident?	If no, **what could be done to address this?** (i.e. – what services need to be introduced to close this gap?)
Do you find it easy to comply with the laws / regulations?	Are there any confusing or difficult aspects?	
How does the government enforce or monitor your company's compliance?	What kind of reporting do you do – to your office, investors, government?	Do you feel that this is too much, or too little monitoring and reporting to government?
If applicable: does your agribusiness have an environmental certificate?	If yes – what was the process? If not, why?	
If you need further information or advice about environmental issues for your business, who would you approach?		

	For example: Chambers of Commerce? Consultancy companies? Other service providers?	

4. Theme Three: strategies for mitigating, addressing and / or resolving negative environmental impacts from agricultural investments

Key Questions	Follow-Up Questions 1	Follow-Up Questions 2
Do you have any system in place for social / environmental sustainability?	Can you describe this system? Do you have a fund in place for environmental impacts? How much? What process / mechanisms do you follow to ensure positive impacts?	If none, why not?
What do you see are the key positive impacts from your investment?	Social, environmental, economic, health, food security, infrastructure? How do you mitigate these – especially **environmental**?	Are there any improvements you would make in the future to better manage environmental impacts?
Are you aware of any negative impacts arising from the investment?		
In terms of environmental impacts: have you seen any investments with chemical contamination in soil and water, noise and air pollution, and health impacts?	Please provide details. How do you manage these issues?	Do you feel you have the knowledge, skills and support to manage these effectively?
Do you provide any training for the community to manage negative environmental impacts?	If so, what kind of training? How much did this cost? How often?	Do you think the community benefitted from this training? Would you do anything different next time?

Did you do an ESIA / EIA? If so, do you use the ESIA to monitor the impacts of your investment?	Is your ESIA publicly available? Can we have a copy? If not, who conducted the ESIA for you?	
Did you involve the community in the ESIA process?	If so, how? Did you share the results of the ESIA with the community?	How could this ESIA process be improved?
Was your investment pre-screened?	Were you involved in the pre-screening? How?	
Has your investment undergone any certification processes (i.e.- Forest Stewardship Council, FairTrade Laos, Good Agricultural Practice, organic, etc)?	Was this usable, and was it useful? If not, why? What was the cost? Timeframe?	
Do you have plans to scale up / expand your investment?	What impacts will expansion have? How will you ensure these impacts are not negative?	
Have you had any conflicts regarding the investment?	If so, how did you resolve it? Were you satisfied with the result?	Do you also use the government system to address complaints?
Do you have a company grievance redress mechanism (GRM)? How does it function?	How are communities made aware of the GRM?	
Have you received any previous support or training to address environmental impacts from your agricultural investment?	If so, from who and when? Was it helpful? Did it cost your company anything?	What additional support do you need to better manage environmental impacts?

Annex 3 - Overview of Selected District Agencies' Mandates

A summary of roles and responsibilities that fall under the mandate of district agencies are illustrated in the table below:

Agency Name	Summary of Mandate and Legal Basis
District Office of Agriculture and Forestry (DAFO)	Ministerial Decision on the Establishment and Activities of DAFO, No.3944/MAF, 2017 Article 3, 'Responsibilities of DAFO': • Survey, collect statistic data on agriculture and forestry, agriculture and forestry related impacts on socio-economy to be the basis for agriculture, forestry, and rural development planning suitable the potential and characteristic of the district; • Manage and promote agriculture production projects; • Encourage and provide technical service on agricultural production, livestock, fisheries, veterinary, forestry, irrigation to farmers and farmers' groups to upgrade to commercial agriculture production; • Establish and improve agriculture technical service centers at district and village level based on production potential to be able to provide service such as training, demonstration, new technology transfer for communities, farmers, processors' group and enterprises; appoint agriculture and forestry technical persons at village level; • Manage, monitor, and protect agricultural, forest, watershed land, water bodies, and natural resources under their responsibility to maximize the use of the resources sustainably; • Work with relevant agencies to conduct survey, zonation, and allocation of agricultural land, watershed, irrigation area; make a proposal on registration of agricultural and forest land under the responsibility of Agricultural Land Management Sector; implement and enforce regulations on the management, use, protection of agricultural and forestry land; allocate agricultural land to communities to use for agricultural production and livelihood; develop agricultural and forestry land upon approval from the Lao Government; • Disseminate laws and regulations to communities and ensure communities understand the laws and regulations to be able to take active role in preventing natural resources exploitation; • Summarize and provide information related to agriculture and forestry to use as a reference for planning, monitoring, promoting agricultural production and evaluating programs and investment projects on their locality;

