



# Project Information Document (PID)

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**BASIC INFORMATION****A. Basic Project Data**

Country Lao People's Democratic Republic	Project ID P170559	Project Name Lao Landscapes and Livelihoods Project	Parent Project ID (if any)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date 30-Nov-2020	Estimated Board Date 19-Mar-2021	Practice Area (Lead) Environment, Natural Resources & the Blue Economy
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance	Implementing Agency Ministry of Agriculture and Forestry	

## Proposed Development Objective(s)

To promote sustainable forest management, improve protected area management, and enhance livelihoods opportunities in selected landscapes in Lao PDR.

## Components

Investing in Natural Wealth and Resilience in Forest Landscapes  
Livelihoods Opportunities from Sustainable Forest Landscapes  
Institutions, Incentives, and Information  
Project Management, Monitoring and Learning.

**PROJECT FINANCING DATA (US\$, Millions)****SUMMARY**

Total Project Cost	57.37
Total Financing	57.37
of which IBRD/IDA	34.00
Financing Gap	0.00

**DETAILS****World Bank Group Financing**



International Development Association (IDA)	34.00
IDA Credit	34.00

#### Non-World Bank Group Financing

Trust Funds	23.37
Global Environment Facility (GEF)	7.37
Miscellaneous 1	16.00

#### Environmental and Social Risk Classification

Substantial

#### Decision

The review did authorize the team to appraise and negotiate

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## B. Introduction and Context

### Country Context

1. **The Lao People's Democratic Republic (PDR) achieved rapid growth and significant poverty reduction between 2005 and 2015, though inequality widened.** Since 2000, gross domestic product (GDP) growth has averaged around 8 percent per annum. The poverty rate declined from 34 percent in 2003 to 23 percent in 2013, with preliminary estimates showing further decline to about 18 percent in 2019.<sup>1</sup> Yet the Gini coefficient increased from 32.5 to 36.2, reflecting lower gains for the bottom 40 percent. Poverty is concentrated in rural areas, most of which are forestlands. The Bank's 2020 poverty assessment determined that the poverty hotspot in the country has shifted to the central region, which is also where the some of the highest values for productive forestry, nature based tourism and biodiversity are. COVID-19 is placing an added economic burden on the country, with 2020 GDP growth expected to decline to 1 to -1.8 percent compared to the pre-COVID estimate of 6 percent growth. Poverty is estimated to increase by 1.4 to 3.1 percent in 2020 compared to a 0.6 percent decline in a no-pandemic scenario.<sup>2</sup>

<sup>1</sup> World Bank 2019a, *Performance and Learning Review of the Country Partnership Framework for the Lao PDR for the period FY2017 – FY2020*.

<sup>2</sup> World Bank 2020a, *Lao PDR Poverty Assessment 2020: Catching Up and Falling Behind*.



2. **This economic challenge can be addressed by promoting a green recovery from natural resource based jobs, livelihoods and resilience, as emphasized in the draft Ninth National Socio Economic Development Plan (NSED-9) for 2021-2025.** With the enactment of the 2030 National Green Growth Strategy (NGGS) in 2019 and other recent improvements in the policy framework, Lao PDR has been making progress in shifting its growth framework to build long-term wealth and resilience by carefully managing natural capital.

3. **Lao's natural resource based sectors contributed one-third of 2018 GDP, and forestry and food production provide over 65 percent of total employment.**<sup>3</sup> Yet GDP growth has largely relied on the short-term liquidation of natural resources. Unsustainable growth patterns have a high cost: natural capital depletion equaled 4.8 percent of 2017 GDP, mostly from the loss of 3.6 percent of forest between 2005 to 2015.<sup>4</sup> The deterioration of natural capital disproportionately affects vulnerable rural communities and amplifies natural disaster and climate risks. Natural capital is especially needed during crises as workers who lost jobs and livelihoods in industry and urban areas return to villages, increasing pressure on forests and natural resources.

4. **Forests are critical to recover from COVID-19 impacts and reduce vulnerability to climate risks.** The forest estate is 70 percent of Lao PDR's landmass and hosts close to 70 percent of its people. Continued degradation and loss of forest and biodiversity undermine livelihoods resilience and amplify risks from floods, erosion, forest fires, and droughts. Up to 31 percent of rural villages reported in the 2010/11 Agriculture Census were prone to floods and 70 percent reported being prone to droughts. Average annual costs from natural disasters are 0.9 percent of GDP, but the cost of the 2018 floods were 2.1 percent.<sup>5</sup> G

5. **As extreme poverty is predominately a rural phenomenon in Lao PDR, new infectious diseases and viruses can have profound consequences for the most vulnerable citizens, most of whom reside in rural and forest areas.**<sup>6</sup> At the same time, these areas are increasingly vulnerable to the spread of zoonotic diseases such as COVID-19. This increased vulnerability could be a combined result of habitat loss due to forest encroachment for agriculture and livestock, as well as the hunting, trade, and consumption of such species as bats, pangolins, and other small mammals. Restoring natural habitats and engaging in community-based information and outreach campaigns can be vital in preventing and slowing contagion, while providing meaningful support to efforts to curb wildlife and forest crimes.

6. **Climate projections for Lao PDR show increased intensity and frequency of rainfall and flooding risks during wet season, and longer dry seasons accompanied by more severe drought.** These risks make livelihoods and key sectors highly vulnerable, including forest food systems, fisheries, crops, and hydropower. Forests and natural solutions can help reduce vulnerability to climate and disaster risks, and complement conventional engineering in "grey-green" hybrid infrastructure.<sup>7</sup> At landscape level,<sup>8</sup> natural solutions offer substantial, durable and cost-effective benefits.<sup>9</sup>

### Sectoral and Institutional Context

7. **The comparative advantage of Lao PDR is its natural wealth, which comprises over 50 percent of the economy.** Recognizing this, the 2030 National Green Growth Strategy (NGGS) and Forestry Law were both enacted in

<sup>3</sup> World Bank 020b, *Valuing Lao Landscapes: A Province, District, And Household Level Analysis of Natural Capital in Khammouane*



2019, charting a more sustainable development path. This path prioritizes forest-based development as an important driver for growth, jobs, and livelihoods -- including conservation, nature-based tourism, village forestry,<sup>10</sup> timber and non-timber production, and wood industries. Lao PDR intends to invest in its natural capital for greener, more resilient growth. The country's policy framework seeks to protect the remaining natural forest cover, promote restoration, and secure jobs and livelihoods from forest and nature-based tourism. Other national policy frameworks include the National Socio-Economic Development Plan (NSED), Localization of Sustainable Development Goals, 2019 Land Law, 2007 Wildlife and Aquatic Law, the emerging National REDD+ Strategy, 2019 Decree on Environmental and Social Impact Assessment, Nationally Determined Contribution, and the National Biodiversity Strategy and Action Plan.

8. **The management of the forest estate is undergoing rapid change catalyzed by the 2019 Forestry Law, the 2016 Prime Minister's Order 15 (halting logging and timber exports), and large-scale private investment in plantation forestry.** Degraded lands in national production forests have been opened to industrial plantations which are expanding significantly, largely in the central and southern regions. New policies promoting village forest management and nature-based tourism are high priorities. Some of the conservation forests, also known as protected areas (PA), are being re-designated as national parks, reflecting renewed commitment to biodiversity conservation and development of nature-based tourism for good jobs that can benefit women in particular.

9. **Lao conservation forests possess globally significant biodiversity and habitat integrity, which is a comparative advantage for tourism and related jobs and livelihoods.** No other region of the world has so high a rate of endemism, or endangerment among its biota. Conservation forests total 15 percent of the country, and are home to some of the poorest households, comprising diverse ethnic groups. There are three globally outstanding conservation landscapes: a)

Province.

<sup>4</sup> World Bank, 2020, *Environmental Challenges for Green Growth and Poverty Reduction in Lao PDR*.

<sup>5</sup> Government of Lao PDR, UN, World Bank, EU 2018. *Post-disaster Needs Assessment, 2018 Floods*.

<sup>6</sup> World Bank 2020a, *Lao People's Democratic Republic Poverty Assessment 2020: Catching Up and Falling Behind*.

<sup>7</sup> Green infrastructure refers to the "strategic use of networks of natural lands, working landscapes, and other open spaces to conserve ecosystem values and functions and provide associated benefits to human populations" (Allen, 2012); and grey infrastructure refers to built structures such as roads and dams.

<sup>8</sup> For this project, each landscape is defined operationally and spatially by the administrative boundaries of a group of forest areas (and their overlapping districts) that share an economic and environmental interest in the forest estate. Biologically and economically, a landscape is defined globally as a mosaic of natural and/or human-modified ecosystems, with a characteristic configuration of topography, vegetation, land use and settlements that is influenced by the ecological, historical, economic and cultural processes and activities of the area. Both the mix of land cover and use types that make up the larger mosaic, including forests, agricultural lands, native vegetation and urban areas (landscape composition), and the spatial arrangement of different land uses and cover types (landscape structure) contribute to the character of a landscape. Depending on the management objectives of the stakeholders, landscape boundaries may be discrete or fuzzy, and may correspond to watershed boundaries, distinct land features and/or jurisdictional boundaries, or may cross-cut such demarcations. Because of the broad range of factors, a landscape may encompass an area of 100 to 10,000 km<sup>2</sup> (Shames, Clarvis and Kissinger, 2014).

<sup>9</sup> By restoring forests in critical watersheds, for example, the flow of sediments would be reduced, lowering downstream flood intensity, especially during extreme climatic events such as the 2018 floods. Investing in such strategic measures could reduce costs exponentially if compared to the financial burden for the repair of damaged water utilities downstream.

<sup>10</sup> Village forestry, and village forest management (VFM), refer to the decentralized management of forest resources by villagers inside their village use forests in compliance with forest management plans. The 2019 Forestry Law grants rights for villages to engage in commercial activities for wood (in PFAs where available, if/when the logging ban is lifted) and non-wood forest products inside village forests, and VFM regulations are being developed. VFM involves participatory land use planning, inventories, capacity development, restoration of forest and land, productive activities, harvest and processing of allowed wood, non-wood, and agricultural products, resource monitoring, and management of fires and disaster risks.



the wet evergreen forest ecosystem in the Annamites, bordering Vietnam, arguably has the highest biodiversity, b) the massive karst formations of Central Lao PDR, and c) the montane forest ecosystem in the Greater Annamites has high species uniqueness. These three priority ecosystems are fairly well represented within the PA system. To strengthen its commitment to conservation, the Government of Lao PDR (GoL) designated the country's first two National Parks in February 2019, including Nakai Nam Theun, the world's largest wet evergreen forest, and Nam Et Phou Louey. Hin Nam No, a karst massif being assessed for natural World Heritage Site designation, was re-designated a National Park in January 2020. The Department of Forestry (DOF) of the Ministry of Agriculture and Forestry (MAF) has identified six further PAs as candidates for upgrading to National Park status, as nature-based tourism has become a high priority in the country's strategic development framework.

10. **Tourism in Lao PDR is driven by growing regional demand for opportunities to interact with conservation landscapes and wildlife, as well as traditional cultures.** In 2019, tourism represented 4.3 percent of GDP and 3.5 percent of jobs in Lao PDR. The global average is about 10 percent of GDP and 10 percent of jobs.<sup>11</sup> There is room for nature-based tourism to grow in Lao PDR. Yet the PAs in these landscapes face challenges including low budgets and revenues, staffing and capacity constraints, weak concession management, overlapping institutional mandates, unsustainable infrastructure expansion, poaching, and lack of tourism products that meet regional demand. One main benefit intended from tourism will include jobs/livelihood generation. The project will support the development of enabling environment/regulations. PA entry fees will be used to support park management. Fees that go to park management supporting conservation activities will be included in tourism concession agreements.

