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# **Final report**

Small research and development activity

# Project Policy analysis for forest plantations in Lao PDR and Viet Nam

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## 2 Executive summary

Governments in Lao PDR and Viet Nam aim for national development through building human capacity, developing industry and sustaining the environment. Forests can play a key role, and both countries have policies to increase forest area to support national development goals, including through increasing forest plantations. Objectives for expanding plantations include improving local livelihoods, alleviating poverty, developing local processing industries, increasing employment and improving the environment.

While policy objectives are similar, the two countries have quite different experiences with plantation development. In Lao PDR, the policy goal has been to restore forest cover from 40% in 1990 to 70% by 2020, including 500,000 hectares of plantations. This goal for plantations has reportedly been achieved (with over half the area under rubber trees). Forest cover has reached only 62% (DOF, 2020) and the Government is now considering new goals and approaches for plantation investment and forest restoration on degraded forest lands. This is expected to stimulate further investment in wood processing industries.

In Viet Nam, government programs have led to an increase in forest cover from 28% in 1990 to 41.9% in 2019. This increase is mostly due to forest plantations, with 37% (1.6 M ha) owned and managed by households. Major industries have developed based on plantation timber that make significant contributions to local livelihoods, poverty alleviation and economic growth. Government policies aims to encourage production of larger, higher value logs for local manufacturing and to demonstrate the environmental sustainability of plantation production for international markets.

The objective of this small research project was to build on the outcomes of the Project ADP/2014/047 to inform development of new laws, decrees and regulations for forest plantations in Lao PDR and Viet Nam. The project team revised policy outputs, produced new reports regional and national economic impacts of forest plantations and engaged policy makers and stakeholders in dialogue on new policy options for forest plantations.

#### Key findings for Lao PDR

In Lao PDR there have been significant recent policy and regulatory changes, coupled with strong signals that the Government is committed to making the business environment easier, investors have been actively seeking land for plantations and investing in wood processing. Regional and national economic analysis indicated that an increase in plantations in Lao PDR can increase overall welfare benefits, and reduce poverty, but may also increase income inequality; Northern region households potentially gain most with welfare gains for rural households almost the same as urban counterparts.

Analysis of the impact of a new bleached hardwood kraft pulp mill in Savannakhet Province, Central Lao PDR indicated major regional economic impact (likely increasing gross outputs for all sectors of 39% for the regional economy and 2.3% for the national economy) but most of the benefits are flowing to international investors and product consumers. This mill is having a wider impact on the plantation wood market but raw material for the mill is mostly coming from plantations in Viet Nam and Thailand. These imports could be replaced with timber from plantations on 'degraded' forest land in Lao PDR, greatly enhancing the economic contribution of the mill to local communities and the Lao economy. Other investments in wood processing in Central Lao PDR and in neighbouring Thailand are further increasing demand for plantation wood.

While degraded land has been the focus of plantation expansion, project analysis in current plantation investment areas indicated that local households derive a high proportion of their income from eligible degraded forests and swidden agriculture lands. This indicates a mismatch between Lao policy makers and local people about the perceived value of degraded forest lands and helps explain why many local people oppose large-scale land concessions for plantations.

On the other hand, project results indicated that plantations can make a significant contribution to household income - if plantation models allow intercropping by households and plantation companies offer more labour opportunities for local people. Therefore, tree plantation developers should allow space for other land uses and employ more local labour. These actions would increase and diversify livelihood options and are likely to increase local support for plantations.

In addition to local opposition, uncertain, sometimes confusing and inconsistent past policies on plantations, and slow and costly land use planning and allocation processes, have restricted plantation tree growing. Implementation also varies between and within provinces. Out of date and inaccessible land use information hinders planning processes to develop land use agreements between investors and individual farmers or with villages. Requirements for leases and concessions for corporate investors are not clearly specified. This created challenges in planning for both large and small investors in tree plantations.

