A CASE STUDY OF THE LAO PDR FOREST INVESTMENT PROGRAM

PROGRAM: SUFORD-SU PROJECT

WORLD BANK GROUP

CIF CLIMATE INVESTMENT FUNDS

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LIST OF ACRONYMS

Lao PDR	Lao People's Democratic Republic
ADB	Asian Development Bank
ANR	Assisted Natural Regeneration
ASKO	Assessment of Capacity
BCC	Biodiversity Conservation Corridor
CAP	Community Action Plan
CEF	Community Engagement Framework
DAEC	Department of Agricultural Extension and Cooperatives
Delta r-NBR	Self-Referenced Normalized Burn Ratio
DOF	Department of Forestry
DOFI	Department of Forest Inspection
DOP	Department of Planning
EMP	Environmental Management Plan
ESF	Environmental and Social Framework
EU	European Union
FCPF	Forest Carbon Partnership Facility
FIP	Forest Investment Program
FLM	Forest Landscape Management
FLUZ	Forest Land Use Zoning
FMA	Forest Management Area
FOMACOP	Forest Management and Conservation Project
FPIC	Free Prior and Informed Consent
FS2020	Forest Strategy 2020
GHG	Greenhouse Gas
GoL	Government of Lao PDR
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association of the World Bank
IFC	International Finance Corporation
ITTO	International Tropical Timber Organization
MAF	Ministry of Agriculture and Forestry
MDB	Multilateral Development Banks
MOIC	Ministry of Industry and Commerce
MRV	Measuring Reporting and Verification
NTFP	Non-Timber Forest Products
PDO	Project Development Objective
PES	Payment for Environmental Services
PFA	Production Forest Area
PLUM	Participatory Land Use Mapping
PLUP	Participatory Land Use Planning
PMO15	Prime Minister Office Decree 15/2016
PSFM	Participatory Sustainable Forest Managemen
REDD	Reducing Emissions from Deforestation, Forest Degradation and Land Use Change
R-PP	Readiness Preparation Program
SUFORD	Sustainable Forestry for Rural Development
SUFORD-AF	Sustainable Forestry for Rural Development –Additional Finance
SUFORD-SU	Sustainable Forestry for Rural Development –Scaling Up
UN COMTRADE	United Nations Commerce and Trade
US$	United States Dollars
VLDG	Village Livelihoods Development Grant
WB	World Bank

PREFACE

This case study has been written by Arturo Bolondi. Guidance and oversight was provided by Meerim Shakirova and Stephen Danyo.

We are grateful to colleagues for their inputs: Fnu Hanny, Deborah Pierce, Esa Puustjärvi, Sousath Sayakoummane, Bounpone Sengthong, Manoly Sisavanh, and Anita Soukhaseum.

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EXECUTIVE SUMMARY

In Lao PDR, 67% of the population is rural and relies on natural resources for livelihoods and income generation. Over 50% of the country's wealth is its natural capital, being a globally important biodiversity hotspot. Forests cover a total of 13.7 million ha (58% of the country's surface), of which 3.1 million are classified as production forests. As such, Lao PDR was part of the 8 pilot countries of the Forest Investment Program (FIP). The 2011 Lao PDR FIP investment plan identified production forests as a key focus area to address drivers of deforestation and forest degradation, and thus the three approved projects outlined in the investment plan focused on different dimensions of production forestry from complementary perspectives to be consistent with FIP's programmatic approach.

This case study reviews thematic areas of the World Bank (WB) implemented FIP Sustainable Forestry for Rural Development – Scaling Up (SUFORD-SU) project, which will conclude March 2020. Data collection combines a review of available primary and secondary documentation with in-country discussions with key stakeholders. Findings reflect the main contributions of the SUFORD-SU project with regard to Reducing Emissions from Deforestation and Forest Degradation (REDD+), participatory sustainable forest management, village livelihoods development, social safeguards, governance & law enforcement, and finally private sector & stakeholder coordination.

The forest carbon agenda is a high priority in the national strategy for green growth, and FIP is contributing to the national REDD+ strategy by incorporating Participatory Sustainable Forest Management (PSFM) and piloting Forest Landscape Management (FLM), collecting data, building technical capacity and raising public awareness on the importance and potential benefits of REDD+. However, it is too early to assess whether REDD+ payments alone would be sufficiently large to be used as an incentive for improved forest management in production forests. Key issues like the nature of the designated authority to manage carbon – to be created, its location within the larger administration, the mechanisms in place of collection and distribution of financial resources among different actors centrally and locally, transaction costs and the ability to provide effective documentation to access the funds in the first place remain uncertain at this stage.

Remaining high quality forests account for only 8% of production forest areas, reducing the potential for profitable and sustainable harvest. This calls for urgent action towards restoration and regeneration, to increase the harvest potential of a sustainably managed healthy forest.

The project development objective is to execute REDD+ activities through participatory sustainable forest management in priority areas and to pilot forest landscape management in four provinces. FIP progress in Lao PDR is noteworthy. SUFORD-SU targets 2,925,000 ha to come under management plans supported by the project. In 2017 alone, over 2,600,000 ha were achieved, bringing the cumulative total to 3,626,699 ha covered by management plans. FIP SUFORD-SU has promoted a variety of livelihoods activities,

including agriculture, livestock and small village grants managed through Village Livelihood Development Committees. A positive link appears between livelihood improvement and forest conservation, but the link is often not direct and sometimes not very strong. Going forward, activities undertaken under FIP SUFORD-SU will need substantial scaling up both in terms of funding and scope, prioritizing activities that make a direct contribution to forest protection and improving livelihoods for the entire village, including active promotion of voluntary vocational training for off-farm jobs. Furthermore, food security should be considered from a policy perspective in order to guarantee sustained commitment to good practices and production models.

FIP has been instrumental in boosting both awareness of and capacity to implement safeguards. To implement a FIP project, Lao PDR had to comply with three separate but mutually supportive sets of safeguards, which were integrated into a coherent national framework. On the ground, FIP SUFORD-SU has innovated with the practice of Participatory Land Use Mapping-Forest Land Use Zoning (PLUM-FLUZ), which promotes the safeguarding of customary land tenure in Lao PDR so that communities are not losing access to forest land.

The FIP SUFORD-SU project has substantially contributed to on-the-ground implementation of the Prime Minister Office Decree 15/2016 (PMO15), an export ban on unprocessed timber. Fostering coordination among different ministries, within the Department of Forestry and among other institutional and international partners was also a successful outcome. In the two years since PMO15 implementation began, results on the ground show that SUFORD-SU has contributed on average US$ 17,500 per province to support law enforcement activities.

Discussions are ongoing at different levels on how to improve management and production practices in the future. The government challenge is on two fronts: by halting exports on unprocessed timber the ban aims at buying time to set up a permanent regulatory framework that incentivizes the forestry sector towards processing and value addition over raw timber. This regulatory framework could include certification schemes, NTFPs and supply chains to access high value international markets. On the other hand, an enforcement system is to be set up and implemented to prevent the widespread mismanagement of wood, including multiple illegal activities at different stages of the supply and distribution chain. Currently, the only companies able to comply with the export ban provisions are some private plantations partnering with the International Finance Corporation (IFC) in an IFC implemented FIP "Smallholder Forestry Project".

A crucial field of intervention and ongoing policy dialogue is on land tenure. In Lao PDR smallholders do not always own the title of the land, and therefore it is difficult to set up plantations and out-grower schemes avoiding conflicts. The private sector plays a central role in the growth of supply chains involving smallholders as active participants. One of FIP's funding principles is to address drivers of deforestation, which often occur outside of the forest sector and are directly or indirectly caused by private entities. FIP established a model for the creation of jobs and partnerships at the village level, all through reducing emissions. Today, the area of private tree plantations in Lao PDR is about 500,000 ha. A new land law is under discussion, and lessons from the FIP process are informing the ongoing dialogue.

FIP SUFORD-SU's approach of aligning incentives and creating common understanding has helped lay the foundation for systemic change, but signals are thus far at interim-level only. FIP has helped to strengthen highlevel government commitments to forest protection. Forest policy reforms, new financing approaches, and cross-departmental working are also in evidence. Nonetheless, illegal logging, forest degradation and rural poverty

still pose serious threats to the preservation of the country's natural resource base. To this end, the government has demonstrated interest to continue working on the path traced by the FIP programmatic approach, by leveraging different stakeholders' financial and technical capacities towards a more holistic, landscape-centered development strategy to meet its national and international commitments.

INTRODUCTION

With a population of 6.5 million[1], Lao People's Democratic Republic (Lao PDR) is a landlocked country in Southeast Asia, bordering China, Myanmar, Thailand, Cambodia and Vietnam.

FIGURE 1 MAP OF LAO PDR

Although Lao PDR retains the highest proportion of forest and woodland among any other country in mainland Southeast Asia, the records of the Department of Forestry (DOF) indicate that the total area of forest declined dramatically from 70% of the land area or about 16.6 million ha in 1940 to only cover a total of 13.7 million ha in 2010 (58% of the country's surface).[2]

Emissions from forest degradation may equal, or even surpass those from deforestation in Lao PDR. It is estimated that almost 10 million hectares of forest are subject to degradation annually and this causes emissions of approximately 23.3 million tCO2e.[3] Shifting cultivation and logging are the main drivers of degradation, and especially illegal logging and unmanaged conversion logging are causing degradation. Besides causing greenhouse gas emissions, these activities also undermine the possibilities for sustainable forest management and benefit sharing from natural resources, which would be essential in improving the livelihoods of rural Lao people.