11. **Production forest areas (PFAs) are not yet generating the jobs and revenues that it could for a forest-rich country facing such growing international demand for “good wood.”** Up to 300,000 jobs could be created from about 300,000 hectares via private investment in environmentally and socially sustainable plantations and downstream industries given effective enabling policies.<sup>12</sup> The GoL has been putting in place policies for legal certified timber to support exports to lucrative international markets. Yet many of the 51 PFAs are highly degraded in terms of timber stocks. The GoL has recently opened PFAs to investors, targeting 650,000 ha of degraded forest for restoration by commercial tree plantations<sup>13</sup>. Significant large-scale private investments have been made, and more is on the table. Forest restoration generates an estimated US\$7-30 in benefits globally for every dollar invested.<sup>14</sup> Participatory sustainable forest management (PSFM) and village forest management (VFM), including native forests restoration and smallholder plantations, complement large-scale environmentally and socially sustainable forest plantations.

12. **Protection forest areas (PtFAs) have not received sufficient regulatory and management attention to fulfill the intended role to provide watershed services including flood and erosion risk reduction.** The 49 PtFAs are the largest land designation in Lao PDR, and host at least 1,896 villages. These villages depend on diverse livelihoods from forests,

<sup>11</sup> World Bank 2019b, *Developing Nature-Based Tourism as a Strategic Sector for Green Growth in Lao PDR*.

<sup>12</sup> World Bank 2019c, *Partnerships and Opportunities for a New Green Forest Economy in Lao PDR: Sustaining Forest Landscapes and Livelihoods*.

<sup>13</sup> “Commercial plantations” refer to industrial tree plantations, which need to sign a concession agreement with the government to establish a commercial operation in selected PFAs. The project will not finance any industrial (or commercial) tree plantation. The project will support the establishment of smallholder (household) tree plantations in private village land in PFAs and PtFAs as one of the many eligible activities under Village Forest Management. GEF resources will not co-finance Activity 1.2.3 on Village Forest Management.

<sup>14</sup> WRI 2017, *Roots of Prosperity: The Economics and Finance of Restoring Land*.



soil, and water resources. Yet these areas are generally highly degraded, with 35 percent of actual forest cover. Under the 2019 Forestry Law there is a renewed opportunity to actively manage them, including for restoration and non-wood forest products and climate-smart smallholder agriculture, which would also reinforce the protective role of these forests while generating local livelihoods. Support for sustainable smallholder tree plantations can also contribute to strengthening small and medium enterprises for the domestic market.

13. **The forest estate had annual average net greenhouse gas (GHG) emissions of 34.1 MtCO<sub>2e</sub> from 2005 to 2015.** The National REDD+ Strategy identified the main drivers of deforestation as a) permanent agriculture and tree crops, mainly rubber,<sup>15</sup> b) pioneering shifting cultivation, c) infrastructure development, and d) unsustainable and illegal timber harvesting.<sup>16</sup> Approximately 60 percent of the emissions were due to converting forests for agriculture.<sup>17</sup> The trends have remained relatively constant during the past two decades, although there is evidence that the deforestation rate has been slowing since Prime Minister's Order 15 was enacted in 2016.<sup>18</sup>

14. **The 2019 Forestry Law recognizes that a productive forestry sector built on sustainable management of forest landscapes and high quality private investment could restore some degraded areas, and reduce pressure on natural forests and globally significant biodiversity while driving economic growth, resilience, and recovery, and reducing poverty.** Without comprehensive support for the sector, unsustainable land use would continue. Large-scale international investments will lack a framework for decisions to manage competing land uses and harness mutual opportunities such as nature-based tourism, or village forest protection combined with small irrigation.

15. **Interventions are addressing these challenges but tend to face institutional challenges and are fragmented spatially, sectorally, institutionally, and financially, thus unable to generate the transformation needed.** Fragmentation and capacity constraints can undermine service delivery and results. At the same time, Lao PDR has strengthened policy and practice to support a greener growth framework. These gains are still fragile, especially during the economic crisis arising from COVID-19. To maintain the gains and drive a green economic recovery, visible impact must be delivered in securing livelihoods, jobs, environmental benefits, and resilience. The GoL continues to build the capacity of forest institutions and address weaknesses in multisector coordination. Past sector support from the Bank and others has brought the country from a largely unregulated and un-managed open access regime to the early days of a "new green forest economy" based on more modern management of the resource. The country's key opportunity is to secure multiple benefits and sector outcomes from production, conservation, and protection in the landscape.

16. **Investment Project Financing (IPF) is needed to assist the GoL to implement and coordinate interventions on landscapes, livelihoods and jobs in priority landscapes.** The proposed IPF would support the government to strengthen its capacity to convene sectors, stakeholders (especially villages and firms), partners, and projects across the forest landscape; leverage diverse financing; and enhance information, institutions, and incentives. It would take an integrated, spatially concentrated approach to investment in productive forestry, conservation, nature-based tourism, land use, livelihoods, reduction of climate risk and emissions, and curbing the illegal forest and wildlife trade. The project would

<sup>15</sup> Here, "tree crops" (most often referring to rubber) are considered a subset of the driver of permanent agriculture, as rubber and other tree crops as drivers of deforestation are not significantly different from that of other agricultural crops.

<sup>16</sup> GoL Department of Forestry, *Draft National REDD+ Strategy (forthcoming)*.

<sup>17</sup> SUFORD-SU 2018, *Forest Cover Assessment*.

<sup>18</sup> 2018 Forest Reference Emissions Level of Lao PDR reported to UNFCCC [https://redd.unfccc.int/files/2018\\_frel\\_submission\\_laopdr.pdf](https://redd.unfccc.int/files/2018_frel_submission_laopdr.pdf)



help boost post-COVID-19 economic recovery and create jobs and secure livelihoods including in the country's new poverty hotspots. The project would support a sector-wide platform for scaling up coordinated action in additional landscapes as more experience is built. Coordinated action would deliver a range of environmental and economic benefits related to functioning and resilient ecosystems, and the protected areas, wildlife, production, protection, tourism opportunities, and villagers dependent on them.

### C. Proposed Development Objective(s)

#### Development Objective(s) (From PAD)

17. To promote sustainable forest management, improve protected area management, and enhance livelihoods opportunities in selected landscapes in Lao PDR.

#### Key Results

- **PDO Indicator 1.** Landscape area with maintained or increased forest cover (ha);
- **PDO Indicator 2.** Protected areas that score over 50 on the global protected area Management Effectiveness Tracking Tool (METT) (Number);
- **PDO Indicator 3.** Households or economic interest groups engaged in alternative and/or improved traditional livelihood activities supported by the project (Number); and
- **PDO Indicator 4.** Beneficiaries of job-focused interventions (Number) (50 percent women) (Corporate Result Indicator [CRI]).

### D. Project Description

18. The project has four components that together help convene and 'crowd in' coordinated actions and investments in eight priority conservation and production forest landscapes. Component descriptions are detailed in the following paragraphs, split by co-financing sources: IDA, Global Environment Facility (GEF), and Canadian Clean Energy and Forest Carbon Facility (CCEFCF).

19. **Component 1: Investing in Natural Wealth and Resilience in Forest Landscapes** (led by DOF) (US\$31.5 million, of which US\$17 million IDA, US\$6.5 million GEF, and US\$8 million CCEFCF). The objective of this component is to build natural capital from improved forest landscape management. Building natural capital helps secure multiple economic, environmental, climate, and resilience benefits. Climate and disaster risks such as flood, drought, erosion, and landslide risks will be reduced by maintaining and restoring forest cover, combined with promoting soil and water conservation structures, small irrigation, and other natural solutions in targeted sites. Such village-based green infrastructure will also contribute to job creation. Collaborative management in PAs and VFM in PFAs and PtFAs will be the main governance modalities to implement sustainable forest management (SFM) at the village level. Enabling activities will leverage parallel private sector investment (environmentally and socially sustainable industrial and smallholder tree plantations and tourism development) and other complementary public sector investments.

20. **Climate co-benefits.** Component 1 will generate the bulk of the project's climate adaptation and mitigation co-benefits, deriving from improved management of the forest landscape including PAs, production forests, protection forests, and village forests and the consequent reduced emissions from deforestation and forest degradation while





investing in climate resilience and response mechanisms to shocks such as flood, drought, forest fires, and erosion. The project will generate net emissions reduction of over 10 million tCO<sub>2</sub>e.

21. Project financing will support public sector interventions organized under two subcomponents: (a) Subcomponent 1.1: Protected Areas and Nature-based Tourism and (b) Subcomponent 1.2: Sustainable Forestry and Resilient Village Infrastructure.

22. **Subcomponent 1.1. Protected Areas and Nature-based Tourism** (led by DOF) (US\$14.2 million, of which US\$6.8 million IDA, US\$4.2 million GEF, and US\$3.2 million CCEFCF). The objective of this subcomponent is to strengthen the management of PAs for biodiversity conservation and tourism opportunities. The subcomponent focuses on investing in eight national parks or PAs with internationally significant biodiversity values and high potential for sustainably developing nature-based tourism and, by doing so, creating direct and indirect jobs and livelihoods opportunities. Seven of the 8 target PAs are designated as Key Biodiversity Areas (KBA) and the seventh meets key KBA criteria. GEF funds will be directed to these 8 PAs. The designated KBAs comprise: (a) Nam Et and Phou Louey National Park, (b) Phou Khao Khouay National Protected Area, (c) Phou Hin Poun National Protected Area, (d) Nakai Nam Theun National Park, and (e) Laving Laverne National Protected Area. Two PAs will require new designations, through upgrading: (a) Khouan Xe Nongma is already listed as a KBA but is named as the “Upper Xe Bangfai”. This area is currently being upgraded from a Provincial Protected Area to a National Protected Area. (b) Tor Sib Provincial Protected Area is being upgraded to a National Protected Area. This area encompasses upper montane forest, which is recognized in the Directory of Important Bird Areas in Lao PDR (2003) as under-represented in the protected area system. Being isolated mountain tops at the highest elevations in the country, the PA boasts range-restricted species in all taxa, such as the Chestnut bulbul, Stripe throated fulvetta, Indochinese fulvetta.

23. **Activities** include (a) collaborative PA management; (b) ranger patrols; (c) extension and outreach (d) village forest and land use planning; and (e) village conservation agreements (VCAs), which include a list of livelihood practices that will promote forest wildlife and vegetation conservation, contributing to climate benefits; (f) enabling activities to facilitate private sector participation in nature-based tourism within the targeted PAs; and (g) civil works to upgrade park facilities using climate-resilient and energy-efficient practices.

24. **GEF grants will complement IDA and CCEFCF by financing** all activities listed above in the 8 target PAs.

25. **Subcomponent 1.2: Sustainable Forestry and Resilient Village Infrastructure** (led by DOF) (US\$17.3 million, of which US\$10.2 million IDA, US\$2.3 million GEF, and 4.8 million CCEFCF). The objective of this subcomponent is to strengthen SFM and landscape restoration in production, protection, and village forests. The focus is on supporting job creation, reducing poverty and climate risks, reducing pressure on natural forests, and boosting forest sector productivity for green growth and economic recovery.

26. **Activities** include (a) state forest management planning and zoning in selected PFAs and PtFAs; (b) village forest and land use planning and zoning in village forests; (c) VFM and restoration, contributing to maintain and increase forest cover and contributing to climate mitigation; (d) extension and village advisory services; (e) enabling activities for private investment in environmentally and socially sustainable industrial tree plantations; (f) research and development for production forestry; and (g) green infrastructure for resilient villages, livelihoods, and jobs (for example, multi-village package of small irrigation plus forest protection, climate-resilient feeder roads, and slope stabilization with trees to improve climate adaptation).