While laws and regulations for land, plantations and agroforestry have improved, some areas remain complex and costly and are inconsistently applied across provinces and districts. Transaction costs remain high for both small growers and large investors. Plantation registration is difficult and costly and there is a mis-match between policies and practice with respect to the governance of micro, small and medium processing enterprises (mSMEs). These act as barriers for participation in markets for legal wood. Smarter regulations that are easier for the government to administer, can also motivate farmers and industry to comply and maximise economic, social and environmental benefits from investment in plantations and wood processing.

Smallholder tree growers in Lao PDR are also not adequately considered nor understood in policy development and associated decision-making processes. To support equitable participation in timber legality policies, under development for example in the Forest Law Enforcement Governance and Trade (FLEGT) process, project donors and policy makers must provide space for smallholders to be represented, and support projects explicitly designed to understand their needs.

New strategies under development aim to better connect micro and small plantation growers and enterprises to larger businesses with stronger market connections. Support measures are needed to safeguard and ensure fair value distribution and build the capacity of smaller enterprises to effectively participate in markets for legal wood. Incentives are needed to encourage larger enterprises to make these value chain connections.

#### Key findings for Viet Nam

Rapid development of plantations in Viet Nam has reduced poverty, improved livelihoods and supported industry development. In part due to success in developing export woodchip markets and increased demand and high prices for plantation wood, conflict over plantation land allocation is increasing due to the lack of transparency and accountability and low local level resources for this activity.

Government also seeks to increase supply of larger, higher value logs for domestic furniture producers. Currently most smallholder-owned trees are sold at a 3-5 years of age for woodchip exports. Increasing production of larger, higher value logs can potentially provide wider benefits to regional economies but smallholders do not generally benefit from this increased value. Similarly, demonstrating environmental sustainability of plantations through certification largely benefits processors and wood product exporters.

Barriers to smallholders producing higher value logs include their need for short-term income, the low price difference between small sawlogs and chip logs, weak credit systems, concern about risks of storm damage or disease with longer-rotation plantations, limited smallholder knowledge about growing larger logs, and poor linkages among actors along the furniture wood value chain. Engagement between the large number of smallholder growers and private sector wood processors is not effective.

Barriers to demonstrating environmental sustainability include low understanding of current environmental regulations and, limited monitoring of environmental impacts or benefits of plantations, high costs, uncertain returns, and uneven distribution of benefits of forest certification.

New policies can support measures for promoting private sector investment and collaboration between small-holders and enterprises across the supply chain. Including:

- 1. identifying the most suitable places to support more larger log production;
- 2. providing finance (loans or grants) to grow larger logs, potentially through expanding or Carbon-PFES for increased carbon sequestered in longer rotation plantations;
- 3. Increasing extension and advice to improve smallholder capacity to produce larger, higher-value logs;
- 4. creating networks to improve linkages in furniture wood value chains and increase understanding of markets and the requirements for forest certification;
- 5. encouraging sawmillers and furniture makers to increase prices for larger logs and contribute to costs of certification by growers;
- 6. developing insurance or compensation schemes to mitigate risks for long rotation large timber plantation forest; and
- 7. increasing resources, transparency and accountability in forest land allocation.

## **3 Introduction**

Planted forests are expanding globally (Keenan *et al.*, 2015) and there are international goals for large-scale restoration of degraded forest lands. Forest tree plantations have been established to produce industrial wood, fuelwood, biomass for energy and non-timber forest products; to restore degraded lands; to sequester carbon and to improve water quality. Increased demand for forest products and high plantation growth rates have led investors to seek suitable land for plantations in South East Asia (Vermeulen *et al.*, 2008). Lao PDR is considered particularly attractive because of good tree growth conditions, a large area of degraded land and low population density.

Governments in Lao PDR and Viet Nam have aims for national development through building human capacity, developing industry and sustaining the environment. Planted forests are seen to play a key role in achieving these development aims and both countries have policies to increase plantations to support national goals.