	• Creating favorable environment for operations of production groups and agribusiness and ensure they comply with laws and regulations... Article 10: Responsibilities of Agriculture Unit: • Implement development and clean agriculture projects in their locality, zone and identify focal area to implement clean agricultural production; • Survey, collect data, inspect, monitor, surveil, prevent and pest control seasonally, issue warnings, summarize and report regarding pests, controlled pests and phytosanitary businesses, plant quarantine station in their locality; • Disseminate, advice, conduct trainings, transfer technology, facilitate the use of clean agriculture system for producers
District Office of Natural Resources and Environment (DONRE)	Ministerial Decision on the Establishment and Activities of DONRE. No. 3172/MONRE, 2017 DONRE comprises 3 units: (1) Administration and Planning, (2) Land, (3) Natural Resources and Environmental Monitoring units. The Land Unit has the following mandate: ● Conduct land allocation and land use planning at village level; ● Conduct land survey, investigate land use rights, perform paperwork for registering and issuing land certificates; ● Create land registration books, conduct land registration, evaluation of land and buildings to for the purpose of registering legal transactions relating to land and for compensation for land transfer, lease, and concession; ● Examine, propose, or decide on allocating rights to use state land, transfer of land, compensation for expropriation, allocating and use rights, and granting land lease and concession in accordance with laws and regulations; ● Evaluate the uses of land, propose to grant and withdraw land use certificates; investigate and resolve land conflicts, provide technical services relating to land; ● Propose to higher authority to withdraw land use rights, halt revoke land lease and concession… The Natural Resources and Environmental Monitoring Unit has the following mandate: ● Review and propose to district administration office to approve environmental management plan for household businesses in their locality; and lead the environmental monitoring of such businesses; ● Participate in the examination and approval of IEE and ESIA reports of projects in their locality as well as

	participate in the monitoring of the implementation of impact management measures; ● Participate in the prevention, control, and monitoring of air, water, soil and other pollutions, control the use of toxic chemicals, hazardous substances and wastes, survey and collect data on pollutions, plan, prevent, and control environmental emergencies in their locality; ● Participate in the monitoring of all types of pollutions from investment and other projects and to work with the environmental sector at higher levels to solve the problems; ● Monitor the use of natural resources including land, forest, biodiversity, water, and minerals by investors and government agencies; ● Examine and provide recommendations to the draft natural resources and environmental management plan of development and investments projects...
District Planning and Investment offices (DPI)	Law on Investment Promotion, 032/NA, 2016. Article 99 (C): DPI has the following mandate: 1. Implement, promote and disseminate strategies, policies, laws and regulations on the promotion of investment under their jurisdiction; 2. Establish and manage information system, provide information on investment incentives to attract responsible investment under their jurisdiction; 3. Encourage, monitor, evaluate the implementation of projects, business operations, as well as compliant with laws and regulations on investment promotion under their jurisdiction; 4. Coordinate with relevant sector authorities of their level to manage and resolve problems arising from projects, business operations; 5. Facilitate and support the operation of investment one-stop-service offices to provide quick, transparent, fair and effective services under their jurisdiction; 6. Collect data on investment and investment operations in their locality; 7. Request for building, training, and upgrading of staff on investment promotion; 8. Summarize and report on investment promotion to the higher authority on a regular basis; 9. Exercise other rights and perform other duties as required by laws and regulations.
District Office of Industry and Commerce (DOIC)	Ministerial Decision on the Establishment and Activities of DOIC. No. 0036/MOIC, 2012. Article 4. DOIC has the following mandates: ● Manage industrial factories, machinery, standards and surroundings of factories, industrial estates and areas as assigned by POIC;