27. **GEF grants will complement IDA and CCEFCF by financing** only activity (d), extension and village advisory services.



28. **Component 2: Livelihoods Opportunities from Sustainable Forest Landscapes** (led by DOF) (US\$9.2 million, of which US\$6.3 million IDA, 0 GEF, and US\$2.9 million CCEFCF). The objective of this component is to improve forest-smart livelihoods opportunities, vocational skills, and nature-based tourism development in targeted landscapes. This component is closely linked to the natural resource planning and management activities in Component 1 and targets the same villages. There are three subcomponents: (a) Subcomponent 2.1: Village Livelihood Block Grants to Village Development Funds, (b) Subcomponent 2.2: Vocational Training and Skills Development, and (c) Subcomponent 2.3: Nature-based Tourism Business Leveraging Facility.

29. **Response to COVID-19 economic impacts.** This component will play a pivotal role in boosting the recovery of rural livelihoods in forest areas. The project will use existing government systems to channel funds to forest villages through the village development funds (VDFs), based on successful models used in other ongoing projects in Lao PDR. Vocational training for locally appropriate market-based activities will provide additional employment opportunities.

30. **Subcomponent 2.1: Village Livelihood Block Grants to Village Development Funds** (led by DOF) (US\$6 million, of which US\$4.1 million IDA, 0 GEF, and US\$1.9 million CCEFCF). The objective of this subcomponent is to strengthen forest-smart village livelihoods in targeted landscapes.

31. **Activities.** The project will finance villages in the three forest categories to select and implement forest-smart livelihood activities. The project will provide funding to VDFs in the form of village livelihood block grants (VLBGs). VDFs are managed by the villages themselves as revolving mechanisms through a Village Committee and are provided to households or groups as credits for specific farm and nonfarm income-earning activities based on specific criteria and risk management.

32. Of the VLBGs, 20 percent will be earmarked as grants to the most vulnerable members of the participating village (elderly, widows, disabled, single mothers, disaster-affected households, and so on) identified by the Village Committee, for homestead-based livelihoods, and disbursed up front without conditionality. The remaining 80 percent of the VLBG will be conditioned to approval of the village forest and land use plan and, in PAs, a VCA. 50 percent of the revolving funds out of the village block grants are taken-up by women, to strengthen women participation in village institutions and decision-making power on natural resource management (NRM) and livelihoods, which helps fill a persistent gender gap.

33. **Subcomponent 2.2: Vocational Training and Skills Development** (led by DOF) (US\$1 million, of which US\$0.7 million IDA, 0 GEF, and US\$0.3 million CCEFCF). The objective of this subcomponent is to improve employment and livelihoods opportunities for people in villages supported by the project. Training will be based on local market demand and could include skills for industries active in the target landscapes such as tourism and hospitality, small business management skills, timber-based enterprise skills, non-timber forest products (NTFPs) and food processing for value chains, and nonfarm skills. To help address gender gaps related to economic opportunities and skills development, the project will have a special focus on encouraging women to participate in the training and devising courses responding to their vocational interests and job market opportunities. Training will be delivered in the village and through a scholarship system for selected youth, based on agreed criteria including poverty, vulnerability, and interest to attend vocational schools in district or province capitals.

34. **Subcomponent 2.3: Nature-based Tourism Business Leveraging Facility** (led by DOF) (US\$2.2 million, of which US\$1.5 million IDA, 0 GEF, and US\$0.7 million CCEFCF). The objective of this subcomponent is to strengthen the development of nature-based tourism by encouraging private sector participation, especially SMEs in and around PAs. The project will finance the establishment of a nature-based tourism business leveraging facility, to strengthen nature-



based tourism development and private sector participation by SMEs. The nature-based tourism business leveraging facility will provide (a) advisory services to tourism companies on product development, market surveys, and so on; (b) financing for small public infrastructure, marketing, and other aspects of the local enabling environment for tourism development in accordance with private sector investment plans and public destination management plans; and (c) training and capacity building for the management and staff of the applying SMEs.

35. **Component 3: Institutions, Incentives, and Information** (led by DOF) (US\$8.8 million, of which US\$5.7 million IDA, US\$0.4 million GEF, and US\$2.7 million CCEFCF). The objective of this component is to strengthen institutions, policies, incentives, and information for sustainable forest landscapes. This component will finance governance-related activities via three subcomponents: (a) Subcomponent 3.1: Strengthening Institutions and Policies for Landscape Management, (b) Subcomponent 3.2: Strengthening Institutions and Policies to Reduce Forest and Wildlife Crimes, and (c) Subcomponent 3.3: Information for Decision Support. Issues such as policy and regulatory development, institutional capacity building, interagency law enforcement coordination for illegal wildlife trade, environmental and social risk management, land and forest tenure, climate change monitoring, and natural capital valuation and impact assessments will be supported by this component.

36. **Subcomponent 3.1: Strengthening Institutions and Policies for Landscape Management** (led by DOF) (US\$5.2 million, of which US\$3.4 million IDA, US\$0.4 million GEF, and US\$1.4 million CCEFCF). The objective of this subcomponent is to strengthen institutions and policies for forest landscapes.

37. **Activities** include (a) supporting government institutions to strengthen and develop relevant public policy, strategy, regulations, and guidelines and to meet various international commitments; (b) establishing and implementing a GoL-led multi-sector and multi-stakeholder coordination platform; and (c) implementing capacity building on landscapes for the GoL to inform decision-making and manage trade-offs and mutual opportunities across sectors.

38. **GEF grants will complement IDA and CCEFCF by financing** only subcomponent 3.1, supporting government institutions to strengthen and develop relevant public policy, strategy, regulations, and guidelines and to meet various international commitments, with targeted support to the Protected Area Management Division (PAMD) in DOF.

39. **Subcomponent 3.2: Strengthening Institutions and Policies to Reduce Forest and Wildlife Crimes** (Led by the Environment Protection Fund [EPF], implemented by the Department of Forest Inspection [DOFI], DOF, Department for Combatting Natural Resource and Environmental Crime [DCNEC], and Lao Customs Department) (US\$2.4 million, of which US\$1.6 million IDA, 0 GEF, and US\$0.8 million CCEFCF). The objective of this subcomponent is to strengthen institutions and policies to reduce forest and wildlife crimes.

40. **Activities** include (a) strengthening and developing relevant public policy, strategy, regulations, and guidelines in coordination with and among agencies as relevant; (b) participating in and meeting various international commitments such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), in coordination with and among agencies as relevant; (c) developing and maintaining public awareness efforts and local networks on how to reduce wildlife and forest crime in coordination with and among agencies as relevant; (d) strengthening and implementing a GoL-led multiagency coordination platform on reducing wildlife and forest crimes (Lao Wildlife Enforcement Network [Lao-WEN]); (e) carrying out field activities by relevant national agencies, in cooperation with and among agencies when and where relevant; and (f) supporting the capacity of provincial agencies to implement field activities through Provincial Wildlife Enforcement Networks (P-WENs) in selected provinces.



41. **Subcomponent 3.3: Information for Decision Support** (Led by EPF, implemented by Ministry of Natural Resources and Environment [MONRE], and Lao Statistics Bureau [LSB]) (US\$1.1 million, of which US\$0.6 million IDA, 0 GEF, and US\$0.5 million CCEFCF). The objective of this subcomponent is to strengthen information, monitoring, and planning to support better landscape-level decision-making.

42. **Activities.** The project will support the information infrastructure for managing key environmental and social risks related to natural disasters and large-scale investments including (a) enhancing and implementing the policy framework for Strategic Environmental Assessments (SEA) and Environmental and Social Impact Assessments (ESIAs) (MONRE); (b) monitoring and reporting on UNFCCC NDC implementation (MONRE); (c) building capacity to carry out natural capital accounting for decision-making (LSB); (d) enhancing the policy framework on land tenure recognition inside forestlands (MONRE); and (e) carrying out impact assessments on key topics to complement the project Results Framework and learning (DOF).

43. **Component 4: Project Management and Monitoring** (led by DOF) (US\$6.8 million, of which US\$4.3 million IDA, US\$0.5 million GEF, and US\$2 million CCEFCF). The objective of this component is to maintain and enhance project management, monitoring, and learning. There are two subcomponents: (a) Subcomponent 4.1: Project Management and Monitoring (US\$6.4 million, of which US\$4 million IDA, US\$0.5 million GEF, and US\$1.9 million CCEFCF), and (b) Subcomponent 4.2: Strategic Communication, Partnerships, and Investment Coordination (US\$0.3 million, of which US\$0.2 IDA, 0 GEF, and US\$0.1 million CCEFCF). Subcomponent 4.1 focuses on project management, monitoring, learning, and adaptive management. Subcomponent 4.2 supports the GoL's strategic communication, resource mobilization, and regional coordination and dialogue on project-related issues.

44. **GEF grants will complement IDA and CCEFCF by financing:** activity (a) in subcomponent 4.1, on project management and M&E.

**Table 1. Project Cost by Component**

Component Name	IDA	GEF	CCEFCF	Total
<b>Component 1. Investing in Natural Wealth and Resilience in Forest Landscapes</b>	<b>16,993,524</b>	<b>6,541,976</b>	<b>8,000,000</b>	<b>31,535,500</b>
1.1 Protected Areas and Nature-based Tourism	6,776,250	4,214,250	3,200,000	14,190,500
1.2 Sustainable Forestry and Resilient Village Infrastructure	10,217,274	2,327,726	4,800,000	17,345,000
<b>Component 2. Livelihoods Opportunities from Sustainable Forest Landscapes</b>	<b>6,285,000</b>	<b>0</b>	<b>2,960,000</b>	<b>9,245,000</b>
2.1. Village Livelihood Block Grants to Village Development Funds	4,080,000	0	1,920,000	6,000,000
2.2 Vocational Training and Skills Development	680,000	0	320,000	1,000,000
2.3. Nature-based Tourism Business Leveraging Facility	1,525,000	0	720,000	2,245,000



<b>Component 3. Institutions, Incentives, and Information</b>	<b>5,700,000</b>	<b>350,000</b>	<b>2,720,000</b>	<b>8,770,000</b>
3.1 Strengthening Institutions and Policies for Landscape Management	3,400,000	350,000	1,440,000	5,190,000
3.2 Strengthening Institutions and Policies to Reduce Forest and Wildlife Crimes	1,680,000	0	800,000	2,480,000
3.3 Information for Decision Support	620,000	0	480,000	1,100,000
<b>Component 4. Project Management and Monitoring</b>	<b>4,341,476</b>	<b>475,000</b>	<b>2,000,000</b>	<b>6,816,476</b>
4.1. Project Management and Monitoring	4,101,476	475,000	1,920,000	6,496,476
4.2. Strategic Communication, Partnerships, and Investment Coordination	240,000	0	80,000	320,000
<b>Contingencies</b>	<b>680,000</b>	<b>0</b>	<b>320,000</b>	<b>1,000,000</b>
<b>Total</b>	<b>34,000,000</b>	<b>7,366,976</b>	<b>16,000,000</b>	<b>57,366,976</b>

45. **Knowledge and communications activities are built in all components, with dedicated resources according to the topic and the level of the interventions.** Dedicated knowledge management (KM) and communications approaches are part of the Project. Implementation of these approaches will result in convening of key groups, producing flagship studies and practical publications that influence practitioners, policymakers and investors, among other interventions. Through KM and communications, plus the country dialogue, the project will provide the “space” needed to seek solutions across multiple scales, as a means to amplify project impact. The project will work closely with stakeholders to a) generate and exchange knowledge, b) consolidate effort to share lessons and best practices, c) promote outreach for strategic knowledge products, and d) produce tools for scale up and replication. Through a feedback loop, the project will convene information from different landscapes and provinces, synthesize lessons learned and findings, and return relevant insights back to the village level activities.