The Forest Investment Program (FIP) is a US$ 749.9[4] million fund established in 2008 to provide financing for countries to address the drivers of deforestation and forest degradation. These funds are channeled through multilateral development banks (MDBs) and have an overall objective to "provide financial and knowledge support for country-led initiatives to reduce greenhouse gas emissions from deforestation and forest degradation and to promote improved sustainable management of forests".[5] This helps make forests a central component of low-carbon development. Designed under the leadership of the government in coordination with the Asian Development Bank (ADB), the World Bank Group (IDA, IFC), other development partners, and key Lao stakeholders, Lao PDR's FIP investment plan was approved in 2011.[6] The core objective of Lao PDR's FIP investment plan is to reduce greenhouse gas (GHG) emissions from deforestation and forest degradation through sustainable management of forests and conservation and enhancement of forest carbon stocks by promoting climate resilient development, particularly in terms of reduced poverty and biodiversity loss in forest ecosystems. Co-benefits include gender and ethnic minority informed efforts to reduce poverty and increase household income, improve health and education in local communities, and promote the inclusion of civil society and diverse ethnic groups in forest governance. Furthermore, FIP investments aim to reduce the adverse effects of climate change by preserving rich biodiversity and valuable natural resources, particularly water, and soil and trees. The investment plan identified nine main drivers of deforestation in the country[7], each involving different actors such as farmers, shifting cultivators, logging companies and contractors, local and foreign investors, unspecified individuals, construction companies, and government authorities.[8]

FIP funds have been channeled through three implementing MDBs, that have developed complementary projects covering the main thematic areas identified by the investment plan. The themes of the FIP Lao PDR investment plan have been developed to support the Forest Strategy 2020 target to attain a 70% forest cover in the country and the relevance of this target to REDD+ [9] by 2020.[10] A FIP focal point is appointed to coordinate FIP activities in the country government, at the institutional and operational level. In Lao PDR, this role is covered by Mr. Bounpone Sengthong, Deputy Director General of the Ministry of Agriculture and Forestry (MAF) Department of Forestry (DOF). This programmatic approach aims to maximize results and efficiencies by leveraging each MDB's expertise and historical engagement in the country.

The ADB-implemented FIP project, the Biodiversity Conservation Corridor (BCC), focuses primarily on protection forest, identifying forest areas outside the designated state forest areas with high conservation value, and on developing Payments for Environmental Services (PES) to ensure their protection. Approved in 2016, it covers 3 of the poorest provinces in the southern area of the country.[11] The project began implementation in 2017, with FIP co-financing of US$ 12.8 million, counterpart financing of US$ 7.56 million, and IDA financing of US$ 19 million.

The International Finance Corporation (IFC) is implementing the FIP-Smallholder Forestry Project, partnering with private enterprises that can meet the Government of Lao PDR's (GoL) requirements and MDB engagement criteria. The IFC is also working with local communities that are interested in participating to establish plantation forests throughout grower schemes and agroforestry systems. The project applies a lead-firm theory of change, leveraging 'first movers' to pilot best practices and attract more investors.

The main FIP engagement in Lao PDR is the Sustainable Forestry for Rural Development – Scaling Up Project (SUFORD-SU), co-financed and implemented by the World Bank's International Development Agency (IDA), the fund for low income countries. The project focuses on Participatory Sustainable Forest Management

(PSFM) in Production Forest Areas (PFA) and strengthening the legal, governance and regulatory framework to institutionalize REDD+ and promote green growth. The objective of this case study is to capture the main features of FIP SUFORD-SU's six years of implementation, in the context of Lao PDR's efforts towards low carbon development. A mixed methodology was adopted in the compilation of evidence for the case study, consisting of a review of institutional and peer-reviewed publications, participant observation in the 2018 FIP Stakeholders Meeting which took place in Vang Vieng, Lao PDR in December 2018, and follow up of targeted questions to participants in the meeting. As the project is about to close in March 2020, this case study gathers lessons learned and provides key areas for future interventions. The main audience of the report are the Lao PDR Government, particularly the Department of Forestry, FIP and REDD+ practitioners, MDB partners and private investors in forest plantations.

The paper is organized around six thematic areas the project has impacted within the national forest agenda, namely REDD+, participatory sustainable forest management, village livelihoods development, social safeguards, governance & law enforcement and private sector engagement. It outlines key data and progress as well as considerations for future scenarios.

Box 1: FIP - SUFORD-Scaling Up: Vision and History

SUFORD-SU is the fourth of a series of projects promoting participatory sustainable forest management in Lao PDR. The World Bank and Government of Finland have been implementing partners of the Government of Lao PDR since the beginning, with Finland discontinuing its technical assistance engagement in June 2017. The cooperation started in 1995 when the first Forest Management and Conservation Project (FOMACOP) was launched in 2 provinces. FOMACOP had a strong focus at the village level, being the first project to try to organize production forests in a sustainable way. Before this attempt, there were no management plans for production forests in the country, and logging quotas were granted to operators without strategic planning nor a strong base of evidence on the resource availability and depletion rates.[1] At the time, the government was concerned with the rapid depletion of natural resources, concern that was exacerbated by the lack of precise information on the status of the logging quotas. A second core objective was to improve the participation of villagers in forestry. Village management plans were developed as frameworks to enable this participation, whereby villages could decide their own activities within the village management plan, including the ability to independently sell logs.

The project lasted five years (1995-1999). Over the course of implementation, concerns emerged within the government that excessive decision power decentralized to the village level could cause distortions in the system and damage the forest resources, particularly as villagers could be manipulated from external actors and overharvest, exploiting the relative independence in the sale of logs allowed by the project. This was the rationale for a re-centralization of decision-making power over management of production forests, and the basis for the discussion of a new concept.

The concept was discussed for two years, and in 2003 the WB and GoL launched the Sustainable Forestry for Rural Development (SUFORD). The project was built on the two main pillars of sustainable forestry and improvement of livelihoods which would become the backbone of all future activities in the sector. Activities have gradually expanded from the initial 2 provinces to the current 13 in the fourth phase of engagement. Adjustments were made along the way, such as the new component of law enforcement that was included during the SUFORD-AF phase (2009-2012). Third party certification has also gained higher prominence within the forest management components.

The forest landscape management (FLM) and village forestry are two new concepts included in the last phase of SUFORD Scaling Up (SUFORD-SU 2013-2019). FIP has been instrumental in mainstreaming REDD+ in the project, by co-financing the fourth generation of WB projects to leverage in country experience and local capacity built over the years. The vision behind it was to revive the initial concepts of the original FOMACOP project by decentralizing decision making to the village level with the aim to correct the weakest spots of that first experience, notably elite capture and exploitation from outsiders. In practice however, on the ground implementation is still riddled by obstacles, as operational and capacity constraints have resulted in the forest landscape management component not yet reaching satisfactory levels, despite the high importance given to it by all stakeholders.

1 fire, unsustainable wood extraction, pioneering shifting cultivation, agricultural expansion, industrial tree plantation, mining, hydropower, infrastructure development, and urban expansion.

REDD+:
EMISSION REDUCTION PROGRESS, UNCERTAIN FUTURE FOR RESULTS BASED PAYMENTS

Box 2: History of REDD+

Reducing emissions from deforestation and forest degradation (REDD) was created as a mechanism to reduce greenhouse gases caused from deforestation. The discussions around REDD were inspired by the Stern Review, which demonstrated how reducing deforestation is the "single largest opportunity for cost-effective and immediate reductions of carbon emissions". REDD was first included as a mechanism for reducing greenhouse gases at COP 13 in Bali in 2007. Since 2008, REDD has been referred to as REDD+ when "the sustainable management for forests and enhancement of forest carbon stocks" was given the same level of priority as conservation. The details of REDD+, including methodological standards, safeguards, monitoring systems, and sources of funding were discussed in subsequent COPs.

Lao PDR is being supported in its preparations for REDD+ implementation by the Forest Carbon Partnership Facility (FCPF), the FIP, and most recently the UN-REDD Program (since 2012). A National REDD+ Task Force has been established with inter-ministerial representation. Lao PDR was one of the first 14 countries to become a REDD+ country participant under the FCPF in July 2008 and its REDD Readiness Preparation Proposal grant was requested and signed in October 2009. FIP provided support during the last phase of the SUFORD-SU project in 2013-2019.

REDD+ funding mechanism rewards countries for "reducing emissions from deforestation and forest degradation and improve conservation and sustainable forest management and enhance forest carbon stocks".[12] The rewards are distributed in the form of carbon credits, bought from donors (through mechanisms such as FCPF, Green Climate Fund and others) or freely traded in the voluntary carbon markets.

REDD+ formally became a part of the SUFORD-SU project in the last phase, as a development objective of the FIP, although important groundwork for REDD+ had already been started under the Sustainable Forestry for Rural Development – Additional Finance (SUFORD-AF) phase. SUFORD-AF, as the main sustainable forestry intervention in the country at the time, possessed the necessary structures and capacity at central and local levels to begin collection of data and began to mainstream REDD+ into project activities.

The project development objective of SUFORD-SU is "to execute REDD+ activities through participatory sustainable forest management in priority areas and to pilot forest landscape management in four provinces". At the national level, the coordination activities are implemented by the ongoing FCPF project. A National REDD+ Strategy was drafted as part of this collaborative effort and is now under review at the Prime Minister Office for its final adoption.

The Government of Lao PDR (GoL) has produced an estimated calculation of the carbon emissions in production forest areas supported by FIP SUFORD-SU.[13] Preliminary findings were presented in late 2018 and, although a more refined methodology is needed, which would include data on removals as well, the results provide the direction of the REDD+ process in Lao PDR and the potential benefit sharing deriving from SUFORD-SU activities. The analysis considered the four main sources of emissions from deforestation in Lao PDR over the period 2015-2018 and compared it with benchmark data (2005-2014).

Box 3: Main sources of GHG emissions from deforestation in Lao PDR

- Forest to shifting cultivation;
- Forest to permanent agriculture;
- Shifting cultivation to permanent agriculture;
- Forest to other land cover (i.e. dams or mines).

Source: GoL – FIP Stakeholder Meeting 2018

The data suggest average annual emissions of 732,015 tCO2e, registering an average reduction of 311,793 tCO2/year compared to the benchmark.[14] The relative share of emissions also changed in the reporting period, with emissions from forest conversion to permanent agriculture decreasing by half in absolute terms but still accounting for 50% of the total emissions from deforestation. Conversion to shifting cultivation has been identified as the second source of emissions accounting for 46% of the total. The stark reduction in forest area conversion to permanent agriculture has been ascribed to both market dynamics and the drop in domestic demand for corn, resulting from the government-imposed cap to concessions for corn production, notably in the eastern province of Huaphan. Furthermore, the analysis considered emissions reductions from forest degradation, with a total reduction of 145,400 tCO2e over the reporting period.[15]

Assuming a nominal carbon price of US$5 per tCO2e, the expected total value of the reduced emissions from deforestation and forest degradation within the SUFORD-SU area amounts to US$6,962,871 - rounded down to US$5M to have a conservative estimate.