In Lao PDR, the aim is to restore forest cover to 70% (16.6 million ha) of the land area (including 500,000 ha of plantations) and to promote domestic wood processing for export markets. Achieving these goals is intended to enhance rural livelihoods and safeguard environmental services. Specific policies include encouraging international investment in plantations and processing industries, addressing illegal logging and trade (PMO 15 and Forest Law Enforcement and Governance policies), and improving the ease of doing business in Lao PDR (PMO 2, 2018). To encourage large- and small-scale private sector investment, policies were established to allocate land for smallholder tree growers and 'concessions' to private investors (Phimmavong et al. 2009, Smith et al. 2017). These policies have resulted in over 500,000 ha of tree plantations, including 270,000 ha of rubber plantation, 67,000 ha of eucalyptus and acacia, around 40,000 ha of teak and 58,000 ha of other species. The Government is now considering new goals and approaches for plantation investment on degraded forest lands.

In Viet Nam, plantation development was primarily driven by public sector investment. Severe forest degradation occurred during the American war and afterwards, due to extreme poverty and government demands to generate capital by exploiting natural forests. Programs supported by government and international donors drove reforestation and plantation development from the 1990s (Smith et al. 2017). Most planted forests were established by State Forest Companies, but plantations or degraded forest lands have gradually been allocated to individuals or households. Forest plantations are now 32% of forest cover (4.32 M ha) (Cochard *et al.*, 2020). Thirty eight percent of plantations (1.6 M ha) are owned and managed by households, with the remainder managed by State Forest Corporation (SFCs) or Forest Management Boards. The Government aims to encourage production of higher value logs for local manufacturing and to demonstrate the environmental sustainability of plantation production for the international market. In recent literature, different approaches have been proposed for achieving these goals (Nambiar, 2020).

While they have similar geography and policy objectives, experience with plantations development in the two countries has been very different. Plantation development has been rapid in Viet Nam but slow in Lao PDR (despite low population density) and households have been the dominant investors in Viet Nam while in Lao PDR investors are mixed – with companies (48% of areas), smallholders (33%) and contract farmers (20%) all participating. Differences in experiences with plantation investment across the two countries provided a valuable opportunity for learning about the effects of different policy and investment arrangements. Research undertaken in ACIAR project ADP/2014/047 (Keenan *et al.*, 2019) extensively analysed the social, economic and environmental outcomes from plantation development across this range of settings and provided a basis for new policies to improve plantation outcomes. This project aimed to support the revision of policies, undertake further analysis and inform policy makers on the outcomes of this research.

## **4** Objectives and deliverables

The objectives of this project were to:

- 1. Inform development of new laws, decrees and regulations for forest plantations in Lao PDR and Viet Nam based on the outputs from Project ADP/2014/047.
- 2. Engage policy makers and stakeholders in dialogue on new policy options for forest plantations.
- 3. Better inform policy makers of the regional and national economic impacts of forest plantations.

#### Proposed deliverables:

- Reports and draft text for laws and related decrees and regulations on plantations.
- Revised and formatted policy briefs on plantation policy, carbon sequestration in forest plantations and opportunities for PES.
- Reports on policy briefings and forums in Lao PDR and Viet Nam.
- Report on presentation of findings to key stakeholder groups.
- Revised website.
- Revised reports and journal articles on regional and national economic benefits of plantations

## 5 Methods and activities

Policy options were further developed using systematic evaluation of current policies and integration of results on the livelihood, social, and environmental impacts of plantations with supply chain and financial studies of different models of plantation investment in the two countries. Team members maintained, through established networks, active participation in policy reform processes and participated in various forums and responded to requests for comments on draft policies, strategies and legislation. Local team members met regularly with senior policy makers and policy influencers. Project outputs were revised in forms suitable for incorporation in policy documents and decisions. These were presented in plantation policy forums engaging policy makers, industry and researchers. Within the constraints of COVID-19 travel restrictions, research beneficiaries such as smallholder growers, industry, communities and provincial and local governments were informed of outputs.

A Steering Committee established under the previous project was not able to meet due to COVID-19 travel restrictions.