46. **A Knowledge management plan will be developed by the NPCU** based on the different thematic areas to define and identify priority topics, develop a timeline for deliverables and procurement of selected expertise to conduct studies and assessments, and disseminate communication materials. Subcomponent 4.2 is designed to focus upon building partnerships and share knowledge through a robust knowledge management approach to convene and influence a wider cohort of actors beyond the direct project stakeholders. Tools will be participatory and involve different stakeholders. Village, District, Provincial, and National project assistants will ensure a direct learning pathway and flow of information. Data collection systems such as tablets and the use of new technologies will be promoted. Activities under subcomponent 4.1 also include research, cross-project monitoring exchanges and capacity development to boost learning from project activities. In addition the project will generate a number of knowledge outputs, including, but not limited to, impact assessments on (i) livelihoods, (ii) jobs and poverty,



(iii) landscape valuation and ecosystem services, (iv) landscape governance modalities, including collaborative PA management and village forestry, (v) gender, (vi) resilience, and (vii) wildlife law enforcement, zoonotic disease prevention and One Health. Other deliverables include (i) a roadmap for private sector investment in nature-based tourism and conservation; (ii) a report on natural regeneration, growth and yield in permanent sample plots (PSP) in natural forests and in assisted natural regeneration forest areas; (iii) A carbon and financial analyses on natural forest restoration; (iv) a timber supply/value chain analysis of smallholders and SMEs. Plans for strategic communications will be developed by the NPCU and detailed in the project operational manual (POM). Communication plans will target different audiences and media, ranging from strategic policy notes for decision makers, to flagship publications, social media and broader public. Specific communication and outreach activities through workshops, meetings and training aimed at engaging local populations and relevant stakeholders to elicit behavior change; and through the use of local radio, television and other media to raise awareness on forest and land management, conservation, and natural hazards will also be delivered as part of project implementation.

47. **GEF Incremental Reasoning:** Key activities for GEF financing include the following: a) protected area management b) village forest management and restoration, c) village land use planning, d) extension and outreach support e) support to enhance the legal and policy framework for enabling environmentally and socially sustainable forest plantations, and f) supporting coalitions of action at national and regional levels. This package of interventions, leveraging larger-scale IDA and CCEFCF resources, would allow the project to generate significant global environmental benefits from larger scale impact in terms of geographies covered, financing mobilized, and number of actors influenced (see also appendices to the project document). Through these activities, aligned with the projects theory of change (Figure 1 of project document) GEF financing would deliver measurable global environmental including: a) sustainable use and conservation of globally significant biodiversity; b) increasing land area treated for restoration and under sustainable practices without increasing the total land area used; c) increasing carbon sequestration; and d) reducing greenhouse gas emissions (GHG). Because the operation would target 5-6 large landscapes during implementation, there is greater potential for economies of scale in achieving objectives of the GEF Biodiversity and Land Degradation Focal Areas. These two focal areas are mutually reinforcing: the growing regional and global demand for wood inevitably increases the pressure on conservation, protection, and production forests and the globally significant biodiversity and flow of ecosystem services in the forest estate.

48. **Sustainability:** Environmental sustainability will be enhanced through all project activities which are designed to deliver local and global environmental benefits. Financial sustainability at the village level would be enabled by the revolving mechanism of the Village Development Funds, coupled with continued extension support throughout project implementation. Institutional sustainability will be strengthened by broad and comprehensive capacity building at national, province, district and village level. Institutional sustainability is also promoted by the project by relying on and strengthening existing government frameworks. In addition, international consultants hired by the project will have dedicated capacity development activities built in their ToRs. One example of how environmental, financial, and institutional sustainability come together at activity level is the package of small irrigation plus forest protection. This activity could be sustained post-project via payments for environmental services among downstream irrigation villages and upstream forest villages. The project will pilot and refine this





approach through inter-village agreements to accompany civil works and village forest management. Social sustainability would be supported through alternative livelihoods and new economic opportunities, including for women and vulnerable households. Overall, the project's sustainability and replicability are also reinforced by recently enacted policies and international commitments by the GoL

49. *Innovation and Scale up:* Innovation would be supported by the project by a) promoting collaborative management of conservation, production, and protection forests by villages, b) promoting an integrated landscape approach for multiple benefits including forest products and agricultural production, conservation, jobs, livelihoods, resilience, and environmental benefits, c) leveraging private stakeholders to partner with government and villages (with IFC) on forestry and tourism, d) deploying local integrated green/grey infrastructure and better forest management to reduce flood and landslide risk, and e) supporting multi-agency approaches to curbing forest and wildlife crimes, and f) carrying out impact assessments to complement the project results framework and promote learning for adaptive project management. The project is designed for scaling up activities as additional funds are raised. New landscapes, provinces, PAs and villages can be added based on the prioritization framework and selection criteria developed under project design.

#### Legal Operational Policies

#### Triggered?

Projects on International Waterways OP 7.50

No

Projects in Disputed Areas OP 7.60

No

#### Summary of Assessment of Environmental and Social Risks and Impacts

50. **The project investments are expected to result in more positive environmental and social impacts and livelihood development outcomes from better managed forest landscapes and the many benefits from them.** However, potential risks and impacts that may be generated and associated with proposed project activities in relation to the World Bank Environmental and Social Framework (ESF) exist. Climate co-benefits for both mitigation and adaptation would be generated from restoration and reforestation activities, better conservation and management of protected areas, and improved forest-smart livelihoods and community-based green infrastructure.

51. **ESS documents address tourism impacts.** Tourism in Lao PDR has been very low compared to Thailand and Vietnam for example, and the immediate challenge is to raise revenues for PA management by increasing nature-based tourism sustainably.



52. **GEF resources will not support or be used for any voluntary or involuntary resettlement under this project.** More broadly the project has no intention to resettle villages but rather to support villages in and around PAs to work with government PA authorities to carry out collaborative management of PAs and village-designated lands enclaved in or bordering PAs.

53. **Environmental**

- a) The project will support small infrastructure construction and/or renovation work such as offices for project staff, small irrigation and rural roads, and substations for forest patrolling teams. Impacts from these activities are expected to be minor, short term, and site specific and can be mitigated by proper design and implementation of the management plans.
- b) Some project activities could lead to disturbance and threat to forest resources and wildlife. A management plan will be developed and implemented to minimize those impacts and achieve the intended objectives.
- c) Policy and capacity building for public institutions will strengthen the enabling environment for private sector investment in nature-based tourism activities and forest plantations, which may lead to disturbance, degradation, or deforestation. The project will strengthen the institutional and policy framework and build staff capacity to address these issues.
- d) Livelihood improvement activities may lead to land clearance for agricultural and livestock production and small irrigation development. Agricultural intensification through possible use of chemical fertilizers and pesticides could be harmful to land resources and human health. The project will help the client develop and implement a Pest Management Plan to ensure that agriculture activities do not harm, and ideally improve, community health and living conditions.

54. **Social:**

- a) Direct risks and impacts include restriction of access to forestland and resources. This may affect natural resources-based livelihoods and customary land use and tenure of vulnerable groups, particularly women and ethnic minority groups. Most of these groups are poor, with their livelihoods and incomes mainly dependent on swidden cultivation, livestock production, and forest resources. Conservation management activities may not adequately recognize customary rights to land use and access to forest products, particularly in those areas or plots where swidden cultivation is practiced. During implementation, the project will build the capacity and processes to ensure the consideration of customary practices.
- b) Community health and safety risks may increase from interaction with project staff (direct workers) and consultants (indirect workers) working in villages within and around selected landscapes. Other impact sources may be tourists and visitors to ecotourism products. Health risks include, but are not limited to, waterborne, waste borne, and airborne diseases; sexually transmitted diseases (STDs/HIV/AIDS); sexual exploitation and abuse; gender-based violence; violence against children; and disturbance to daily life and privacy. The project will build the capacity and processes to minimize health and safety risks.





- c) Inequality in income distribution from tourism and forestry is a potential social risk, as economic benefits as a result of such activities have the potential to benefit certain segments of the population disproportionately according to need and project objectives. The project will work with partners to establish systems and participatory processes that target low-income and vulnerable groups and address gender gaps.
- d) Vulnerable households, especially ethnic groups, may find it challenging to adjust or adopt forest-smart practices and technologies introduced by the project. This may lead to increased burden on the participating households and result in further impoverishing the vulnerable, especially ethnic women, who often perform most of the day-to-day livelihood activities. The project will use participatory tools (for example, focus group discussions and training) supported by social consultants, to ensure that the vulnerable and ethnic groups are engaged in the decision-making process and benefit from the project in a culturally appropriate manner.
- e) Land acquisition and resettlement of villages and households will unlikely be required and, if required, will be minimal as the civil works will be mainly undertaken within the existing premises. If private land needs to be acquired for the construction of new offices or facilities with co-financing made available by the government agencies, an Abbreviated Resettlement Action Plan (ARAP) for the work sub-project will be prepared and implemented in accordance with a Resettlement Policy Framework (RPF).
- f) Communities and households in the selected landscape may have used the lands for years without official recognition of their customary land use rights. Their forestlands and natural resources could be acquired by the Government and private investment projects without, or with inadequate, compensation. Communities may then be considered as an 'illegal occupier or encroacher' as a result of land use planning to be supported by the project. The project will build the capacity and processes to ensure the consideration of customary practices in the land use planning participatory exercise and promote policy work for clarification of rights.

## E. Implementation

### Institutional and Implementation Arrangements

55. **The GoL will implement the project through existing institutions at the central, provincial, district, and village levels, based on their legal mandates.** MAF/DOF will lead project implementation. A National Project Coordination Unit (NPCU) located in DOF will provide project services to DOF, as well as other ministries, departments, and provincial and district institutions implementing specific project activities.

56. **Each collaborating institution will have a small project implementation team networked to the NPCU to form a multi-sector team that regularly exchanges relevant information across institutions and sectors.** A National Project Steering Committee (NPSC) and National Project Technical Committee (NPTC) with representatives of all relevant government agencies will oversee national level strategic and technical direction of the project, while a Provincial Steering Committee (PSC) will facilitate inter-ministerial project coordination at provincial level.



## Results Monitoring and Evaluation Arrangements

57. **Project monitoring and broader natural resource monitoring and impact assessment would be carried out by the PCU at DOF.** These functions could be supported by a third party contracted by the client with project funds. This entity could be secured via a performance-based contract with the government to train government staff in a range of relevant institutions to carry out M&E and impact assessment, and would provide regular reports documenting and quantifying the capacity building process. The relevant GEF Tracking Tools would be completed at approval, mid-year and completion. GHG emissions will be tracked using Ex-Act tool. Additional project indicators beyond the project results framework and GEF tracking tool may be monitored by the project as necessary. A project Mid-term Review (MTR) and Borrower's Completion Report (BCR) would be undertaken with consultants hired by the PCU, starting in the project's final year. The Bank would undertake an Implementation Completion Report (ICR) based on the BCR, also starting in the project's final year.

58. **Impact assessments would complement the project results framework and the KM approach of the project.** Assessments would include a) impacts on livelihoods, jobs and poverty, b) impacts on landscape valuation and ecosystem services, c) impact of landscape governance modalities, including collaborative PA management and village forestry, d) gender, e) resilience, and f) wildlife law enforcement and zoonotic disease prevention as part of the One Health approach.