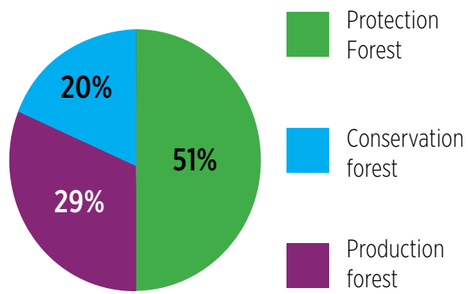
Questions remain open on the operational aspects of the payment schemes. Discussions over ownership and use rights over forest carbon, often referred to as "the new natural resource" are still ongoing in the country. A specific authority will likely be created within the MAF and will be in charge of managing the carbon stocks with the power to transfer management and selling rights to other entities, pending agreement upon benefit sharing mechanisms.[16] A decision is expected within the first semester of 2019, but according to the REDD+ National Coordinator the policy for production forests is not to claim carbon generated from plantations under national REDD+.[17] This could have positive implications for the long-term sustainability of private sector forest plantations, which could sell carbon directly in the market for up to US$30 tCO2e, including from smaller operations under out-grower schemes, potentially providing an additional revenue stream to support the livelihoods of tree farmers. Furthermore, IFC partner companies have expressed their intention to reinvest the entirety of the carbon revenues in the village development funds adjacent to the plantation.[18]

It is too early to assess whether REDD+ payments would be sufficiently large to be used as an incentive for improved forest management. Key issues like the organizational setting of the designated authority, its location within the larger administration, the mechanisms in place of collection and distribution of financial resources among different actors centrally and locally, staff capacity, transaction costs and the ability to provide effective documentation to access the funds in the first place remain uncertain at this stage. However, it is clear that REDD+ is a high priority in the national strategy for green growth, and FIP is contributing to achieve the national REDD+ strategy by incorporating PSFM and piloting FLM, collecting data, building technical capacity and raising public awareness on the importance and potential benefits of REDD+.

PARTICIPATORY SUSTAINABLE FOREST MANAGEMENT:
THE STATUS OF PRODUCTIVE FORESTS

Strengthening and expanding PSFM in Production Forest Areas is the core activity of the FIP SUFORD-SU project, both in terms of scope and financial commitment (over US$ 25 million allocated by FIP, IDA and the government).[19] PSFM systems (regulations, guidelines, training programs and monitoring tools) were developed during SUFORD previous phases. To enhance this work, support for developing or improving existing systems related to REDD+, Measuring Reporting and Verification (MRV) of carbon emissions, PES, and community engagement have been developed under SUFORD-SU, with FIP funding and support. A process of training, consultations and collective deliberation has produced Community Action Plans (CAPs), a converging of multiple past engagements at the village level such as Community Engagement Frameworks (CEFs), Environmental Management Plans (EMPs) and Participatory Land Use Planning (PLUP). The CAPs identify local, social, natural and institutional capital and identify options to finance village livelihood grants for sustainable livelihoods. The total number of beneficiaries from PSFM provinces is about 717,000, of which 354,000 are women and 346,000 who belong to ethnic groups.[20]

FIGURE 2 SHARE OF FOREST USE IN LAO PDR



Lao PDR has stated its goal of reaching 70% of forest cover by 2020.[21] Currently, the country's forests are divided in three main categories: PFAs (3.1 M/ha), conservation forest areas (4.7 M/ha) and protection forest areas (8.2 M/ha).[22] Among the 51 PFAs designated in Lao PDR, 41 are under FIP SUFORD-SU jurisdiction (2.1 M/ha).

Box 4: PFA Sub-Zoning

- Zone 1 - Production Forest Zone (natural timber production)
- Zone 2 - Conservation and Protection Forest Zone
- Zone 3 - Agroforestry and Forest Plantation Zone
- Zone 4 - Non-Forest Zone

Source: GoL – FIP Stakeholder Meeting 2018

Health of the forest can vary substantially from area to area, and with it the availability of harvestable areas. In Zone 1 for example, where natural timber production is allowed, SUFORD-SU estimated that a "good forest" has a harvestable

area of over 60 m3/ha of timber, with a potential annual harvest volume of 14,273 m3; a "degraded" forest has on average a harvestable area between 20-40 m3/ha with a potential annual volume of 960 m3 of timber while a "severely damaged" forest has a harvest annual potential close to zero.[23]

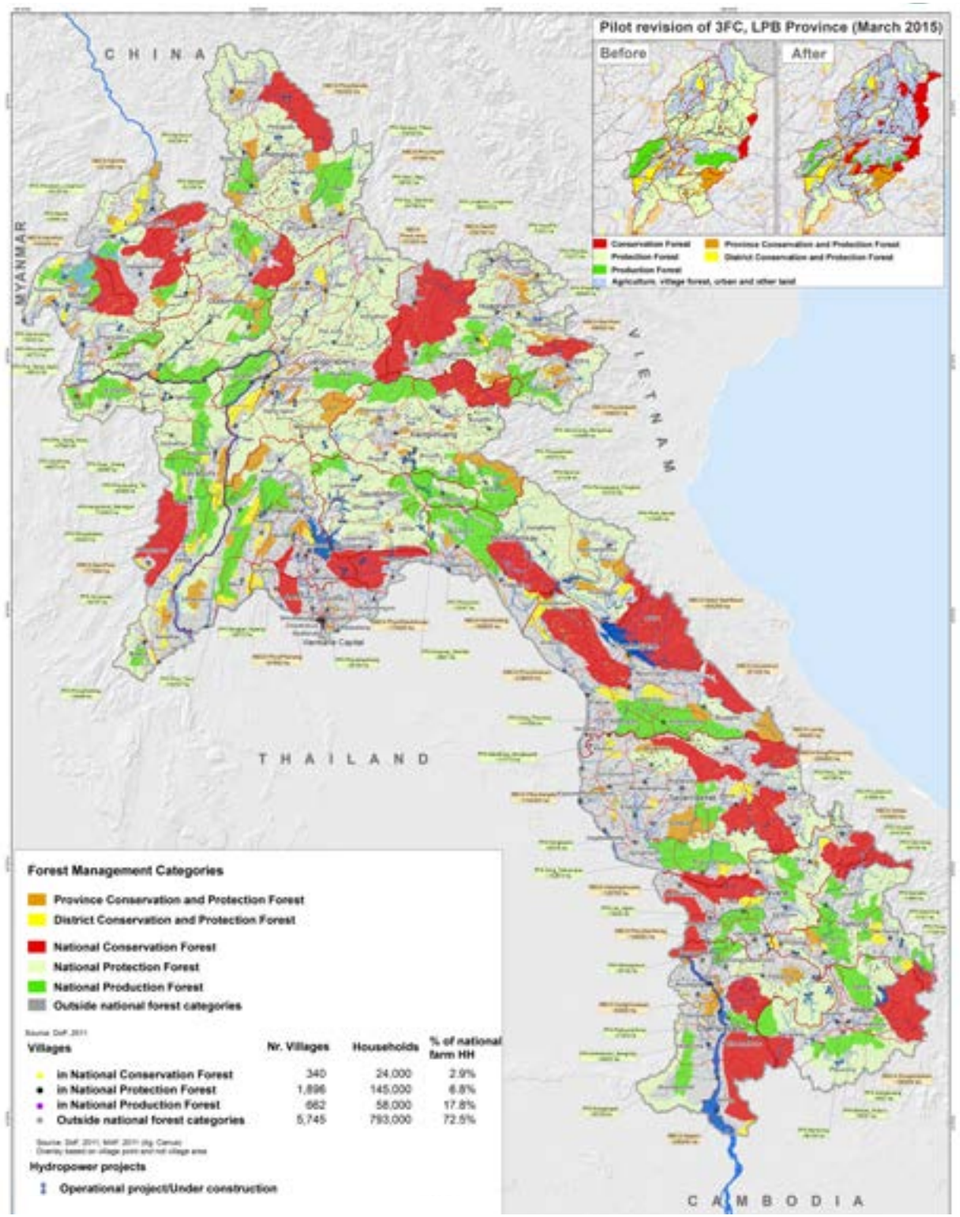
It is relevant to note that the good quality forests account for only 260,000 ha of the 3.1m ha within PFA (8%). This calls for urgent action towards restoration and regeneration, to fully capitalize on the high harvest potential of a sustainably managed healthy forest.

To this end, PSFM could be applied to good quality zone 1 Forest Management Area (FMA) with a cutting cycle of 15 years, cutting 80% of previous cycles to allow further natural regeneration.[24] It has been calculated that with a starting total harvestable area of 16,636 ha/year at a rate of 6 m3/ha, a sustainable harvest could yield 100,000 m^3/year. Annual harvestable volumes could be increased over time, when the regenerating production forests develop into harvestable production forests and could sustain annual harvestable volumes up to 250,000 m^3 at a rate of 15 m3/ha.

FIP SUFORD-SU has consistently worked towards mainstreaming PSFM at the provincial government level, making it possible to integrate these systems at the local level. There has been an improvement in capacity due to the training provided, and these skills will be deployed in the future when the announced value chain investments will be made to increase the domestic value addition of the timber industry. Nonetheless, challenges remain, both due to disparities among provinces as well as difficulty in retaining staff, ultimately losing skills and institutional memory.[25]

In 2012, a logging ban was put in place to curtail the illegal logging crisis affecting the country's forests, it was stipulated under the legal basis that the ban would be lifted after all forest management plans were completed. However, unauthorized harvesting continued under the ban. A vivid demonstration of this negative trend in harvestable wood is the logging plan target set in 2016, a target set by the Government every 8 years. The 2016 target was set at 3,210 m3 or about 40% of the previous 2008 logging plan target (7843 m^3).[26] This has resulted on the ground in loss of livelihood opportunities for communities that are no longer able to harvest timber for commercial purposes, including FIP supported communities. In addition, Prime Minister Office Decree 15/2016 (PMO15) set a stringent export ban for logs and unprocessed wood that are not certified, together with a freeze on concessions to private entities for logging and plantations. More than half of businesses cannot harvest at all following the passage of PMO15. This has created disruption in the sector not only at the national level but also at the local level.