Objective 1. To inform development of new laws, decrees and regulations for forest plantations in Lao PDR and Viet Nam					
Activities	Outputs/Milestones	Due dates			
Review and analysis of policies for plantation development.	Report on revised policies for plantation development. Policy briefs. Presentations to key policy makers and to Plantation Policy Forum	First report May 2020 Final report Dec 2020 (this report)			
Objective 2. To engage policy makers and stakeholders in dialogue on new policy options for forest plantations					
Policy briefing/forums in Viet Nam to present the findings to key stakeholder groups in Lao PDR and Viet Nam	Report on policy forum attendees, program and outcomes. for increasing value production by small growers.	Forum September 2020 Report December 2020 (this report)			
Other briefings and engagement as appropriate	Report on the activities, briefings and outcomes	Final report December 2020 (this report)			
Objective 3. To better inform policy makers of the regional and national economic impacts of forest plantations					
Project website development on the University of Melbourne platform	Project website hosted by the University of Melbourne	June 2020			
Revision of economic analysis and implications for industry investors and small grower livelihoods.	Report on economic implications of plantation development in Viet Nam. Report on economic implications of plantations and industry development in Lao PDR	September 2020 (not completed) February 2020			
	Policy briefs and presentation of outputs to key policy makers and plantation sector stakeholders. (as part of forums above)	December 2020 (this report)			

#### 5.1 Proposed activities and outputs/milestones

## 6 Activities and outputs

#### 6.1 Activities

Activities in the project were largely as specified in Section 5.

#### Objectives 1 and 2.

For Lao PDR, policy briefs were revised and translated into Lao language and presented to policy makers on 2 December 2019. They were also circulated widely through networks of policy practitioners and donors established during ADP/2014/047.

Research findings on policy and legislation review were presented at a multi-stakeholder dialogue "Facilitating High-Quality Forest Plantation Sector Investments in Lao PDR" organised by the Interlaken Group and during a subsequent study tour organised by MAF and FAO on "Promoting industrial tree plantations concessions in degraded Production Forest Areas".

Detailed submissions were made on drafts of the Decree on Plantation Promotion No. 247, 2019 and on the revised Forestry Law, 2019. Several of the recommendations made were adopted.

Dissemination of policy recommendations for forest plantations in Lao PDR and providing input to the Forestry Strategy 2030 occurred at a workshop on, held at the Faculty of Forest Science, NUOL in Vientiane in February 2021; this strategy development process is ongoing.

For Viet Nam, a policy brief was prepared in English and Vietnamese and presented to policy makers at a forum on 16 November 2020.

Fieldwork was conducted in between August and November 2020 in four provinces of Lao PDR to assess costs and returns for out-grower farmers growing trees on contract, originally for Oji Lao Plantation Forest Co. Ltd. (LPFL). In 2017, Oji Holdings sold Oji Lao Plantations Limited (LPFL) to New Forest Asia, and the enterprise is called Mekong Timber Plantations Company Limited (MTP).

A study to test a framework to assess changes in ecosystem services from increased Acacia plantations in central Viet Nam was completed.

A Masters student thesis project by Cleo Riddy provided the opportunity to explore in more depth the development of a timber legality assurance system (TLAS) in Lao PDR as part of ongoing negotiations with the European Union (EU) to establish a bilateral trade agreement: the EU-Lao PDR Voluntary Partnership Agreement (VPA) under FLEGT processes. Alongside advancing trade in legal timber, the VPA seeks to strengthen national forest governance and sustainable forest management by promoting participatory processes and inclusive policies for all stakeholders. The project involved 20 semi-structured interviews with key representatives from industry, the EU, academia, and NGOs to identify how smallholder plantation growers have been, and could be, considered in the TLAS and associated VPA negotiations. Policy briefs are being developed and will be disseminated to participants and more broadly.

Analysis for a journal article on assessment of ecosystem services from plantation forests in Central Viet Nam was completed and published.