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**APPROVAL**

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# Appendix A: LLL Results Framework, Monitoring and Learning

## **Introduction**

1. This document is part of the project documentation for the Lao Landscapes and Livelihoods project (LLL). It provides details on the monitoring and evaluation for the project, and complements the Project Appraisal Document (PAD) Section VII “Results Framework and Monitoring.” The document is organized as follows:

**Section A.** Results framework

**Section B.** Monitoring and evaluation plan (definitions, data, methodology for the results framework)

**Section C.** Additional indicators to be tracked outside the results framework

**Section D.** Impact assessments

**Section E.** Knowledge management and learning

**Section F.** Implementation arrangements and budget

**Annex 1:** GEF tracking tool for the Protected Area Management Effectiveness Tracking Tool (METT)

## A. Results Framework (from PAD)

### Project Development Objectives(s)

To promote sustainable forest management, improve protected area management, and enhance livelihoods opportunities in selected landscapes in Lao PDR.

### Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
<b>To promote sustainable forest management</b>			
1. Landscape area with maintained or increased forest cover (Hectare(Ha))		0.00	2,000,000.00
1a. Conservation forest (PAs) area with maintained or increased forest cover (Hectare(Ha))		0.00	1,300,000.00
1b. Protection forest area with maintained or increased forest cover (Hectare(Ha))		0.00	400,000.00
1c. Production forest area with maintained or increased forest cover (Hectare(Ha))		0.00	300,000.00
1d. Village forest with maintained or increased forest cover (Hectare(Ha))		0.00	800,000.00
<b>to improve protected area management</b>			
2. Protected areas that score over 50 on the global PA Management Effectiveness Tracking Tool (METT) (Number)		3.00	8.00
<b>to enhance livelihoods opportunities in selected landscapes in Lao PDR</b>			
3. Households or Economic Interest Groups engaged in alternative and/or improved traditional livelihood activities supported by the project (Number)		0.00	72,050.00
3a Economic Interest Groups engaged in alternative and/or improved traditional livelihood activities supported by the project (Number)		0.00	50
4. Beneficiaries of job-focused interventions (CRI, Number)		0.00	150,000.00
4a. Beneficiaries of job-focused interventions - Female (CRI, Number)		0.00	75,000.00

## Intermediate Results Indicators by Component

Indicator Name	PBC	Baseline	End Target
<b>Investing in Natural Wealth and Resilience in Forest Landscapes</b>			
5. Forest area brought under management plans (CRI, Hectare(Ha))		0.00	2,300,000.00
5a. Conservation Forest (PA) under a management plan (Hectare(Ha))		0.00	1,500,000.00
5b. Production Forest Area under a management plan (Hectare(Ha))		0.00	400,000.00
5c. Protection Forest Area under a management plan (Hectare(Ha))		0.00	400,000.00
5d. Village forest under a management plan (Hectare(Ha))		0.00	800,000.00
5e. Production Forest Area certified for controlled wood or SFM (Hectare(Ha))		0.00	250,000.00
6. Land area under sustainable landscape management practices (CRI, Hectare(Ha))		0.00	1,200,000.00
7. Net GHG emissions (Tonnes Co2)		0.00	-10,000,000
8. Beneficiaries using extension or outreach services (Number)		0.00	144,000.00
8a. Beneficiaries using extension or outreach services (females) (Percentage)		0.00	50.00
9. Productive assets built and maintained for improved resilience (Number)		0.00	30.00
9a. Small irrigation or multipurpose small reservoirs plus village-to-village payments for environmental services to protect forest (Number)		0.00	10.00

Indicator Name	PBC	Baseline	End Target
9b. Tourism or park management facilities constructed / rehabilitated (Number)		0.00	10.00
9c. Roads constructed / rehabilitated (Number)		0.00	10.00
10. Village conservation agreements approved and annually reported (Number)		0.00	267.00
11. Tourism agreements signed between tourism operators, local villages and relevant PA and other management authorities in targeted forest landscapes (Number)		0.00	10.00
12. Villages entering partnership agreements with environmentally and socially sustainable tree plantation enterprises (Number)		0.00	30.00
13. Households establishing and managing tree plantations (Number)		0.00	200.00
<b>Livelihoods Opportunities from Sustainable Forest Landscapes</b>			
14. Households using Village Development Funds for forest-smart livelihoods activities (Number (Thousand))		0.00	72,000.00
14a. Vulnerable households using Village Development Funds for forest-smart livelihoods activities (Number (Thousand))		0.00	5,000.00
15. Share of target beneficiaries with a score 'Satisfied' or above on project interventions (Percentage)		0.00	90.00
15.a Share of target beneficiaries with a score 'Satisfied' or above on project interventions (females) (Percentage)		0.00	50.00
<b>Institutions, Incentives, and Information</b>			
16. New or revised laws, policies, and regulations drafted and submitted to relevant authority for approval (Number)		0.00	15.00



Indicator Name	PBC	Baseline	End Target
17. Investigations of breaches of forestry law and wildlife and aquatic law referred to criminal courts at national or provincial level (Number)		0.00	60.00
17.a Referred cases jointly investigated each year (Percentage)		0.00	50.00

## B. Monitoring and Evaluation Plan (definitions, data, methodology for the results framework)

Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	Definition/Description	Frequency	Data source	Methodology for Data Collection	Responsibility for Data Collection
1. Landscape area with maintained or increased forest cover	<p>This indicator measures the PDO aspects of forest and protected area management at landscape level. The overall change in forest cover area will be recorded according to the GOL's definition of forest (not 'forestland' which is an administrative unit) within the project area. Forest is defined as having a minimum "diameter at breast height" (DBH) of 10cm; minimum crown density of 20%; and minimum area of 0.5ha. This definition was used in the construction of the Forest Reference Emission Level/ Forest Reference Level (FREL/FRL) and formally submitted to the UNFCCC in January 2018 and is used in the Bank/FCPF financed Emission Reduction Purchase, and the national GHG inventory. It is noted that the 2018 definition is different from what Lao PDR used for reporting to the FAO Forest Resources Assessment (FRA) in 2015.</p> <p>Sub-indicators measure the change in area for different categories of forest within the landscape within the project area. These sub-indicators include conservation forest (protected areas and national parks), protection forest, production forest, village forest, smallholder forest, and environmentally and socially sustainable commercial plantation forests that interface with project-supported villages and that do not displace standing forest. Commercial plantation forests would not include oil or palm as the project will not be supporting these. The project is not financing commercial plantation forests.</p> <p>Village forests according to the 2019 Forest Law: "District administration authorities allocate forests and forestland to village administration authorities to manage, inspect, protect, develop and utilize in accordance with village forest management plans...." Forests under village responsibility may be classified into three categories, mirroring the national designations: namely protection forests that include water resources riparian forests, roadside forests; conservation forests that include sacred forests and cemetery forests; and Village Use Forests. Village forests exist as enclaves within or outside of designated state or provincial conservation forest (PAs), protection forest, and production forest.</p> <p>The overall target of the main indicator is not the sum of the three sub indicators on National PAs, PFAs, and PtFAs (1,300,000 + 400,000 + 200,000 = 2,000,000 ha). The other two sub indicators, Village forests and Plantation forests, represent a sub-set of the three state forest categories, hence their targets are not counted twice in the total of the main indicator.</p>	Annual	Forest cover assessment	<p>Remote sensing.</p> <p>The project will distinguish the different forest area by preparing geo-referenced maps with layers for the 3 state forest categories, aggregated in the main indicator and disaggregated for the first three sub-indicators (1a. 1b. and 1c).</p> <p>Geo-referenced maps will also be prepared with layers from the village forests mapped under the forest and land use planning activity in component 1 (for sub-indicator 1d.), and for new environmentally and socially sustainable industrial tree plantations (for sub-indicator 1e.).</p>	DOF

	This indicator responds to the SD-OPCS Kiosk Announcement issued on June 8, 2020 and IDA19 Policy Commitment to all IDA operations with more than 20 percent Climate Co-Benefits will incorporate at least one climate-related results indicator to increase the focus on climate outcomes.				
1a. Conservation forest (PAs) area with maintained or increased forest cover	See mother indicator.	Annual	Forest cover assessment	Remote sensing	DOF
1b. Protection forest area with maintained or increased forest cover	See mother indicator.	Annual	Forest cover assessment	Remote sensing	DOF
1c. Production forest area with maintained or increased forest cover	See mother indicator	Annual	Forest cover assessment	Remote sensing	DOF
1d. Village forest with maintained or increased forest cover	See mother indicator.	Annual	Forest cover assessment	Remote sensing	DOF
2. Protected areas that score over 50 on the global PA Management Effectiveness Tracking Tool (METT)	<p>This indicator measures the strength and effectiveness of the GOL's PA authorities in managing PAs and biodiversity in targeted PAs using the globally standardized METT for PAs. Each individual PA is scored separately, and scores are then averaged. This is based on annual assessment and hence non-cumulative targets. By using specific criteria and activities for PAs, variation in management intensity between PAs can be accounted for.</p> <p>The METT tool is customized for Lao PDR.</p> <p>METT would be carried out with third party support to avoid bias from self-reporting.</p> <p>The 8 PAs cover over 1.5 million hectares of conservation forest:</p> <p>Nam Et-Phou Louey NP = 410,720 ha  Phou Khao Khouay NPA = 200,000 ha*  Tor Sib/ Phou Samsoum = 53,978 ha + 25,558 ha*  Phou Hin Poun NPA = 150,000 ha*  Nakai Nam Theun NP = 427,770 ha  Hin Nam No NP = 94,121 ha  Laving Laverne NPA = 86,000 ha</p>	Annual	METT score	Scoring exercise by 3rd party	DOF

	<p>Khoun Xe Nongma PPA = 53,863 ha</p> <p>*Some areas are approximate following PM Decree 164 in 1993. Tor Sib/Phou Samsoum has not yet been defined/designated.</p>				
<p>3. Households or Economic Interest Groups engaged in alternative and/or improved traditional livelihood activities supported by the project</p>	<p>This indicator captures the livelihoods aspects of the PDO statement. It measures the number of households that have added new activities to their livelihood strategies and/or improved existing farm- and forest-related livelihood activities. The latter could be, for example, improvements in the quantity and/or quality in agricultural produce or increased yield of NTFPs through non-destructive harvesting.</p> <p>Both the (i) use of Village Livelihood Block Grants by households and by villages and (ii) livelihoods from improved forest management by households and by villages will be the main elements contributing to the strengthening of livelihood activities. A given household could engage in several new or improved activities but will only be counted once to avoid double counting.</p> <p>The indicator also captures the support to Economic Interest Groups to include new or additional activities into their portfolio of activities. Economic Interest Groups are groups formed around a specific economic activity, for example weaving, and often helps in marketing of the products through improved product design, facilitation of market access and business operation services.</p>	Biennial	Survey reports	Household survey	DOF
<p>3a. Economic Interest Groups engaged in alternative and/or improved traditional livelihood activities supported by the project</p>	<p>See mother indicator.</p>				
<p>4. Beneficiaries of job-focused interventions</p>	<p>The indicator measures the number of beneficiaries reached by interventions that contribute to the jobs agenda in operations supported by the World Bank. The indicator captures the cross-cutting nature of the jobs agenda, as <i>beneficiaries</i> (disaggregated by gender) may be individuals, workers, households, farmers, microenterprises, small and medium-sized enterprises (SMEs), and other target groups that benefit from Bank Group-supported operations in different sectors and types of operations. For the purpose of this project only individuals will be considered beneficiaries.</p> <p><i>Jobs</i> are defined as “activities that generate income, monetary or in kind, without violating human rights” (WDR on Jobs, 2013). For the purpose of this project jobs can be full time, seasonal, formal and informal.</p>	Annual	Survey reports	Household survey.	DOF