FIGURE 3 FOREST DISTRIBUTION BY CATEGORY



Source: GoL – FIP Stakeholder Meeting 2018

The logging ban has greatly affected communities and businesses.[27] Illegal logging and deforestation have made it difficult to precisely assess a concrete result of the ban. However, this has repercussions on the ability to deliver benefits at the village level especially in those areas adjacent to the most degraded PFAs. The government's perception is that if the PMO15 came earlier, more production forest areas would now be available. Revenue have decreased by 10-15% in the last 2 years nationally due to PMO 15.[28]

During SUFORD-AF, piloting of enrichment planting[29] was undertaken, with a projected diameter growth of 0.5 cm/year – leading to a non-harvestable size of less than 30 cm in diameter. SUFORD-SU on the other hand, has undertaken a strategy of assisted natural regeneration (ANR)[30] which can help increase forest productivity at a lower cost. This measure was conducted at the village level, with grants of US$ 2000 per village. These initiatives are mainly designed for management of zones 1 and 2, financially sustained by public finance or donor resources.

In zone 3 (agroforestry and forest plantation) villages use the fallow forest to supplement their diets, while non-commercial forests such as dry dipterocarps, are also designated for village use and especially for NTFP collection.

In sum, from a public policy perspective, line and gap planting[31] in zone 1 has a poor record of performance in sparsely forested areas, whereas assisted natural regeneration can increase productivity but without substantial increase in forest cover. In zone 3, providing secure tenure is a necessary condition to implementing a meaningful out-grower scheme and effective public-private-people partnerships. Furthermore, food security should be considered from a policy perspective in order to guarantee sustained commitment to good practices and production models: agroforestry combines tree planting with cash crops that can provide income to buy food, whilst allowing NTFP crops (rattan, cardamom, coffee) in the fallow forest to allow existing trees to stand and grow.[32]

FIP progress in Lao PDR is noteworthy. The SUFORD-SU Project targets 2,925,000 ha to come under management plans supported by the project. In 2017, 2,650,488 ha of forest were placed under management plans, bringing the cumulative total to 3,626,699 ha. Also, in 2017, the "Protecting Forests for Sustainable Ecosystem Services" Project incorporating the "Biodiversity Conservation Corridor" and implemented by the ADB reported a target of 690,000 ha for restoration, and 2,116 ha achieved so far. This progress includes 1,768 ha restored with assisted natural regeneration and 348 ha planted with hardwood species on heavily degraded land.[33]

TABLE 1 COST OF RESTORATION[34]

Methodology	Price (USD/ha)
Protection and natural regeneration	350-350
Assisted Natural Regeneration (ANR)	500-750
ANR with enrichment planting	750-1000
Tree plantation	1000-2000
Mining site rehabilitation	10,000

Source: Appanah et al. (2015)

Experience from SUFORD-SU restoration in Savannakhet province shows that working with large parcels of land can result in efficient outcomes. With an allocation of US$ 1000 villagers have restored 100 ha of degraded forest, demonstrating high commitment to apply new skills learned, and abide by the maintenance plan that they themselves designed and agreed to beforehand. The project training activities included information on which species should and should not be cut for domestic use, including invasive species and shrubs.[35] The US$ 2,000 grant per village allocated by the project includes equipment and were perceived as positive by beneficiaries. In Oudomxai province a model for PSFM was put in place that spurred from peer learning. Villagers organized by themselves and decided to share techniques and strategy with neighboring communities resulting in a regeneration of 25 ha per village. The process started with open consultation among village authorities and the community to determine which areas were to be allocated for production and which for conservation. The consultation led to participatory mapping to understand where forests had been encroached upon, as well as which type of forest should be focused on. The deliberative process resulted in a focus on new forests of 10-15 years or younger. The key to success was the clear understanding by all members of the community of the demarcation between areas for agriculture, forest plantation and regeneration.[36]

IS LIVELIHOOD DEVELOPMENT HELPING FORESTY?

"Agroforestry: we should translate this term in Lao, which confuses people in the village. It has agriculture and forest, but what we want to achieve is forest, and we have to be clear on this with people."[37]

All generations of SUFORD projects have had two main components: sustainable forest management and livelihoods development. Arrangements for managing livelihood development activities were different under different phases. Under SUFORD and SUFORD-AF, at the central level the DOF was the overall project coordinator, but livelihood development was managed by the Department of Agricultural Extension and Cooperatives (DAEC) independently. Under SUFORD-SU, DOF coordinated livelihood development as well. At the provincial level, under all three projects local DOF chapters managed both components.

The project's theory of change assumed that improved livelihoods would induce a change from shifting cultivation to other land uses that require less land and enable the conservation of fallow forests that are not needed for shifting cultivation cycles. FIP SUFORD-SU actively promoted agroforestry practices as a means of not only improving livelihoods but also directly contributing to the expansion of forest cover and carbon stocks. The national FIP focal point team has conducted two studies on the impacts of grants distributed under SUFORD-AF, the previous phase of the project. Both studies concluded that the grants succeeded in the dual objectives of reducing shifting cultivation, by 20,000 ha[38], and improving sustainable livelihoods of the local communities living in or adjacent to forests. Most of the beneficiaries have affirmed that income, food security and education have increased because of the project.[39]

The main conclusion was that improvement of livelihoods tends to reduce the area of shifting cultivation because better off people engage less in shifting cultivation. However, there is a degree of difference of impact, depending on the type of livelihoods activity put in place. For example, rice paddies were considered a good option due to the immediate food security improvement generated by direct access to rice. Coffee growth also had a positive impact on village livelihood due to the labor intensity required by the crop, which generated increased income in the form of wages and direct sales. Corn on the other hand, has shown to have no impact on shifting cultivation, and possibly a negative impact as often people integrated it within their shifting cultivation cycle, creating a more permanent conversion of land use.

Questions remain on whether the unused shifting cultivation area became forest or not. Currently there are no data available to prove or deny such an assertion, and other factors may have influenced the ability of the forest to regenerate and lead to land use change. Among these factors, the expansion of permanent agriculture may increase demand for land, and in turn land-related conflicts, whereas on the contrary the improved agriculture productivity may generate the opposite trend with a reduced demand for land. In-and-out migration may have a similar double impact on the demand for land, as less people employed on-farm might reduce pressure on surrounding forest areas. At the same time, more permanent conversion to agriculture can attract migrant workers to previously forested areas, ultimately accelerating deforestation and degradation. Nevertheless, it is likely that Village Livelihoods Development Grants (VLDGs) improved the situation compared to a scenario without these grants.[40]

Agroforestry seems to be a solution to deforestation caused by shifting cultivation and is a more cost-effective means of increasing forest cover, since agroforestry has the same average cost per hectare of gap planting but yields returns earlier.[41] While implications for the quality of the forest should be considered, which will be different for agroforestry vis a vis gap planting, the agroforestry model would be more sustainable because the quicker returns from cash crops incentivize farmers to maintain the forest cover. FIP SUFORD-SU has invested US$ 1.4 million of the VLDGs in agroforestry activities (about 35% of the funding). These activities cover an area of about 2,500 ha, contributing directly to the expansion of forest cover.

Nonetheless, in Lao PDR and within the SUFORD-SU areas agroforestry activities have shown some limitations that call for future action. These include geographic, market, and equity limitations. About 75% of the agroforestry activities funded by the project were implemented in the northern provinces, suggesting that only selected locations could be feasible for such activities. In addition, some experts have suggested that in the medium-term markets won't be able to absorb the significant increase in supply of commodities, especially given the unpredictability of crop quality and farmers' ability to reach out to bigger national and international markets.[42] The question of equity needs to be considered, as the poorest farmers may not be able to access these schemes because of the relative long time for returns to become available (about 4-5 years on average) in relation to the immediate cost of offsetting shifting cultivation for subsistence farming.

The SUFORD-SU project helped households improve their welfare although it is hard to attribute this effect solely to the program.[43] If the livelihood development activities are very selective and focus mainly on activities that have a direct link to forest protection (e.g. agroforestry), then the potential activities are few and potential impact on livelihoods limited. Since sustainable forest management, and especially reforestation, is dependent on the interest of local people in maintaining the forest, incentives and livelihood development are needed in multiple areas.[44]

Going forward, activities undertaken under FIP SUFORD-SU will need substantial scaling up both in size and scope, prioritizing activities that make direct contribution to forest protection and improving livelihoods and welfare for the entire village. As previously mentioned, agroforestry has a limited potential for scaling up due to soil and environmental conditions and limited market potential, especially if practiced by smallholders at a village scale.

This makes it a potential priority area for gradual private sector engagement: large companies can "create"[45] their own market demand that would enable scaling up, while also providing opportunities for formalizing out-grower schemes for forest products (timber and non-timber) and food commodities. Nevertheless, a cautious approach is paramount, with strong safeguards, improved governance and accountability structures to be carefully designed and tested to avoid negative effects on people, forest and the economy.

Following the underlying notion that villages with higher incomes or more food security engage less in shifting cultivation and other activities that cause forest degradation, other scenarios are presented which include different livelihood activities (see box 5).

There has been recognition within the policy dialogue that under SUFORD-SU there was limited technical guidance for livelihood development at the central level, while often forest management activities prevailed over livelihood related activities in the event of a scarcity of financial resources.[46] Going forward, proposals have been made to modify implementation arrangements having the Department of Planning (DOP) within the MAF being responsible for the overall coordination whereas the responsibility for implementing forest management and livelihood development would be separate and entrusted to the DOF and another specialized agency if the livelihoods component is relatively large and comprises activities requiring specialized skills, like irrigation or employment outside of agriculture.

BOX 5: Scenarios for future livelihoods enhancement activities to improve forest management

- Switch from shifting cultivation to permanent agriculture. In the case of rice (61% of cultivated land), the transition to permanent agriculture would present challenges as the area available for paddy extension is limited in the flat areas while in hilly areas large scale irrigation would be needed to enable the development of terraces. Overall there is space for enhancement of the agricultural value chain of existing products through improving, among others, extension services, infrastructure development, mechanization, access to finance, business environment, and land tenure. In the short term, the switch from shifting cultivation to permanent agriculture would increase the area of fallow forests that could regenerate into healthy forests. In the long term however, permanent agriculture may also expand and reduce the forest area or the potential forest area (fallow forest).

- Livestock development is another livelihood option, and a priority activity for the GoL. This scenario creates problems from a forest management perspective, as freely roaming livestock may destroy tree seedlings in regeneration sites, although this impact could be mitigated by fencing. However, ruminants are a significant source of emissions, which would require approximately 0.5 ha of new trees planted for each additional cow as a mitigation measure. For these reasons, livestock intensification is not recommended as a priority livelihood activity in next generation projects.