	● Coordinate with relevant agencies to monitor factories in their locality; ● Provide service for enterprise registration, monitor, inspect business operations... Law on Investment Promotion, 032/NA, 2016. Article 100 (C): ● Oversee presence and operations of all types of businesses in the whole business cycle; ● Provide services related to business operation permits and requests for any changes in the business permits; ● Record, protect, and report the data on enterprises to higher authority and to public; ● Enforce measures including revoking business permit temporary or permanently of non-compliant business.
District Office of Justice (DOF)	Agreement No 179/MoJ, 2009 Article 2: ● Act as an advisory body to district administrative office on works relating to laws and justice and development of legislations; provide legal advice to district authorities, government offices, and civil societies in their locality; ● Manage and implement activities in the justice sector such as promoting and disseminating legal information, enforce court decisions, provide notary services, and justice work at village level...
Customs Offices	Law on Investment Promotion, 032/NA, 2016. Article 101(C): ● Advice, disseminate policies, laws, and regulations relating to the sector and investment promotion; ● Encourage, promote, and facilitate the implementation of investment projects and businesses, as well as monitor and ensure business compliant with tax and customs laws; ● Coordinate and work together with other sectors to solve problems arises from business operations; ● Propose to relevant agencies to halt, revise, or revoke investment projects that violate national laws or not perform their tax, customs, and other financial obligations

Source: Independent analysis by Village Focus International.

Annex 4 – Legislation Governing Legal Information Dissemination Processes

The table below outlines that steps taken by the Ministry of Natural Resources and Environment to disseminate new or revised legislation to community level, as enshrined in Lao legislation.

Level	Steps	Channels	Legal Reference
Central level	When a law is issued at central level, it would be posted on the Lao Gazette Website managed by MoJ. Hard copies of the law would be sent to relevant government agencies at the central level.	● Lao Gazette Website ● Sending hard copies	Law on Making Legislation, No. 19/NA, 2012. Ministerial Decisions of the Management of the Lao Gazette, No.1106/MoJ, 2017
Provincial Level	Responsible agency at central level (for example MONRE) will provide the hard copy to their line agency at the provincial level (PONRE). PONRE would comprehend the content of the law and disseminate the law to other government sectors at provincial level (horizontal line) In parallel, POJ also has a responsibility to disseminate the law to other government sectors at provincial level	● Sending hard copy ● At provincial level, PONRE may request to organize a cross-sectoral meeting to disseminate the law (this will vary depending on available resources), in which the provincial administrative office will help to facilitate and coordinate.	Law on Local Administration, No.68/NA, 2015 Ministerial Decisions of the Establishment and Activities of Provincial Division of Natural Resources and Environment, No. 3171/MONRE, 2017
District level	Follow the same steps from PONRE to DONRE (vertical line) and then to other sector (horizontal line)		

	In parallel, DOJ also has a responsibility to disseminate the law to other government sectors at provincial level		
Community level	Villagers would receive information about the law from DONRE or from DoJ. Sometimes DONRE and DoJ may jointly conduct the law dissemination together. The government also has 'Primary Legal Education' program to train village authorities and committees on all laws in Laos. These people will also be a source of legal information to other villagers.	• Periodic community meetings (the frequencies will vary from each sector, DoJ has a specific unit to work on legal dissemination so the frequency is higher)	
Investor	One-Stop Service Office at central level has a responsibility to provide legal information (as well as investment related information as process for operating investment in Laos) to potential investors. One-Stop Service Office comprises of representatives from relevant agencies to provide technical and legal advice under their mandate. Investor may acquire legal information directly from relevant ministries and their line agencies.		Decisions on the Implementations and Operations of Central Investment of One-Stop Service Office and Coordination, No. 002/CIPSC, 2018

Source: Analysis of Lao legislation by research team.