#### **Objective 3.**

National and regional economic analysis and implications for plantation industry investors in Lao PDR were completed (see publication list in Section 6.2). Analyses of impacts for small grower livelihoods were completed in studies by PhD student, (now Dr) Alex van der Meer Simo.

National and regional economic analysis of plantations in Viet Nam was not completed due to restrictions associated with COVID-19.

The project website was not completed.

#### 6.2 Outputs

- 1. Revised policy briefs for Lao PDR (Appendix 1):
- Policy Brief 1 Options for forest plantations in Lao PDR
- Policy Brief 2 Land Tenure for Plantations in Lao PDR
- Policy Brief 3 Smarter regulation of plantation wood value chains in Lao PDR
- Policy Brief 4 Improving environmental outcomes from forest plantations in Lao PDR
- Policy Brief 5 Investment in tree plantations in Lao PDR
- Policy Brief 6 Regional Economic Effects of Plantation Industries Lao PDR
- 2. Policy brief for Viet Nam (Appendix 2)
- 3. Plantation Policy Forum Report for Lao PDR (held 2 December 2019, Appendix 3)
- 4. Plantation Policy Forum Report for Viet Nam (held 16 November 2020 Appendix 4)
- 5. Journal publications from this project and research in ADP/2014/047 are listed in Section 9.2.
- 6. Student theses associated with the project:
- van der Meer Simo, A. 2020. More than the trees: a comparative study of the contribution of four tree plantation models to rural livelihoods in Lao PDR., PhD thesis. Australian National University
- Riddy, C. 2020. Plantations, policy, and participation: smallholders and the timber legality assurance system in Lao PDR. Masters research thesis. University of Melbourne.

## 7 Key findings

#### 7.1 Lao PDR

#### **Plantation Policies**

The Land Law and the National Land Use Allocation Plan set the basis for designating land uses. Project analysis indicated that effective land use planning requires up-to-date and accessible land information but land use planning and allocation for plantations is often confusing and inconsistent. The processes to develop land use agreements with individual farmers and with villages, or to develop leases and concessions by corporate investors, are not clearly specified and vary between provinces, creating many challenges for large and small investors in tree plantations.

The project also found that while there has been regulatory reform some regulations for plantations and agroforestry remain complex and unevenly applied across provinces and districts, with high transaction costs for small and large investors. Plantation registration is difficult and costly, particularly for smallholders and is a barrier for participation in legal wood markets. Smarter regulations, that are clearer and easier for the government to administer, can motivate farmers and industry, and maximise economic, social and environmental benefits from investment in plantations and wood processing.

Smallholders are not adequately considered nor understood in policy development and associated decision-making processes (Riddy 2020). Voluntary Partnership Agreements under FLEGT processes offer an opportunity for legislative reforms to specifically target tree growers. To support the development of policy that is fair and accessible, the government should simplify plantation policy and provide pathways tailored to the needs of smallholder and micro and small enterprises when defining timber legality. To support equitable participation, project donors and policy makers must clarify how these actors are represented in negotiations, and support projects which are explicitly designed to understand their needs. Policy makers can look to the experiences of other VPA countries in the region to ascertain opportunities that reduce barriers to smallholder market access, which may be applied in the Lao PDR context.

#### **Regional economic contribution of plantations**

Results of a simulated increase in plantation activity in Lao PDR (Phimmavong and Keenan 2020) indicated that welfare and income inequality would increase, and poverty incidence would decrease. While Northern region households potentially gain most from this policy outcome, rural households enjoy almost the same level of welfare gain as their urban counterparts. Therefore, the incidence of poverty, the poverty gap index and poverty severity rates in this region decline. Overall, this increase in welfare accords with the actual situation in Lao PDR. Plantation development policy is likely to favour the regions and ethnic groups that are actively involved in this sector.