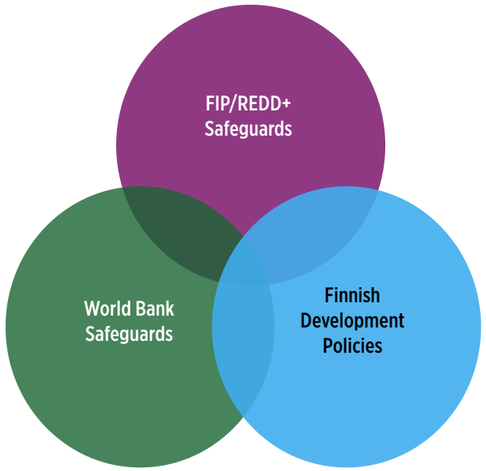
- Off-farm income can be a major driver of poverty reduction in Lao PDR. Benefits accrue not only to those who earn off-farm income themselves but also their families (payment of remittances). However, low-productivity off-farm jobs do not necessarily contribute to poverty reduction and high-paying jobs require education and training. Encouraging off-farm jobs is sometimes seen to create social and cultural problems and lead to "brain-drain", where those with skills and education increasingly move to cities. To mitigate against negative effects, training could prioritize those who are already seeking off-farm jobs while promoting land-based activities like agroforestry for those wishing to stay on the land. If livelihood development aims to improve livelihoods of the entire village, then encouraging uptake of off-farm jobs is a viable strategy for diversification.

Source. Adapted from presentation "Is livelihoods development helping forestry?", FIP Focal Point December 2018.

SOCIAL SAFEGUARDS:
HOW ARE PEOPLE INVOLVED IN FOREST DECISIONS?

Safeguard systems in Lao PDR have been consistently improving over the last two decades, incrementally integrating newer standards and methodologies, as well as training young local staff in implementation at the local level.[47] FIP has been instrumental in boosting both awareness and capacity over safeguards, due to the programmatic and collaborative nature of its business model. To implement a FIP project, Lao PDR had to comply with three separate but mutually supportive sets of safeguards, which were integrated in a coherent national framework. In SUFORD-SU, the World Bank, as the implementing agency had in place safeguards that were reinforced by Finnish Development Policies (technical assistance partner); REDD+ Safeguards completed the safeguards framework as a mandatory inclusion in FIP (Fig.4).

FIGURE 4 SUFORD SU Safeguards Framework



The resulting Community Engagement Framework's main features outline processes for engaging with ethnic communities, women and men, as well as how to include free prior and informed consent (FPIC) and cover preparation of both Forest Management Plans and Community Action Plans. The framework also established procedures for assisting those facing temporary or permanent loss of access to resources, resettlement and grievance mechanisms through the Lao PDR national system.

Two social safeguards assessments were conducted in 2015 and 2017 for FIP projects. The 2015 study found that the community engagement framework adopted by the project was good on paper, but some challenges were encountered during its implementation. In 2017, the second assessment found that implementation had improved, and recording of community engagement was now adequate, based on the recommendations brought by the 2015 assessment. Key findings state that no resettlements were undertaken, and land use changes were all achieved through voluntary and shared decision-making by villagers. All interviewed villagers claimed that they had been consulted, including women, ethnic groups and the poor.[48]

A specific assessment on capacity (ASKO) was also undertaken. Findings suggest that even if there were instances in which local staff did not know what safeguards were, they have implemented the safeguard guidelines in an adequate manner, ultimately complying with the safeguards policy.

Free Prior and Informed Consent (FPIC) is not yet mainstreamed in government activities and has been perceived, especially in the past, as an additional burden on top of project implementation. The adoption of the World Bank Environmental and Social Framework (ESF), which mandates FPIC for any new project, has been lauded as an opportunity to establish a more permanent partnership with the department of Ethnic and Religious affairs to promote a systematic national mechanism to conduct and assess FPIC.[49]

It is very important that people on the ground implementing these activities have the right skills and knowledge and engage with people in the villages. These are sometimes very young staff lacking the necessary experience and skills to work with ethnic groups, something identified by the GoL as a priority to improve in the future. In a mission to a remote ethnic village for example, meeting the requirement of understanding was very hard because even the village head man could not speak Lao, putting a barrier to providing the meaningful information to villagers to inform their decision making.[50]

Social inclusiveness in decision making is ensured in prioritizing Community Action Plans and accessing project benefits through validating the Village Livelihoods Development Grants (VLDG). Beneficiaries of the VLDG must be under a certain livelihood threshold. A dedicated team has been established to implement the Village Livelihoods Development to ensure that all project beneficiaries, regardless of their ethnic group or social status are engaged in a culturally relevant way, aiming at establishing broad based and sustainable community support for the project. To this end, the composition of the team includes members from the four main broad ethnic groups: Hmong-iu Mien, Lao-Tai, Mon-Khmer and Sino-Tibetan which include a total of 16 sub-ethnicities. Out of 295 team members, 81% belongs to the Lao-Tai family groups, while 19% is composed of ethnic staff. 38% of the total staff are women, and 89% of the 73 field teams has at least one female staff.[51]

TABLE 2 Ethnicities in Lao PDR FTP

Hmong-ju mien	Lao Tai
Hmong	Lao
Mou-Khwer	Lue
Brao	Taidam
Harak	Thikhao
Katu	Yang
Khmu	Youan
Lamet	Simu-Libetan
Talieng	Akha
Yae	Phounoy

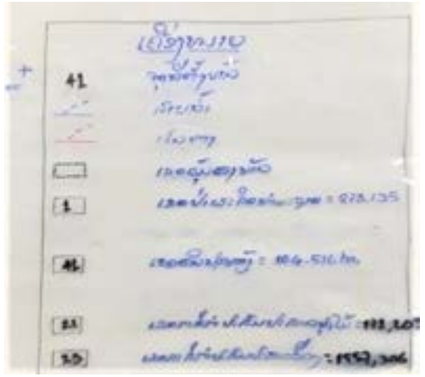
Source DOF 2018

On the ground, FIP SUFORD-SU has innovated with the practice of Participatory Land Use Mapping-Forest Land Use Zoning (PLUM-FLUZ), which promotes the safeguarding of customary land tenure in Lao PDR so that communities are not losing access to forest land and are instead undergoing change in the use of their resources towards medium and long-term management systems.[52] This forms part of the rotational shifting cultivation system of land use and is targeted for regeneration by the government under four possible scenarios: keeping forest fallow to ensure food security; using the fallow for planting indigenous tree species; agroforestry schemes; or natural regeneration. The PLUM-FLUZ approach aims to prevent households from losing access to resources inside the PFA to be consistent with the Involuntary Resettlement operational policy 4.12. It consists of mapping current land use and delimitating land use conversion from fallow land to: upland farming, plantations, agroforestry or natural regeneration. Households that lose access to resources (land for shifting cultivation, inside a PFA) should be compensated and should receive priority for VLDG.

In Phonexi village, Bolikhamxay Province, the PLUM-FLUZ process deliberated that fallow forest was categorized as agricultural land even inside the PFA. Regeneration will be implemented into the PFA and will not impact village access to forested land. The outcome of the PLUM-FLUZ has been the demarcation of 476.670 ha for fallow forest, 586.730 ha for village land use forest, 164.179 ha for pasture land, 87.192 ha for short term crops, 225.535 ha for rice paddy, and 1557.306 ha for agroforestry. The process certified community's endorsement of transition from fallow forest to other land use (fig. 5 and 6).

FIGURE 5 Participatory Land Use Mapping (PLUM)

FIGURE 6 Forest Land Use Zoning (FLUZ)

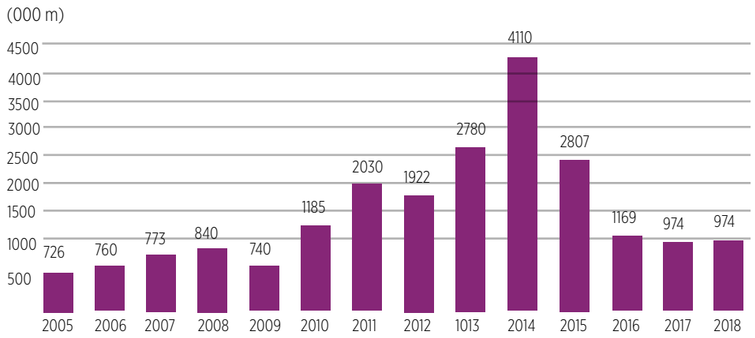


LAW ENFORCEMENT AND GOVERNANCE:
EXPORT BAN'S IMPACT ON PRODUCTION FORESTS

In May 2016 the newly appointed Prime Minister Thongloun Sisoulith issued the Prime Minister Office Decree on "Enhancing Strictness on the Management and Inspection of Timber Exploitation, Timber Movement and Timber Business" (N15/PM) commonly referred to as PMO15. It requires all ministries, provincial governors and mayors to implement strict measures to control and inspect the felling of trees, log transportation, and logging businesses.

The GoL has tried to tackle illegal logging with multiple logging bans (1999, 2002, 2004, 2008 and 2015) allowing only wood exports in special occasions or from specific cases, such as from approved conversion areas. Unfortunately, these specific cases became the norm, thus legitimizing illegal logging exports.[53]

FIGURE 7 Export volume converted from value data



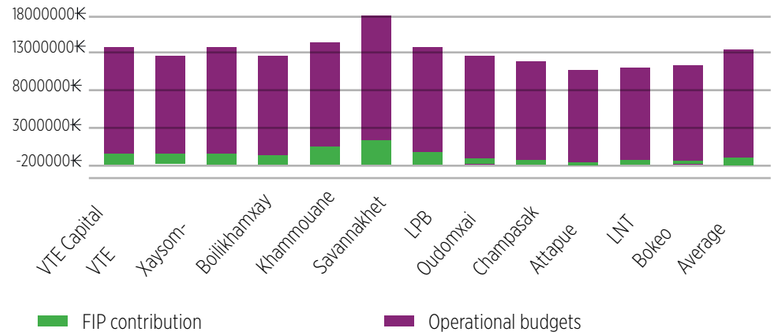
The situation changed drastically after PMO15 was enacted: the exports of logs and sawn wood to China and Vietnam plummeted to 26% of their 2014 levels[54] (figure 7). Law enforcement actions were taken while seizures and penalties were being enacted: 45,300 m3 of timber and logs were confiscated and USD $ 500,000 of fines were issued in 2016 after PMO15.[55]

PMO 15 covers 17 policy prescriptions, including one that forbids the export of logs, timber, processed wood, roots, branches, and trees from natural forests as well as logs the previous government had recently approved for export. It also specifies that all types of wood must be turned into finished products before they are exported, according to standards set by the country's Ministry of Industry and Commerce. Although this measure follows a series of legislative initiatives and executive orders,[56] PMO15 is widely perceived as a clear political commitment at the highest level to fight illegal logging and other forest and wildlife crime.