	<p><i>Jobs-focused interventions</i> are those contributing to the jobs agenda that have an explicitly stated and substantive link to creating more, better, and/or inclusive jobs.</p> <p><i>More jobs</i> refers to direct and indirect employment linked to increased firm performance, hiring, and/or self-employment/entrepreneurship.</p> <p><i>Better jobs</i> imply higher productivity and earnings, better benefits, better working conditions, and/or improved income protection, for example.</p> <p><i>Inclusive jobs</i> are those that offer improved access or that benefit from targeted interventions to increase the employability of youth, women, the poor, and other disadvantaged groups.</p> <p>For the purpose of this project only individuals will be considered beneficiaries.</p> <p>For the purpose of this project jobs can be full time, seasonal, formal and informal.</p> <p>Measures will be put in place to avoid double-counting.</p>				
4a. Beneficiaries of job-focused interventions - Female	See mother indicator.	Annual	Survey reports	Household survey	DOF

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
5. Forest area brought under management plans	This indicator measures the forest areas brought under management plan as a result of the project. To be counted the management plan would have to be approved by the relevant government authority. Forestland classification is based on national definitions.	Annual	Forest management plans	<p>Field survey</p> <p>The target for the mother indicator is the aggregated value of the first 3 sub-indicators (5a, 5b, and 5c) on State PAs, PFAs and PtFAs respectively.</p> <p>Sub-indicators 5d on village forests, and 5e on PFAs certified, track</p>	DOF

				<p>sub-divisions of the same State forestlands tracked in sub-indicators 5a, 5b, and 5c.</p> <p>Sub-indicators 5d and 5e are tracked to add an additional qualitative level of planning to the existing state forest management plan.</p>	
5a. Conservation Forest (PA) under a management plan	<p>Management plans for protected areas can be developed by following relevant guidelines, for example: the IUCN World Commission on Protected Areas Best Practice Guidelines can be used as a reference (e.g., Dudley, Nigel (ed.), 2008, Guidelines for applying protected area management categories; and Thomas, Lee and Middleton, Julie, 2003, Guidelines for Management Planning of Protected Areas.)</p> <p>5 Conservation Forest Areas (PAs) have approved management plans, some of which require updating.</p>	Annual	Management plans	Field survey	DOF
5b. Production Forest Area under a management plan	<p>Forestland classification is based on national definitions. Management plans for production forests can be demonstrated by, for example, certification of SFM (for reference, see OP 4.36, para. 9, or WWF/World Bank Global Forest Alliance, 2006, Forest Certification Assessment Guide: A framework for assessing credible forest certification systems/schemes), or by following relevant FAO guidelines (e.g., FAO, 1998, Guidelines for the management of tropical forests 1. The production of wood, FAO forestry paper 135).</p> <p>40 Production Forest Areas have approved management plans, some of which require updating.</p>	Annually	Management plans	Field survey	DOF
5c. Protection Forest Area under a management plan	<p>Protection Forest Areas do not have approved management plans at the time of project initiation. It is therefore expected that this sub-indicator will start recording progress some time during implementation. The necessary time will be used by DOF to develop and approve a management system for PtFAs, and individual management plans for PtFAs.</p>	Annual	Management plans	Field survey	DOF
5d. Village forest under a management plan	<p>This sub-indicator measures the cumulative hectareage of delineated village forest area (of villages not inside PAs) that has been brought under a decentralized village-led forest management plan with project support. To be counted the management plan would have to be approved by the relevant government authority. Village forest is defined above (PDO indicator 1) in line with the 2019 Forestry Law. Values</p>	Annual	Management plans	Field survey	DOF

	are based on average village forest size of 2000 ha x 400 villages supported by the project.				
5e. Production Forest Area certified for controlled wood or SFM	This sub-indicator tracks the hectares of PFAs holding a third party certification of Sustainable Forest Management and/or controlled wood.	Annual	Management plans, certification documents	Field survey	DOF
6. Land area under sustainable landscape management practices	<p>The indicator measures, in hectares, the land area for which new and/or improved sustainable landscape management practices have been introduced.</p> <p><i>Land</i> is the terrestrial biologically productive system comprising soil, vegetation, and the associated ecological and hydrological processes.</p> <p><i>Adoption</i> refers to change of practice or change in the use of a technology promoted or introduced by the project.</p> <p><i>Sustainable landscape management (SLM)</i> practices refers to a combination of at least two technologies and approaches to increase land quality and restore degraded lands for example, agronomic, vegetative, structural, and management measures that, applied as a combination, increase the connectivity between protected areas, forest land, rangeland, and agriculture land.</p>	Annual	Survey reports, project and activity records	Field survey	DOF
7. Net GHG emissions	<p>Project net greenhouse gas (GHG) emissions are calculated as an annual average of the difference between project gross (absolute) emissions aggregated over the economic lifetime of the project and the emissions of a baseline (counterfactual) scenario aggregated over the same time horizon. Net GHG emissions at the portfolio level are calculated as the sum of project net emissions.</p> <p>Economic lifetime is the lifetime of the underlying assets that the Bank project finances and is usually longer than the implementation period of the Bank project. The indicator value is negative if the project is reducing emissions, and positive if the project is increasing emissions.</p> <p>The indicator is based on an ex-ante estimation performed during project preparation using GHG accounting methodologies as approved by the GPs. GHG accounting is done ex-ante, and the exercise is repeated annually.</p> <p>If the project undergoes major restructuring or is subject to additional financing relevant to GHG accounting, the ex-ante estimation of project net emissions needs to be recalculated at the time of restructuring or processing additional financing.</p>	Annual	Modified Ex-ACT tool	Survey	DOF

8. Beneficiaries using extension or outreach services	<p>This indicator measures the number of individuals using annually with extension or technical outreach services, provided through the project, in land use planning, decentralized sustainable forest management, land management, conservation, NTFPs, or food production.</p> <p>This indicator corresponds to the World Bank Corporate Results Indicator, “Farmers reached with agricultural assets or services,” where the definition of “agriculture” explicitly includes forestry, timber, NTFPs, and natural resource management.</p> <p>Assumptions for estimating the target:</p> <ul style="list-style-type: none"> <li>• 600 villages of which 200 are PA villages and 400 villages are outside PAs.</li> <li>• Average of 120 households per rural village nationwide</li> <li>• Average of 5.5 individuals per household nationwide</li> <li>• Two people per household counted toward the target. Husband and wife of each household are presumed to be the primary recipients of extension or outreach services; others are not counted in the reporting</li> <li>• Half of the recipients of the extension or outreach will be female.</li> </ul>	Annual	Survey reports	Survey	DOF
8a. Beneficiaries using extension or outreach services (females)	Gender indicator. See mother indicator.				
9. Productive assets built and maintained for improved resilience	<p>Resilience indicator. Climate adaptation indicator.</p> <p>This indicator measures the project contribution under both Components 1.1 and 1.2 to building and maintaining critical small infrastructure and natural solutions that are part of Village (community) Action Plans.</p> <p>These small works aim to boost the economic resilience of villages and protected areas by supporting economic activities in the face of recurrent floods, droughts, and landslides.</p> <p>These works include such assets as (i) small irrigation (plus payments for environmental services to upstream villages for protecting forest in command areas averaging 650 hectares), (ii) multipurpose reservoirs, (iii) access roads or small bridges and drainage, (iv) slope stabilization using reforestation and revegetation, and (v) tourism and protected area facilities.</p>	Annual	Project and activity records	Survey	DOF
9a. Small irrigation or multipurpose small reservoirs plus village-to-village payments	This sub-indicator measures the progress on constructing small irrigation schemes which are associated with payments for environmental services (in-kind or in cash) to upstream villages for protecting forest in command areas averaging 650 ha.	Annual	Survey reports	Survey	DOF



for environmental services to protect forest					
9b. Tourism or park management facilities constructed / rehabilitated	This sub-indicator measures the improvement or construction of small infrastructure to promote nature-based tourism development. Examples could be trails, camp grounds, small-scale waste management facilities, small-scale visitor centers in PAs, etc.	Annual	Survey reports	Survey	DOF
9c. Roads constructed / rehabilitated	This sub-indicator measures the progress on construction, rehabilitation, and maintenance of climate resilient roads to access nature-based tourism assets, or to improve village access to markets.	Annual	Survey reports	Survey	DOF
10. Village conservation agreements approved and annually reported	<p>Village Conservation Agreements (VCA) are binding between the relevant government authority and the Village Administration.</p> <p>These agreements may address the protection of species, ecological communities, habitats or potential habitats. Based on an approved VCA, participating Guardian Villages in and bordering PAs would access block grants for livelihoods through their respective Village Development Fund under Component 2. VCAs are preceded by the participatory preparation of a Village Forest and Land Use Management Plan.</p> <p>*For NEPL, 43 VCAs are already approved and under implementation under LENS2, and would be counted in LLL to track continued implementation.</p> <p>10 VCAs in NNT have also been approved as of July 27, 2020 and will continue to be reported on during LLL.</p>	Annual	Village conservation agreements	Survey	DOF
11. Tourism agreements signed between tourism operators, local villages and relevant PA and other management authorities in targeted forest landscapes	<p>This indicator measures the number of partnerships (tourism agreements) among Government Authorities, private entities, and villages in nature based tourism established as a result of the project.</p> <p>A tourism agreement is a contract using a prescribed format (concession agreement, memorandum of understanding, or management contract or approval document) that sets out the terms and conditions for the right to use a given PA (district, provincial or a national protected area) and/or certain tourism sites outside of PAs for tourism purposes by a tourism operator.</p> <p>The contract format will be developed by the GOL (DOF).</p> <p>The contract specifies employment benefits for local communities (for example number of full-time equivalent jobs offered to members of local communities and training of these local people for performance in their job) and contribution to the management and protection of the protected area (for example an annual fee) to the GOL.</p>	Annual	Tourism agreements	Survey	DOF

	It is signed by the relevant authority, the tourism operator and the heads of the villages within or around the protected area.				
12. Villages entering partnership agreements with environmentally and socially sustainable tree plantation enterprises	<p>This indicator measures the number of villages that enter partnership agreements that have been facilitated as a result of project support to GOL and villages.</p> <p>A partnership agreement could be an out-grower contract, MOU, or other equivalent, stamped legal agreement among parties.</p> <p>The partnership agreement would articulate local benefits accruing to a specific village or village cluster from the enterprise and other terms such as timeline, land use rights, and so on, as well as responsibilities of villages, individuals, the enterprise, and the government.</p> <p>Partnership agreements counting toward this indicator target would comply with the main elements of the LLL World Bank ESF and IFC sustainability criteria and corporate sustainability commitments by a given enterprise.</p> <p>Participation of ethnic minority villages will be tracked.</p>	Annual	Partnership agreements	Survey	DOF
13. Households establishing and managing tree plantations	<p>The indicator measures the number of smallhold households involved in establishing and managing tree plantations with support provided under the project, whether inputs, extension services, or market facilitation.</p> <p>Smallholder tree plantations are grown on household land. Results will be reported in more detail by value chain which would include, among others, teak, mai theu (for white charcoal), eucalypt, or pine at higher elevations.</p> <p>Where possible, market access will be facilitated with project support (such as part of a village partnership agreement with large enterprises).</p>	Annual	Project records	Household survey	DOF
14. Households using Village Development Funds for forest-smart livelihoods activities	<p>COVID 19 response indicator.</p> <p>This indicator measures the total number of households accessing the respective Village Development Funds to implement their own livelihoods activities of choice that are supported under the project.</p> <p>The release of the Village Livelihood Block Grants (VLBGs) to the VDF are contingent on, and must be implemented in compliance with, the approved village forest and land use plans (including Village Conservation Agreements inside PAs).</p> <p>Loans are provided to most HHs, and grants are provided to village-identified highly vulnerable HHs through community-based targeting.</p>	Annual	Village Development Funds	Household survey	DOF