Input-output analysis of the regional and national economic impact of a 300,000 tonne/yr bleached hard-wood kraft pulp mill that began operation in 2018 in Savannakhet Province (Phouttavong et al. 2020) indicated that the mill had a major impact on the plantation wood market in Lao PDR. Regional level analysis revealed that the (an equivalent of US\$ 294 million), largely due to the impact of the pulp mill on demand from wood industry sector and other related sectors. The greatest beneficiaries from the mill are industries in other countries which purchase and use the pulp. At the national level, the gross production output of the national economy would increase by 2.3% (US\$ 351 million).

Currently, raw material for the mill is mostly coming from plantations in Viet Nam and Thailand. Increasing timber plantations on degraded land in Lao PDR, would greatly enhance the economic contribution of the mill to the local community. Increasing sustainable timber production from plantations in Lao PDR needs enforcement of forestry and other laws, and supporting policies, guidelines and codes of practices relating to planted forests to ensure that forest processing industries are environmentally responsible and consistent with international best-practice standards.

#### Household economic contribution of plantations

Analysis of household livelihoods (van der Meer Simo 2020) indicated contribution from tree plantations were positive where plantation models allowed for intercropping by households and when plantation companies offered more labour for local people. In contrast, where contracts to grow trees were not honoured, crops could not be grown jointly, and plantation labour opportunities were limited, returns to households were not competitive with alternative land uses, including traditional swidden agriculture. To best contribute to livelihoods, tree plantation development should allow space for other land uses within the plantation system and adopt plantation management strategies that employ more local labour and provide opportunities for diversified livelihood strategies.

The value of the current land use to rural livelihoods needs to be considered in plantation policy. Patches of secondary forests in various stages of fallow and regrowth that farmers create through swidden agriculture are important to rural livelihoods. The mean annual household environmental income – including from 'degraded' forests and swidden agriculture – in all case study villages was much higher than those reported in similar recent studies in Lao PDR. This suggests a mismatch between policy makers and local people about the perceived value of degraded forest lands and helps explain why many local people oppose large-land concessions in Lao PDR.

Returns to households from outgrower contract arrangements vary from -26 to + 32% internal rate of return (IRR). This difference was largely due to differences in stumpage price associated with harvesting and transport costs (Appendix 3).

Overall, tree plantations are not inherently positive or negative for local livelihoods. While all the plantation models studied can impact positively on local livelihoods, their potential to do so increases where trees are integrated with other land uses, where more local labour is employed, and where the opportunity costs of conversion of land to tree plantations are lower.

#### 7.2 Viet Nam

#### Policy for smallholder tree growers and higher value timber

The project found that barriers to achieving these policy goals were:

- Smallholder needs for short-term income,
- low price difference between small sawlogs and chip logs,
- weak credit systems,
- concern about risks of storm damage or disease with longer-rotation plantations,
- limited smallholder knowledge about growing larger logs, and poor linkages among actors along the furniture wood value chain.
- low understanding of current environmental regulations and, limited monitoring of environmental impacts or benefits of plantations,
- high costs, uncertain returns and uneven distribution of benefits of forest certification,
- lack of transparency and accountability and lack of local level resources for land allocation.

The Government of Viet Nam has issued several policies to improve sawlog supply in the country, however this situation has not significantly improved. The main reason is the lack of incentive policy to support forest growers to shift from short-term plantation to longer

term plantations for sawn timbers. Therefore, better incentives are required to support small-holder forestry in longer-term plantation development.

Specific policies should be developed for (i) plantation areas to grow larger logs and (ii) for shorter-term production. For larger logs, policies for maintaining plantation as well as minimizing the impacts of risks need to be addressed, for instance, species selection to meet both economic and environmental development goals and amending loan policies in the Cooperative Law.

Social benefits of plantation development are quite clear, particularly the contribution of plantation development to poverty reduction and livelihood improvement. However, engagement between the large number of smallholder growers and private sector wood processors is not effective. New policies can support measures for promoting private sector investment and collaboration between small-holders and enterprises across the supply chain.