The FIP SUFORD-SU project has been instrumental in implementing PMO15 on the ground, under its 3rd component. Particularly, the flexibility in adapting to the mutated context and in providing funds for building the capacity of law enforcement officials, administering trainings, and surveys and monitoring tools were shown to be effective in producing encouraging quick results in tackling illegal logging. Figure 8 shows SUFORD-SU financial contribution in each province, showing the project's key role in supporting the GoL in its effort to enforce the bans.

Fostering coordination among different agencies in different ministries, within the forest service and among other institutional and international partners was also a successful outcome of this component. After two years since of PMO15 implementation, results on the ground tell that SUFORD-SU has contributed on average

FIGURE 8 Financial contribution of FIP SUFORD-SU to operational bugets



Source: UN Comtrade, ITTO

US$ 17,500 per province in law enforcement activities. Effectiveness of both law enforcement and training has increased substantially, with a peak in seizures of timber, NTFPs, wildlife products and equipment (i.e. chainsaws, trucks), number of investigations and fines issued.[57]

Based on the remote sensing monitoring Delta-rNBR results, funded by the FIP, approximately 390,000 ha of forests were subject to degradation in both dry seasons of 2014-15 and 2015-16, while this figure declined by 25 % to 290,000 ha in the dry season of 2016-17 as an outcome of PMO15. The degradation was concentrated in the districts located close to the Eastern border of Lao PDR, and degradation hot spots were found especially in Xaysomboun, Xiengkhuang, Houaphan, Bolikhamxay and Attapeu.[58]

PMO15 has been a success story in the fight against illegal logging. As the Vice Minister for Agriculture and Forestry said: "FIP created the capacity to act, PMO15 created the authority to act". It endowed the Department of Forest Inspection (DOFI) with the instruments and political support it needed to tackle the problem at the scale required. Nonetheless, the introduction of the ban has had repercussions on the economy, in a country where natural capital accounts for over 50% of its national wealth.[59] In years before the ban, revenues from the forest sector had contributed greatly to the national economy, albeit depleting PFAs stocks and often with illegal or unsustainable practices. The government estimates that 10-15% of public revenues have decreased in the last 2 years nationally due to PMO15.[60]

This has opened discussions at different levels on how to improve management and production practices in the future. While officially there are more than 1000 companies and factories that abide by the law[61], very few can export due to the little value addition they provide to the raw material, potentially losing market share to others operating illegally and escaping the ban. Furthermore, often illegally harvested seized logs are auctioned to the very same illegal loggers from whom they had been confiscated from.[62]

The challenge to the government is on two fronts. The first is by halting exports on unprocessed timber the ban aims to buy time to set up a permanent regulatory framework that incentivizes the sector towards processing and value addition over raw material, including certification schemes, NTFPs and supply chains to access European Union and Japanese markets. On the other front, an enforcement system is to be set up and implemented to prevent the widespread mismanagement of the resource, including multiple illegal activities. These institutional changes must take place before the ban is lifted, factoring in all repercussions on the economy in general and on project activities. The ban should only be lifted under certain conditions and in certain locations such as if there is agreement on instruments and processing, forest management and chain of custody certification, legality of salvage logging, and use of an auction platform as relevant. The lifting of the ban could also take place step by step, building on lessons learned and pilot operations. The current Ministry of Industry and Commerce (MOIC) export list of acceptable products could be revised in collaboration with MAF without jeopardizing the spirit of the logging ban.[63]

Currently, the only companies with export capacity are some private plantations partnering with IFC in the FIP project, which are very small in volume but can comply with PMO15 both in terms of certification and value addition. Stora Enso has been able to modify pre-existing contracts with an Indian importer for natural wood veneer (now forbidden under PMO15). After PMO15, the company agreed to switch to eucalyptus-planted veneer, while still importing natural wood in the form of plywood which is considered a finished product. In general, however, the wood industry does not have the capacity for finished products on a large scale. Investments are needed, but for investments to occur there is need for a predictable supply of sustainably produced timber. The transparency required to deliver such supply is not yet present, and the ban aims at providing a space for addressing all these complexities at a systematic level.

PROGRAMMATIC APPROACH AND PRIVATE SECTOR ENGAGEMENT:

THE WAY FORWARD FOR COMMERCIAL FOREST PLANTATIONS?

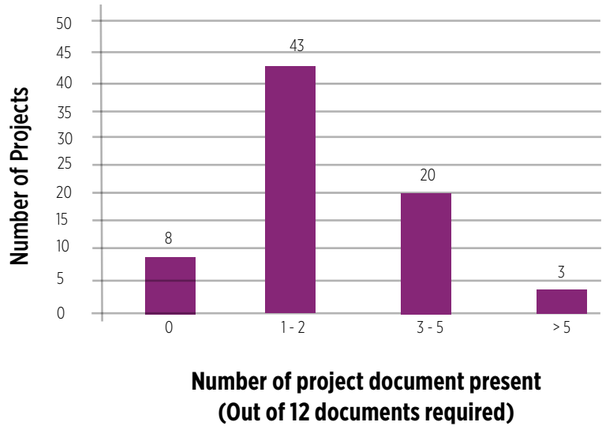
One of FIP's funding principles is to address drivers of deforestation, which often occur outside of the forest sector. To deliver on its mandate, a programmatic approach has been enacted since the drafting of the investment plan, requiring a high degree of coordination at the country level both horizontally between government agencies and ministries, and vertically between the central, provincial and local levels. Coordination is also fundamental among MDBs to multiply efforts, avoid duplication and maximize impact. The public sector, private sector, civil society, and forest dependent communities are all integral actors in this approach.

In Lao PDR IFC has been engaged from a market perspective, supporting reliable companies in their effort to comply with national and international standards and develop a transparent and vibrant private sector engagement in forestry. The private sector plays a central role in the growth of the supply chains involving smallholders as active participants in this process. FIP established a model for the creation of jobs and partnerships at the village level, all through reducing emissions. IFC's FIP Smallholder Forestry Project complements The World Bank's FIP SUFORD-SU by focusing on plantation forests, thus covering the full spectrum of production forest areas. IFC investment project aims to improve partners' capacities to manage wood production and processing under certification standards, thus enabling the conditions for a thriving sustainable forest industry.

Today, the area of private tree plantations in Lao PDR is about 500,000 ha.[64] While the 2012 (PM13) moratorium on new concessions for eucalyptus and rubber plantations has produced a sharp decline in area, the National Assembly's 2018 Land Use Master Plan assigned 500,000 ha for planting eucalyptus and rubber trees.[65] The private sector can provide ample funding and resources to sustain reforestation on large scale, which the government alone would not have the financial capability to undertake. Furthermore, by mainly focusing on commercially viable fast-growing species, private plantations provide an opportunity for the forest sector to compete with agriculture in terms of land use and provide benefits to the local people in the form of jobs and out-grower schemes. IFC partner companies Burapha and Stora Enso have developed an agroforestry model which includes: the adoption of FPIC in every activity; the cultivation of agricultural crops between planted trees in the early year of rotation; first option for local villagers to access jobs at the plantation; full clearance of unexploded ordnances and war legacies (UXOs) and compensation to the village for the use of land. This has resulted in a combined planted area of 5,837 ha, over US$ 1 million in payments for out-grower wood, US$ 4 million for daily labor wages, and $4 million as contributions to Village Development Funds while generating 3,200 full time jobs per year.[66]

Nevertheless, private tree plantations pose several different risks. From an environmental perspective, while monocultures have positive benefits in terms of production volumes and productivity, they can also accelerate soil erosion and nutrient depletion and subsequent vulnerability to pesticides and harmful chemical fertilizers. Furthermore, the "unnatural look", especially in large blocks, could negatively impact nature-driven tourism, while also increasing vulnerability to widespread fires. In addition, the establishment of a plantation causes the loss of local people's access to previously fallow land. This has both social and environmental implications as people could either attempt to compensate their loss by moving to clear forest elsewhere ("exporting deforestation") or being unable to compensate their loss and becoming poorer. Finally, there are concrete governance risks connected with the enforcement of concession agreements on behalf of the concessionaires, the lack of which resulted in the 2012 moratorium on land concessions. It has been estimated[67] that out of the 74 land deals reviewed in Lao PDR, only 3 could provide more than 5 documents out of the total of 12 required by the concessions law (Fig.8).

FIGURE 9 Legal compliance with concessions



A crucial field of intervention and ongoing policy dialogue is on land tenure. As in Lao PDR smallholders do not own the title of the land, it is difficult to set up plantations and out-grower schemes avoiding conflicts.

Furthermore, the issue of land tenure has historically been a weak spot in the fight against illegal logging and other forest criminal activities. In addition, from an investor perspective, lack of clarity over tenure can pose a serious threat during the certification process. As stated previously, certification of sustainability and legality is necessary to access the most lucrative markets, such as Japan, Korea and the European Union – the lack of which could discourage the investments needed to push the industry towards the value-addition direction set by PMO15.

The lack of clear land tenure recognition has also implications for public finances both at the national and local level, as it is difficult to precisely assess the fiscal base and thus design an efficient levy on a single producer. The government is in the process of reviewing the land law, particularly regarding plantations and concessions. Specifically, it is studying a model of certificates based on tree ownership[68] (as opposed to land) targeted at certain species, most notably hardwoods such as teak to reduce pressure on the rapidly depleting natural stock due to illegal logging.