	<p>The project will support approximately 600 villages total, which amounts to an estimated 72,000 households or 396,000 people.</p> <p>Assumptions: average of 120 HHs per rural village nationally, and 5.5 average people per HH.</p>				
14a. Vulnerable households using Village Development Funds for forest-smart livelihoods activities	This sub indicator measures the community targeting of earmarked 20% resources of the VLBG to the most vulnerable households in the village, disbursed as grants ahead of NR village planning.	Annual	Village Development Funds	Household survey	DOF
15. Share of target beneficiaries with a score 'Satisfied' or above on project interventions	<p>Citizens engagement indicator.</p> <p>This indicator reports the percentage of the beneficiaries among the village population, disaggregated by gender, who perceive that services received by them respond to their needs and demands in the area of livelihoods, resilience and environmental management.</p> <p>This indicator represents the World Bank's required citizen engagement indicator, in line with the ESF guidance on beneficiary feedback loops.</p> <p>The satisfaction is measured along the dimensions of livelihoods, resilience, and environmental management.</p> <p>Satisfaction will be captured through a set of approximately 20 questions and capture various aspects of beneficiaries' perceptions on livelihoods, resilience, and environmental management. Each response will be scored and contribute to the overall rating.</p>	Annual	Survey reports	Perception survey	DOF
15a. Share of target beneficiaries with a score 'Satisfied' or above on project interventions (females)	Gender indicator. See mother indicator.	Annual.	Survey data	Perception survey	Third party contracted by DOF/PIU.
16. New or revised laws, policies, and regulations drafted and submitted to relevant authority for approval	<p>This indicator measures the support provided by the project to the GOL to enhance legislation, policy, and regulations (often referred to as "guidelines" in Lao PDR).</p> <p>Support comprises formulation of proposals for laws, policies, or regulations (guidelines) for appropriate level of decision making, conducting relevant analyses, and contributing to relevant working groups.</p> <p>Areas of interest include, among others: production forest management, forest enterprises, timber and wildlife trades, nature-based tourism development and</p>	Annual	Institutional data, legal and policy documents	Document review	DOF

	<p>enterprises, concession management, protected area management, land access and tenure, watershed function, green growth, climate change, disaster risk management, resilience, nature-based tourism development, the timber and wildlife trades, and zoonotic diseases.</p> <p>This indicator is compatible with the CRI “Implemented reforms supporting private sector development (number)”</p>				
<p>17. Investigations of breaches of forestry law and wildlife and aquatic law referred to criminal courts at national or provincial level</p>	<p>This indicator measures the capacity of the agencies comprising the Lao Wildlife Enforcement Network (Lao-WEN) (Department of Forest Inspection, Department of Forestry, Environmental Police, Customs Department, Office of the Public Prosecutor, Army) to detect and investigate relevant cases in line with Lao PDR law, policy and international treaties such as CITES.</p> <p>The process of referring a case to the courts is considered a benchmark for investigation quality. Relevant cases could include, for example, CITES I and II listed species, domestic wildlife crimes, encroachment, or high value timber.</p> <p>Lao-WEN is the GOL’s interagency network for both wildlife and timber crimes. Provincial Wildlife Enforcement Networks (P-WENs) and District-Wildlife Enforcement Networks (D-WENs) operate under the Lao WEN.</p> <p>Any law enforcement agency can open an investigation but only the Office of the Public Prosecutor can prosecute once a case is sent to the prosecutor’s office by a concerned enforcement agency.</p> <p>The indicator and sub-indicator must be reported in the Lao-WEN and P-WEN minutes of meetings as well as receive a case file number.</p>	Annual	Lao-WEN and P-WEN minutes of meetings	Review of Lao-WEN and P-WEN minutes of meetings	DOF
<p>17a. Referred cases jointly investigated each year</p>	<p>The sub-indicator on joint investigations measures the capacity of Lao WEN agencies to collaborate across institutions.</p> <p>Investigations that are joint are considered to be a proxy for the function of Lao-WEN.</p> <p>The indicator and sub-indicator must be reported in the Lao-WEN and P-WEN Minutes of Meetings as well as receive a case file number.</p>	Annual	LaoWEN and P-WEN meetings minutes	Review of Lao-WEN and P-WEN minutes of meetings	DOF

### C. Additional indicators to be tracked outside the RF

#### *GEF Project Core Indicators*

Project Core Indicators		Expected at CEO Endorsement
1	Terrestrial protected areas created or under improved management for conservation and sustainable use (Hectares)	1,458,000
2	Area of land restored (Hectares)	50,000
3	Area of landscapes under improved practices (excluding protected areas)(Hectares)	800,000
4	Total area under improved management (Hectares)	2,308,00
5	Greenhouse Gas Emissions Mitigated (metric tons of CO2e)	10,354,758
6	Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	400,000 ( 50% women)

#### *Canada Climate Facility Additional Indicators*

1. Amount of private financing leveraged by the project. (US\$)

#### *Gender Indicators to monitor project management performance (tracked outside the Results Framework) will include*

1. Percentage of women appointed to managerial positions in the LLL PCUs,
2. Assessment of gender-related outcomes after Year 1, and
3. Resolution of ESF grievances lodged by village women relating to the LLL.

### D. Impact Assessments

2. Impact assessments would complement the project M&E and promote more in-depth learning. These assessments include:

- a) impacts on livelihoods, jobs and poverty,
- b) impacts on landscape valuation and ecosystem services,
- c) impact of landscape governance modalities, including collaborative PA management and village forestry,
- d) gender,
- e) resilience, and
- f) wildlife law enforcement, zoonotic disease prevention and One Health.

3. The impact assessments complement project M&E, inform the project's adaptive learning activities and the mid-term review. Impact assessments help understand, learn from, and adapt project management and activities related to key results areas that are often too complex for conventional project results frameworks.

4. Methodologies for the impact assessments are diverse (e.g., these are not necessarily randomized controlled trials) and would generally include baseline, midline and endline data collection and dialogues with key stakeholders. Different assessments would be completed at different times, depending on the topic, to complement project M&E, and will inform the project's adaptive learning activities and the mid-term review and the project completion reports by both the Government of Lao PDR and the World Bank.

5. Impact assessments would also likely support future external decisions to expand financing for LLL.

#### **E. Implementation arrangements and budget**

6. **Project monitoring and broader natural resource monitoring and impact assessment will be carried out by the NPCU at DOF.** Provincial PCUs will be responsible for M&E for their respective provinces and report to the NPCU. A rigorous M&E system equipped with GIS and other facilities for data collection, storage and analysis will be established at central level enabling the project's progress towards the results to be measured and assessed. The project M&E system will utilize existing country systems as far as possible.

7. **M&E functions could be supported by a third party contracted by the client with project funds.** This entity will be secured via a performance-based contract with the government to train government staff in a range of relevant institutions to carry out M&E and impact assessment, and will provide regular reports documenting and quantifying this progress to build capacity.

8. **Project M&E specialists (government staff) will lead on M&E and will be supported by a dedicated M&E advisor and M&E assistants where relevant.** The M&E advisor will support the NPCU to: a) review and update the M&E section of the project operational manual (POM); b) ensure that data collection, analysis, presentation and reporting follow quality standards and processes outlined in the POM; c) work in close collaboration with Provincial and District authorities to implement and maintain appropriate M&E processes and reporting mechanisms; and d) contribute to learning and communication, working closely with project communication specialist and advisors.

9. **Data and reporting.** Baselines are set at zero, and the project will monitor the change attributable to project intervention over the implementation period, and report it in the results framework. The Results Framework includes definitions, data sources, frequency of data collection, methodology, and institutional responsibilities. Targets for the RF are set based on previous experience in the country and in consultation with sector experts and client counterparts. GHG emissions will be reported annually. Additional project indicators beyond

the project results framework and GEF tracking tools may be monitored by the project as necessary. For some indicators, such as the PA management effectiveness tracking tool (METT) and others, the client will rely on a third party (firm, NGO or consultant) to conduct monitoring, audits and assessments.

10. A project Mid-term Review (MTR) and Borrower Completion Report (BCR) will be undertaken with consultants hired by the NPCU. The World Bank will prepare the Implementation Completion Report (ICR).

11. Project funding will be provided for capacity development on results monitoring.

12. The project will update GEF core indicators and dedicated GEF tracking tool for the Biodiversity Focal Area. This tool involves the application of the PA Management Effectiveness Tracking Tool (METT) at beginning, mid-term, and project completion.

13. **Budget.** This budget covers the activities described in this appendix, including monitoring and reporting on the Results Framework and updating the GEF Core Indicators, and impact assessments. The budget expenditure for M&E is expected to be higher in the first and last years, in line with expectations of respective workloads at start and end of project.

<i><b>Activities</b></i>	<i><b>budget</b></i>
Salary of the M&E advisor (over 6 years)	175,000
Impact assessments	360,000
Preparation of the M&E manual	5,000
Capacity building	50,000
Support to missions to collect data	50,000
External assessments and third-party monitoring	50,000
Project completion and mid-term review	50,000
<b>TOTAL</b>	<b>740,000</b>

#### **F. Learning and Knowledge Management from M&E**

14. In addition to impact assessments mentioned above, dedicated knowledge management (KM) and communications approaches are part of the Project. Implementation of these approaches will result in convening of key groups, producing flagship studies and practical publications that influence practitioners, policymakers and investors, among other interventions. Through KM and communications, plus the country dialogue, the project will provide the “space” needed to seek solutions across multiple scales, as a means to amplify project impact.

15. The project will work closely with stakeholders to a) generate and exchange knowledge, b) consolidate effort to share lessons and best practices, c) promote outreach for strategic knowledge products, and d) produce tools for scale up and replication. Through a feedback loop, the project will convene information from different landscapes and provinces, synthesize lessons learned and findings, and return relevant insights back to the village level activities. Knowledge and communications activities are built into all components, with dedicated resources according to the topic and the level of the interventions.

## Annex 1: GEF Tracking Tool on METT

The template below will be completed annually for each protected area supported by LLL. A dedicated Excel file is provided for this purpose.

Tracking Tool for GEF-7 Protected Area Projects in the Biodiversity Focal Area		
GEF 7 Objective 2: Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate		
SECTION I		
<i>PLEASE NOTE THAT THIS TOOL IS ONLY FOR USE FOR GEF-7 Protected Area Projects</i>		
<b>I. General Data</b>	<b>Please indicate your answer here</b>	<b>Notes</b>
Please complete this section for all projects under Objective 1.		
Project Title		
GEF Project ID		
Agency Project ID		
Implementing Agency		
Project Type		FSP or MSP
Country		
Region		
Date of submission of the tracking tool		Month DD, YYYY (e.g., May 12, 2010)
Name of reviewers completing tracking tool and completion date		Completion Date
Planned project duration		years
Actual project duration		years under implementation to date
Lead Project Executing Agency (ies)		
<b>II. Total Extent by Biome</b>	<b>Please indicate your answer here</b>	
Please complete this table with the total extent of protected areas targeted by the project by terrestrial, freshwater, and marine biome.		
Please complete this section for all projects under Objective 1.		
Terrestrial (insert total hectares for terrestrial coverage)		ha
Freshwater (insert total hectares for freshwater coverage)		ha
Marine (insert total hectares for marine coverage)		ha
<b>III. Targeted Protected Areas</b>	<b>Please indicate your answer here</b>	
Please complete the table below for the protected areas that are the target of the GEF intervention (i.e. completing a METT). Add new tables (copy/paste rows) for each protected area, as needed.		
Use N/A for not applicable.		
<b>1. Protected Area</b>		
Name of Protected Area		
Is this a new protected area that is being established through this project intervention?		Yes = 1, No = 0
Area in Hectares		
Biome type		Please select from the drop-down list.
Global designation or priority lists		Please select from the drop-down list.
Local Designation of Protected Area		(E.g, indigenous reserve, private reserve, etc.)
IUCN Category		Please select from the drop-down list.