It is important to organize the small forest growers to work together to reduce costs of production and help them access better technology (good seedling sources, technical capacity building), higher value timber markets and finance. In this regard the role of relevant organizations should be clarified and strengthened, for example, cooperative alliance, farmer union and extension service centres. Cooperation between management agencies, research organizations, forest growers and enterprises should be improved to support smallholders in development of higher value plantations for improved economic returns and environmental benefits.

#### **Ecosystem Services**

A study to test a framework to assess changes in four ecosystem services due to an increase in Acacia plantations in central Viet Nam (Paudyal et al 2020) found that the area of planted forests in Quang Tri and Thua Thiên-Hu Provinces increased from 130,930 to 182,508 hectares from 2005–2015, mostly by replacing non-forest areas (degraded lands, grasslands and agricultural lands) and poor forests. The framework demonstrated capacity to assess the effect of planted forests on wood flow, carbon stocks, sediment retention, and that conversion of non-forest land to planted forest, between 2005 and 2015 in the central region of Viet Nam improved the capacity of the landscape to supply ES. Expansion of planted forests, as well as the increased area of poor forest on non-forest land, reduced landscape capacity to supply freshwater, but increased sediment retention, habitat provision and carbon stocks. Results can also provide a basis for new funding opportunities for ES produced from planted forest and other landscape restoration programs.

## 8 Conclusions

The project largely achieved its objectives to inform development of new laws, decrees and regulations for forest plantations in Lao PDR and Viet Nam based on the outputs from Project ADP/2014/047, engage policy makers and stakeholders in dialogue on new policy options for forest plantations and better inform policy makers of the regional and national economic impacts of forest plantations. Research on aspects of tree plantation policy in Lao PDR is continuing under Project FST/2016/151 (VALTIP3).

Some elements for Objective 3 were not completed due to restrictions imposed by COVID-19, this included the regional economic analysis of plantations in Viet Nam and the redevelopment of the project website.

#### 8.1 Policy recommendations for Lao PDR

The project found current regulations for plantations and agroforestry in Lao PDR remain complex and unevenly applied across provinces and districts, with high transaction costs for small and large investors. Despite some reforms, plantation registration is difficult and costly and is not valued. This is a barrier for smallholders to legally participate in wood markets. Smarter regulations can motivate farmers and industry and maximise economic, social and environmental benefits from investment in plantations and wood processing.

## The Government of Lao PDR should improve land use planning and allocation for plantation investment by:

- setting a clear vision for tree plantations that specifies goals for forest restoration, poverty alleviation and timber industry development, with clearly identified roles for larger private investors and smallholders. It should ensure the Land Law, Forest Law, Environment Protection Law, and Investment Promotion Law are consistent with this vision;
- 2. clearly indicating the different land categories for tree plantations small private ownership, leases, concessions, village land and Production Forest Areas;
- 3. identifying forestland suitable for plantations based on ecological forest type and current livelihood contribution and apply this process rigorously and consistently.
- 4. supporting land use planning and allocation by consolidating, updating and making available information on land use and capability held by various government agencies, development agencies, research projects, and companies;
- 5. identifying strategic plantation investment zones to guide investment and actively engage with industry and the community through inclusive land planning to identify the best locations for plantations within these zones;
- 6. recognising and respecting local community interests and rights in land planning, including community and household need to access rotational swidden land for food security and the potential for integrated agroforestry models;
- 7. allocating land for plantations based on its capability for tree growing, and operational suitability, such as slope, and access to infrastructure and markets; and
- 8. ensuring transparent contracts and land leases between foreign investors and villages and smallholders that clearly identify and assign responsibilities, benefits and risks between all parties and that have mechanisms for ensuring free, prior and information consent by local people and to mediate and resolve disputes.