IFC partner companies Stora Enso and Burapha have put in place measures to mitigate both the social and environmental risks exposed previously. They would divide plantations in three zones: area planted with fast-growing species (70%), naturally regenerating areas on steep slopes, riverside buffer zones etc. (20%), and areas planted with indigenous species (10%). The FIP team from the IFC and WB have been working closely with the government to issue regulations spelling out minimum requirements on this matter to scale up these best practices nationwide. On the social risks, IFC partners have committed to providing employment and alternative livelihoods to prevent the "export of deforestation". In addition, by rotating their plots within each village Stora Enso and Burapha aim to provide permanent employment to local people living close to the plantations. In this last component, close collaboration with SUFORD-SU has been instrumental in leveraging long-built relations of trust needed to establish livelihood activities. Furthermore, IFC's focus on plantation forests integrates the World Bank Group's FIP core mission of sustainable forest management in natural forests, enhancing carbon sequestration at the national level, informing the government planning on solutions and best practices while improving livelihood security on the ground for the local forest dependent communities.

A LOOK INTO THE FUTURE:
WHAT AFTER FIP?

In Lao PDR, the FIP has had impact through the long-running, high-profile FIP SUFORD-SU co-financed World Bank forestry project. GoL was supported through regulatory framework initiatives and support for strengthening forest law enforcement and monitoring through joint efforts by the World Bank and IFC. Specifically, the project has supported enforcement of the Forestry Law and the Wildlife and Aquatic Law by DOFI. Consistent monitoring and reporting on this law has been expanded to all 18 provinces with FIP resources. There has been high demand from the GoL for advice on revising its laws, particularly on land tenure and management to facilitate sustainable forest management.[69]

FIP's approach of aligning incentives and creating common understanding has helped lay the foundations for systemic change, but signals are thus far at interim-level only.[70] FIP has helped to strengthen high-level government commitments to forest protection. Forest policy reforms, new financing approaches, and cross-departmental working are also in evidence. In Lao PDR, PMO15 has been introduced to reduce illegal logging, with joint support from the World Bank and IFC - although it remains to be seen whether these policy developments will lead to the desired outcomes and lasting change in the sector. In Lao PDR, FIP does not have a strong profile of its own but rather uses its resources for scaling up existing MDB projects and selectively supporting the ongoing REDD+ process.[71]

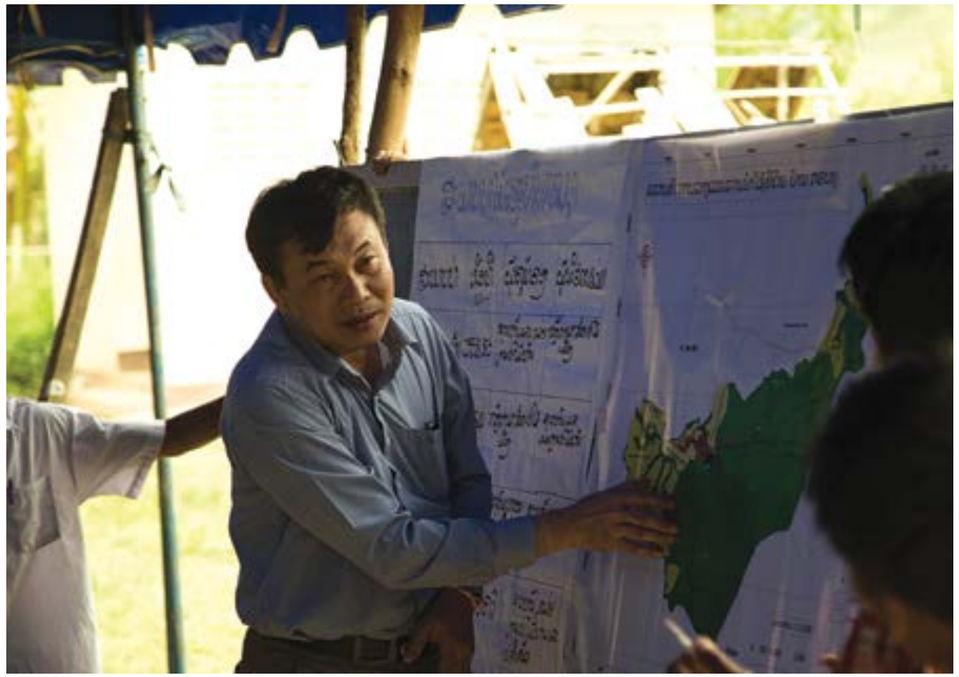
The WB implemented FIP SUFORD-SU project is scheduled to close in early 2020. It has consolidated the PSFM system in production forest areas and forest law enforcement has considerably improved, and together with the introduction of PMO 15 most of the village projects are sustainable. While the logging and export bans have prevented the project from meeting all its objectives, it has also highlighted some lessons for the future such as higher emphasis on NTFPs to diversify forest-related revenues and increase the resilience of local forest communities from external shocks like PMO15.

FIP IFC's Smallholder Forestry Project has been successful in helping two forestry companies to establish procedures and methods to involve smallholders in their activities. This is important because the participation of the private sector is a government priority. These lessons will also inform strategic discussions on the best use of the Production Forest Areas to meet the government's target of 70 % forest cover by 2020, securing a good outcome from the involvement of the private sector, and finding efficient arrangements for cross-sectoral coordination.

To date, in Lao PDR 67% of the population is rural and relies on natural resources for their livelihood and income generation.[72] Over 50% of Lao PDR's wealth is its natural capital, being a globally important biodiversity hotspot. It is not a surprise that national strategic development frameworks recognize that jobs, livelihoods and greener growth depend on well-functioning landscapes and climate resilience.

Forestry could generate 300,000 green jobs in production and downstream industries while forest restoration globally generates US$ 7-30 in economic benefits for every dollar invested.[73] These opportunities have not been capitalized upon yet, and on the contrary great threats to Lao PDR's natural resources persist from agriculture expansion, climate change, illegal logging, wildlife and forest crimes. Current interventions and institutions addressing these issues remain fragmented spatially, institutionally and financially, and are too small in scale individually.

The government is negotiating the creation of a strategic platform for joint action on landscape interventions, in which multiple sectors, stakeholders, partners and investments could converge. This would leverage multiple financing sources to enhance information, institutions and incentives to build and sustain natural wealth.



The process will learn from the many lessons gained through the FIP experience, from the design of the investment plan, through enhanced and collaborative inter-ministerial and MDB coordination, increased awareness, quality and application of safeguards to promote better and more informed participation of local communities in the management of forests. The progress made on law enforcement and transparency, also in terms of human capital and skills acquired through training will be precious in the process of building an effective forest governance structure that will enable the lifting of PMO 15.

Finally, as the first payments for carbon credits under REDD+ have been approved in other countries, Lao PDR is expediting the establishment of benefit-sharing institutions that would allow it to capitalize on the "new natural resource".[74]

The country is at a crossroads or, as stated by H.E. Sitaheng Rasphone, former minister of agriculture and forestry: "we are on the back of the tiger, if you fall you die. The only way to survive is to ride the tiger to the future".

ENDNOTES

1 WB Country profile – data 2015
2 DOF presentation in Annual MAF Conference in January 2011
3 Kukkonen, M. & Langner, A. 2017. Assessment of Forest Degradation Monitoring Methods in Lao P.D.R. Technical Report. SUFORD-SU. Vientiane, Lao PDR.
4 FIP/SC.21/3, FIP Operational and Results Report. 2019
5 FIP Design document, July 2009
6 Investment Plan for Lao People's Democratic Republic (Document FIP/SC.7/4). 2011
7 fire, unsustainable wood extraction, pioneering shifting cultivation, agricultural expansion, industrial tree plantation, mining, hydropower, infrastructure development, and urban expansion.
8 FIP Investment Plan for the Lao People's Democratic Republic
9 Decree on Endorsement and Declaration of the Forestry Strategy to the Year 2020 of the Lao PDR, No. 229/PM. http://theredddesk.org/sites/default/files/fs_2020.pdf
10 Countries' efforts to reduce emissions from deforestation and forest degradation, and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks. See box 2 for more.
11 Presentation "Report progress on the implementation of the 2016 BCC FIP project" – December 2018
12 What is REDD+? https://www.forestcarbonpartnership.org/what-redd
13 GoL Presentation: "Green Climate Fund Results-Based-Payment Pilot Program" – December 2018
14 GoL Presentation: "Green Climate Fund Results-Based-Payment Pilot Program" – December 2018
15 Quote from the Director of National Forest Research Center – December 2018
16 Quote from Director General, DOF – December 2018
17 Quote from National REDD+ coordinator – December 2018
18 Quote from Stora Enso National Coordinator – December 2018
19 World Bank. 2013 Project Appraisal Document. Report No: 75632-LA
20 World Bank. 2013 Project Appraisal Document. Report No: 75632-LA
21 Decree on Endorsement and Declaration of the Forestry Strategy to the Year 2020 of the Lao PDR, No. 229/PM. http://theredddesk.org/sites/default/files/fs_2020.pdf
22 GoL presentation: "The Way Forward for Management of Production Forests" – December 2018
23 Ibid.
24 Quote from Chief Technical Adviser. FIP Focal Point team. – December 2018
25 Quote from FIP Focal Point – December 2018
26 Quote from the director general, Department of Forestry, Ministry of Agriculture and Forests – December 2018
27 Quote from the director general, Department of Forestry, Ministry of Agriculture and Forests – December 2018
28 World Bank. 2018. Lao People's Democratic Republic—Sustainable Forestry for Rural Development Project. Independent Evaluation Group, Project Performance Assessment Report 125929. Washington, DC: World Bank.
29 The introduction of valuable species to degraded forests without the elimination of valuable individual which already existed at that particular site.
30 ANR aims to accelerate, rather than replace, natural successional processes by removing or reducing barriers to natural forest regeneration such as soil degradation, competition with weedy species, and recurring disturbances (e.g., fire, grazing, and wood harvesting).
31 A technique of enrichment planting alternating lines of trees with gaps to favor light penetration and growth of wider

diameter trees.
32 GoL presentation: “increasing forest cover in PFAs using public funding” – December 2018
33 FIP/SC.21/3, FIP Operational and Results Report. 2019
34 Appanah, S & Shono, K & Durst, P.B. (2015). Restoration of forests and degraded lands in Southeast Asia. 66. 52-63.
35 Quote from the Director of National Forest Research Center – December 2018
36 Quote from SUFORD-SU provincial coordinator, Oudomxai province – December 2018
37 Quote from the FIP National Coordinator – December 2018
38 total area of SC inside SUFORD and SUFORD-AF PFAs was about 400,000 ha, about 50 % of the families received grants; the area of SC among recipients was average about 10 % less than among non-recipients (20,000 ha = 400,000 ha x 50 % % 10 %).
39 Presentation: “Is livelihoods development helping forestry?” – December 2018
40 Quote from Chief Technical Adviser. FIP Focal Point team. – December 2018
41 Quote from Director General. Ministry of Agriculture and Forestry. – December 2018
42 Quote from the director general, Department of Forestry, Ministry of Agriculture and Forests – December 2018
43 Quote from Lao PDR FIP focal point team – December 2018
44 Quote from Department of Extension Services and Processing
45 If a big competitive plantation is established, it will need a network of suppliers and contractors up and down the chain, ultimately reviving a sector (including processing) that is currently stagnant for lack of capacity and policy limitations (logging, concession and export bans).
46 Quote from the Director, Planning Division – December 2018
47 Quote from FIP focal point team – December 2018
48 Quote from FIP focal point team – December 2018
49 Quote from the director general, Department of Forestry, Ministry of Agriculture and Forests – December 2018
50 Quote technical staff – December 2018
51 Presentation: “Social Safeguards in SUFORD-SU”. December 2018
52 Forest Stewardship Council (FSC). 2017. Centralized National Risk Assessment for Lao People´s Democratic Republic.
53 Smirnov, D. (2015). Assessment of scope of illegal logging in Laos and associated trans-boundary timber trade. 102 p. WWF, Vientiane.
54 To, P.X., Treanor, N.B., & Canby, K. (2017). Impacts of the Laos Log and Sawnwood Export Ban. 26 p. Forest Trends, Washington D.C.
55 Presentation: “Forest & Wildlife Law Enforcement: an overview of Component 3B, SUFORD-SU”. December 2018
56 - a notice issued by the prime minister’s office in August 2015 that prohibited the export of logs and mandated that all timber must be processed in Lao PDR before it is exported to foreign countries;
- a notice issued by the prime minister’s office in May 2015 prohibiting the export of logs and timber;
- a notice issued by the central committee of the Lao People’s Revolutionary Party in February 2014 regarding the ban on exporting logs, timber, roots, and half-finished wooden products;
- an order issued by the Ministry of Finance in July 2013 pertaining to the control of log exports and collection of tax from selling logs;
- a moratorium issued by the prime minister in November 2012 suspending logging in production forests and providing clear classifications of production forests for the government.
57 Department of Forest Investigation (DoFI), Presentation – December 2018.
58 Kukkonen, M. & Langner, A. 2017. Assessment of Forest Degradation Monitoring Methods in Lao P.D.R. Technical Report. SUFORD-SU. Vientiane, Lao PDR.
59 Lange, Glenn-Marie, Quentin Wodon, and Kevin Carey, eds. 2018. The Changing Wealth of Nations 2018: Building a Sustainable Future. Washington, DC: World Bank.
60 Quote from the director general, Department of Forestry, Ministry of Agriculture and Forests – December 2018
61 Quote from Director, Ministry of Industry and Commerce. December 2018
62 Quote from Director, Ministry of Industry and Commerce. December 2018
63 Presentation: “Partnerships and Opportunities for Green Forest Economy”, WB – December 2018
64 Presentation: “Forest Restoration by Private Sector – An opportunity for the Forest Sector, if managed well”, DOF –December 2018
65 Quote FIP Focal Point – December 2018
66 Presentation “Forest Investment Program Stakeholders Meeting – Private Sector Update”, IFC- 2018.
67 Hett & al. 2015. Land Deals in Laos: First Insights From A New Nationwide Initiative To Assess The Quality Of Investments In Land.
68 Quote from the director general, MAF. December 2018
69 ICF 2019. Evaluation of the Climate Investment Funds Programmatic Approach
70 ITAD, 2019. Evaluation of Transformational Change in the Climate Investment Funds
71 ICF 2019. Evaluation of the Climate Investment Funds Programmatic Approach
72 World Bank Data Bank: Lao PDR.
73 Quote from WB TTL – WB December 2018
74 Quote from the REDD+ national coordinator. December 2018

ANNEX
List of Participants

Name	Role in workshop			Position	Institution	City - Province
	Organizer	Speaker	Participants			
Government						
Mr. Thonghphat		√		Vice Minister	MAF	Vientiane Cap
Mr. Thongphat's Secretary			√	Mr. Thongphat's Secretary	MAF	Vientiane Cap
Mr. Sousath Xayakoummane		√		Director General	DOF	Vientiane Cap
Mr. Bounpone	√	√		Deputy Director General	DOF	Vientiane Cap
Mr. Lattana	√		√	Deputy Director Production Division	DOF	Vientiane Cap
Mr. Say			√	Technical Staff, Production Division	DOF	Vientiane Cap
Mr. Saly			√	Head of Section, Technical Standards Division	DOF	Vientiane Cap
Mr. Khampheng			√	Deputy of Section, Production Division	DOF	Vientiane Cap
Ms. Yommala	√		√	Technical Staff, Production Division	DOF	Vientiane Cap
Dr. Oupakone		√		Head of Division, Village Forestry and NTFP	DOF	Vientiane Cap
Mr. Phouthone			√	Head of Planning Division	MAF	Vientiane Cap
Mr. Bounpheng			√	Deputy Director, FIPD	MAF	Vientiane Cap
Mr. Khamsene			√	Head, REDD+ Office,	DOF	Vientiane Cap
Ms. Khonesavan			√	Head of Financial Unit	DOF	Vientiane Cap
Ms. Veomany			√	Technical Staff, Financial Unit	DOF	Vientiane Cap
Mr. Thongphanh			√	Deputy Director General	DOFI	Vientiane Cap
Mr. Khamphet		√		Deputy of Section	DOFI	
Mr. Khanxay			√	Deputy of Division, Administration	DOEC	Vientiane Cap
Mr. Somphathai			√	Head of Project Management Division/DOPF	MAF	Vientiane Cap
Mr. Venevongphet		√		Coordinator, ADB BCC project	DOF	Vientiane Cap
Mr. Sythud Phimmachanh			√	National BCC FIP Focal Point	DOF	Vientiane Cap
Mr. Chansamoun			√	Deputy Director	NAFRI	Vientiane Cap
University 1			√			Vientiane Cap
University 2			√			Vientiane Cap
LWU			√			Vientiane Cap
LNFC			√			Vientiane Cap
Plantation Division			√			Vientiane Cap

Administrative Division			√			Vientiane Cap
Conservation Division			√			Vientiane Cap
Protection Division			√			Vientiane Cap
Forest Resource Development Fund			√			Vientiane Cap
Mr. Vangchai			√	Head of Division	MOIC	
Ministry of Finance			√			Vientiane Cap
TBD			√	PFS (Forestry)	PAFO	Oudomxay
TBD			√	PFS (VLD)	PAFO	Oudomxay
TBD			√	PFS (Forestry)	PAFO	Sayaboury
TBD			√	PFS (VLD)	PAFO	Sayaboury
TBD			√	PFS (Forestry)	PAFO	Bokeo
TBD			√	PFS (VLD)	PAFO	Bokeo
TBD			√	PFS (Forestry)	PAFO	Luang Namthas
TBD			√	PFS (VLD)	PAFO	Luang Namtha
TBD			√	PFS (Forestry)	PAFO	Vientiane Prov
TBD			√	PFS (VLD)	PAFO	Vientiane Prov

TBD			√	PFS (Forestry)	PAFO	Sayxomboun
TBD			√	PFS (VLD)	PAFO	Sayxomboun
TBD			√	PFS (Forestry)	PAFO	Bolikhamxay
TBD			√	PFS (VLD)	PAFO	Bolikhamxay
TBD			√	PFS (Forestry)	PAFO	Khammouane
TBD			√	PFS (VLD)	PAFO	Khammouane
TBD			√	PFS (Forestry)	PAFO	Savannakhet
TBD			√	PFS (VLD)	PAFO	Savannakhet
TBD			√	PFS (Forestry)	PAFO	Salavan
TBD			√	PFS (VLD)	PAFO	Salavan
TBD			√	PFS (Forestry)	PAFO	Attapeu
TBD			√	PFS (VLD)	PAFO	Attapeu
Mr. Bounelop Sydavong			√	BCC	PAFO	Attapeu
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TBD			√	PFS (VLD)	PAFO	Sekong
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TBD			√	PFS (Forestry)	PAFO	Champassak
TBD			√	PFS (VLD)	PAFO	Champassak
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Technical Assistance						
Mr. Esa Puustjarvi		√		Chief Technical Advisor	SUFORD-SU	Vientiane Cap
Mr. Manuel Bonita		√		Forest Management Advisor	SUFORD-SU	Vientiane Cap
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Mr. Bouaphet Philakhet			√	National Livelihood Advisor	SUFORD-SU	Vientiane Cap
Mr. Anousack Inthachack			√	National Livelihood Advisor	SUFORD-SU	Vientiane Cap
Mr. Savay Thammavongsa			√	National Livelihood Advisor	SUFORD-SU	Vientiane Cap
Mr. Thinnakone Misaiphone			√	National Livelihood Advisor	SUFORD-SU	Vientiane Cap
Mr. Vilasak Chanthamith			√	National Livelihood Advisor	SUFORD-SU	Vientiane Cap
Ms. Simpaseuth Ratsavong			√	Office Manager	SUFORD-SU	Vientiane Cap
CSOs						
WorldWildlifeFund			√			
Village Focus International			√			

Private Sector						
Mr. Peter Fogde			√	COO	StoraEnso	Vientiane Cap
Ms. Manoly			√		Burapha	Vientiane Cap
Mr. Nico Strydom			√	General Manager	Mekong Timber Plantations	Vientiane Cap
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Mr. Steeve Danyo		√		Task Team Leader SU-FORD-SU	TheWorld Bank	Vientiane Cap
Ms. Manoly Sisavanh		√		Natural ResourceMg-mtSpecialist	TheWorld Bank	Vientiane Cap
Mr. Werner L. Kornex			√	Natural Resource Mgmt Specialist	The World Bank	
Mr. TuyenD.Nguyen		√		Principal OperationsOf-ficer	IFC	
Ms. DalaphoneSihanath			√	Lao Agroforestry Project Officer	IFC	Vientiane Cap
Mr. Stephen Midgley			√		IFC	Vientiane Cap
Ms. Sisavanh Phanouvong			√	Senior Environmental Officer	ADB	Vientiane Cap


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