# The Government of Lao PDR should implement smart regulations for tree plantations by:

- regulating plantations based on risk level for example, smallholder tree growing is low risk to the environment and the community and approval for smallholder tree planting and timber harvest and transport could be granted by local level authorities such as village heads;
- requiring larger-scale plantation investors to meet international best practice Corporate Social Responsibility (CSR) standards such as FSC or PEFC certification or International Finance Corporation (IFC) Performance Standards;
- 11. designing flexible regulations for larger investors based on local social monitoring and control – for example, companies not causing problems with local communities continue to operate freely, when problems occur regulation escalates to district or provincial officials, with requirements to make good on impacts, those making repeated offences can be fined, sanctioned or have licences terminated;
- 12. setting regulations for larger-scale plantations in Production Forest Areas (under PMO09) to indicate (a) the desired long-term goal for this investment, for example natural forest restoration, long-term timber production, extent of smallholder ownership (as in Viet Nam) (b) transparent benefit sharing between industry, governments and communities, (c) clear environmental standards (such as the area of natural forest restoration), and (d) regular (3-5 yearly) review of land lease rates, employment conditions and payments for village development; and
- 13. setting up a mechanism to improve coordination between levels of government and government agencies to ensure a consistent approach to plantation regulation.

## The Government of Lao PDR should work with investors and the wood processing industry to facilitate value chain investment by:

- 14. building capacity to facilitate partnerships to support value adding among value chain actors (growers, traders, primary processors and manufacturers) to provide information on desired species, improved seedling quality, management for required log sizes and qualities and prices for different types of logs and products;
- 15. developing demonstration, communication and extension activities for forest growers; and
- 16. promoting and supporting low-cost group certification for smallholders.

#### 8.2 Policy recommendations for Viet Nam

The Government of Viet Nam should:

- 1. undertake analysis to identify the right places to support larger log production.
- 2. Provide finance (loans or grants) to grow larger logs, potentially through expanding or Carbon- Payment for Forest Environmental Services for increased carbon sequestered in longer rotation plantations.
- 3. increase extension to improve smallholder capacity to produce larger, higher-value logs.
- 4. create networks to improve linkages in furniture wood value chains and increase understanding of markets and the requirements for forest certification.
- 5. encourage furniture makers to increase prices for larger logs and contribute to costs of certification by growers.
- 6. develop insurance schemes to mitigate risks for long rotation large timber plantation forest.
- 7. increase resources, transparency and accountability in forest land allocation.

#### 8.3 Further research

In Viet Nam, further research and analysis are required on the following topics to support policy implementation:

- design of incentives to increase carbon stock in higher value, longer-rotation plantations by extending Payment for Forest Environmental Services (through the Forest Protection and Development Fund);
- 2. accounting for carbon stored in wood products and incorporating this aspect into carbon payment incentives;
- 3. options for managing risks in longer rotation plantations due to storms or disease losses e.g. insurance, government or industry underwriting, disaster risk compensation funds for value losses;
- 4. analysis to determine the balance in ownership between State Forest Enterprises and smallholders. What are the right settings to provide government income, wood for local industry development, employment and environmental benefits?;
- 5. determining the minimum plantation land area to meet income requirements for poverty alleviation in different locations.
- 6. design and implementation of training programs, peer learning processes and information and materials.
- 7. design of suitable credit arrangements to support tree growing by poorer households.

In Lao PDR further research and analysis are needed to support:

- 1. the development of PFES approaches, including for carbon in plantations.
- 2. developing and piloting incentives for smallholders and mSMEs to comply with regulations.
- 3. regulatory impact analysis associated with these incentives and sector-wide reforms for smarter regulations.
- 4. local level representative associations that could participate in policy development, including the FLEGT VPA.
- 5. economic and policy analysis of forest restoration programme (Forestry Strategy to 2030)
- 6. designing options for community forest resources management in the National Production Forest through a consultation with stakeholders and technical surveys

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## **10 List of Appendixes**

10.1 Appendix 1: Policy forum report Lao PDR

- 10.2 Appendix 2: Policy forum report Viet Nam
- 10.3 Appendix 3: Summary of data on cost and returns of forest plantations in Lao PDR
- 10.4 Appendix 4: Revised policy briefs for Lao PDR
- **10.5 Appendix 5: Revised policy briefs for Viet Nam**