## Tracking Tool for GEF-7 Protected Area Projects in the Biodiversity Focal Area

### GEF 7 Objective 2: Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate SECTION II: Management Effectiveness Tracking Tool for Protected Areas

Note: Please complete the management effectiveness tracking tool for EACH protected area that is the target of the GEF intervention to improve management effectiveness and create a new worksheet for each.

Structure and content of the Tracking Tool - Objective 1. Section II:

The Tracking Tool has five data sheets:

**Data Sheet 1:** Records details of the assessment and some basic information about the site, such as name, size and location etc.

**Data Sheet 2:** Provides a specific list of threats that the project is addressing.

**Data Sheet 3:** Condition of biodiversity in the protected area.

**Data Sheet 4:** Assessment Form: the assessment is structured around 30 questions presented in table format which includes three columns for recording details of the assessment, all of which should be completed.

**Data Sheet 5:** Datasources and methods on which above assessments of condition of biodiversity in the protected area in Question 30 are based.

***PLEASE NOTE THAT THIS TOOL IS FOR USE ONLY IN GEF-7 Protected Area PROJECTS***

#### Data Sheet 1: Reporting Progress at Protected Area Sites

Questions	Please indicate your answers here			Notes
	Project Start-up	Midterm	Project Completion	
Name, affiliation and contact details for person responsible for completing the METT (email etc.)				Protected Area and Protection Forest Division, Provincial Agriculture and Forestry Office
Date assessment carried out				Month DD, YYYY (e.g., May 12, 2010)
Name of protected area				
WDPA site code (these codes can be found on <a href="http://www.protectedplanet.net">www.protectedplanet.net</a> )				Needs to be updated
Country				
Location of protected area (province and if possible map reference)				
Date of establishment				Date of establishment of NPA
Ownership details (please choose 1-4)				1: State 2: Private 3: Community 4: Other
Management Authority				Ministry of Agriculture and Forestry
Size of protected area (ha)				
Number of Permanent staff				
Number of Temporary staff				
Annual budget (US\$) for recurrent (operational) funds - excluding staff salary costs				
Annual budget (US\$) for project or other supplementary funds - excluding staff salary costs				
What are the main values for which the area is designated				
List the two primary protected area management objectives in below:				
Management objective 1				
Management objective 2				
No. of people involved in completing assessment				
Including: (please choose 1-8)				1: PA manager 2: PA staff 3: Other PA agency staff 4: Donors 5: NGOs 6: External experts 7: Local community 8: Other

## Data Sheet 2: Key Biodiversity Indicators Used in This Protected Area

At project start-up, identify and list up to five key biodiversity indicators that are monitored on a regular basis in the protected area; these indicators can relate to any/all trophic levels OR using other indicators. For each identified indicator, provide the current (project start-up) status of that indicator in numerical terms or with a short description (see examples below), as appropriate. The examples are only illustrative and the protected area manager should use the indicators that currently are being monitored and/or will be monitored.

At project midterm and at project completion, provide updates on the status of the same indicator(s) identified at project start.

The overall condition of biodiversity -- based on the status of the indicator(s) identified here -- will be reported on in Question 30 in Data Sheet 4 (METT Assessment Form). Therefore the inputs here require focused analysis to assess whether trends are positive, negative or neutral.

Indicator	Project Start-up	Midterm	Project Completion	Comments (optional)
<i>INDICATOR 1 - Forest loss rate in the Total Protection Zone and Controlled Use Zone</i>				
<i>INDICATOR 2 - Presence and population viability of 10 selected flagship species listed by IUCN red-data list (CE or EN) or Lao (Category I), present in Laving Laveve NPA.</i>				

## Data Sheet 3: Protected Areas Threats

Please describe each threat that the project is directly addressing and provide the threat reduction indicator that the project is using from the project logframe to measure progress in reducing each threat. An example is provided.

Questions	Please enter your answers in this column.	Comments (optional)
<b>Threat 1</b>		
Threat reduction indicator		
Baseline status		
Target		
Midterm status		
End of project status		
<b>Threat 2</b>		
Threat reduction indicator		
Baseline status		
Target		
Midterm status		
End of project status		
<b>Threat 3</b>		
Threat reduction indicator		
Baseline status		
Target		
Midterm status		
End of project status		

Data Sheet 4: METT Assessment Form				
Please select a score from the drop-down list for each question. If a question is not applicable, then do not select a score and enter "N/A" in the comments space along with a brief explanation.				
Questions	Project start-up (2021)	Midterm (2024)	Project Completion (2027)	Criteria and Scores
1. Legal status: Does the protected area have legal status (or in the case of private reserves is covered by a covenant or similar)?				0: The protected area is not gazetted/covenanted 1: There is agreement that the protected area should be gazetted/covenanted but the process has not yet begun 2: The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant) 3: The protected area has been formally gazetted/covenanted
Comments and Next Steps				
2. Protected area regulations: Are appropriate regulations in place to control land use and activities (e.g. hunting)?				0: There are no regulations for controlling land use and activities in the protected area 1: Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses 2: Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps 3: Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management
Comments and Next Steps				
3. Law Enforcement: Can staff (i.e. those with responsibility for managing the site) enforce protected area rules well enough?				0: The staff have no effective capacity/resources to enforce protected area legislation and regulations 1: There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support) 2: The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain 3: The staff have excellent capacity/resources to enforce protected area legislation and regulations
Comments and Next Steps				
4. Protected area objectives: Is management undertaken according to agreed objectives?				0: No firm objectives have been agreed for the protected area 1: The protected area has agreed objectives, but is not managed according to these objectives 2: The protected area has agreed objectives, but is only partially managed according to these objectives 3: The protected area has agreed objectives and is managed to meet these objectives
Comments and Next Steps				

5. Protected area design: Is the protected area the right size and shape to protect species, habitats, ecological processes and water catchments of key conservation concern?				<p>0: Inadequacies in protected area design mean achieving the major objectives of the protected area is very difficult</p> <p>1: Inadequacies in protected area design mean that achievement of major objectives is difficult but some mitigating actions are being taken (e.g. agreements with adjacent land owners for wildlife corridors or introduction of appropriate catchment management)</p> <p>2: Protected area design is not significantly constraining achievement of objectives, but could be improved (e.g. with respect to larger scale ecological processes)</p> <p>3: Protected area design helps achievement of objectives; it is appropriate for species and habitat conservation; and maintains ecological processes such as surface and groundwater flows at a catchment scale, natural disturbance patterns etc</p>
Comments and Next Steps				
6. Protected area boundary demarcation: Is the boundary known and demarcated?				<p>0: The boundary of the protected area is not known by the management authority or local residents/neighbouring land users</p> <p>1: The boundary of the protected area is known by the management authority but is not known by local residents/neighbouring land users</p> <p>2: The boundary of the protected area is known by both the management authority and local residents/neighbouring land users but is not appropriately demarcated</p> <p>3: The boundary of the protected area is known by the management authority and local residents/neighbouring land users and is appropriately demarcated</p>
Comments and Next Steps				

7. Management plan: Is there a management plan and is it being implemented?				0: There is no management plan for the protected area 1: A management plan is being prepared or has been prepared but is not being implemented 2: A management plan exists but it is only being partially implemented because of funding constraints or other problems 3: A management plan exists and is being implemented
Comments and Next Steps				
7.a Planning process: The planning process allows adequate opportunity for key stakeholders to influence the management plan				0: No 1: Yes
Comments and Next Steps				
7.b Planning process: There is an established schedule and process for periodic review and updating of the management plan				0: No 1: Yes
Comments and Next Steps				
7.c Planning process: The results of monitoring, research and evaluation are routinely incorporated into planning				0: No 1: Yes
Comments and Next Steps				
8. Regular work plan: Is there a regular work plan and is it being implemented				0: No regular work plan exists 1: A regular work plan exists but few of the activities are implemented 2: A regular work plan exists and many activities are implemented 3: A regular work plan exists and all activities are implemented
Comments and Next Steps				

9. Resource inventory: Do you have enough information to manage the area?				0: There is little or no information available on the critical habitats, species and cultural values of the protected area 1: Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making 2: Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making 3: Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making
Comments and Next Steps				
10. Protection systems: Are systems in place to control access/resource use in the protected area?				0: Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use 1: Protection systems are only partially effective in controlling access/resource use 2: Protection systems are moderately effective in controlling access/resource use 3: Protection systems are largely or wholly effective in controlling access/ resource use
Comments and Next Steps				

11. Research: Is there a programme of management-orientated survey and research work?				0: There is no survey or research work taking place in the protected area 1: There is a small amount of survey and research work but it is not directed towards the needs of protected area management 2: There is considerable survey and research work but it is not directed towards the needs of protected area management 3: There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs
Comments and Next Steps				
12. Resource management: Is active resource management being undertaken?				0: Active resource management is not being undertaken 1: Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented 2: Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed 3: Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented
Comments and Next Steps				
13. Staff numbers: Are there enough people employed to manage the protected area?				0: There are no staff 1: Staff numbers are inadequate for critical management activities 2: Staff numbers are below optimum level for critical management activities 3: Staff numbers are adequate for the management needs of the protected area
Comments and Next Steps				
14. Staff training: Are staff adequately trained to fulfill management objectives?				0: Staff lack the skills needed for protected area management 1: Staff training and skills are low relative to the needs of the protected area 2: Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management 3: Staff training and skills are aligned with the management needs of the protected area
Comments and Next Steps				

15. Current budget: Is the current budget sufficient?				<p>0: There is no budget for management of the protected area</p> <p>1: The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage</p> <p>2: The available budget is acceptable but could be further improved to fully achieve effective management</p> <p>3: The available budget is sufficient and meets the full management needs of the protected area</p>
Comments and Next Steps				
16. Security of budget: Is the budget secure?				<p>0: There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding</p> <p>1: There is very little secure budget and the protected area could not function adequately without outside funding</p> <p>2: There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding</p> <p>3: There is a secure budget for the protected area and its management needs</p>
Comments and Next Steps				
17. Management of budget: Is the budget managed to meet critical management needs?				<p>0: Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year)</p> <p>1: Budget management is poor and constrains effectiveness</p> <p>2: Budget management is adequate but could be improved</p> <p>3: Budget management is excellent and meets management needs</p>
Comments and Next Steps				

18. Equipment: Is equipment sufficient for management needs?				0: There are little or no equipment and facilities for management needs 1: There are some equipment and facilities but these are inadequate for most management needs 2: There are equipment and facilities, but still some gaps that constrain management 3: There are adequate equipment and facilities
Comments and Next Steps				
19. Maintenance of equipment: Is equipment adequately maintained?				0: There is little or no maintenance of equipment and facilities 1: There is some ad hoc maintenance of equipment and facilities 2: There is basic maintenance of equipment and facilities 3: Equipment and facilities are well maintained
Comments and Next Steps				
20. Education and awareness: Is there a planned education programme linked to the objectives and needs?				0: There is no education and awareness programme 1: There is a limited and ad hoc education and awareness programme 2: There is an education and awareness programme but it only partly meets needs and could be improved 3: There is an appropriate and fully implemented education and awareness programme
Comments and Next Steps				
21. Planning for land and water use: Does land and water use planning recognise the protected area and aid the achievement of objectives?				0: Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area 1: Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area 2: Adjacent land and water use planning partially takes into account the long term needs of the protected area 3: Adjacent land and water use planning fully takes into account the long term needs of the protected area
Comments and Next Steps				
21a. Land and water planning for habitat conservation: Planning and management in the catchment or landscape containing the protected area incorporates provision for adequate environmental conditions (e.g. volume, quality and timing of water flow, air pollution levels etc) to sustain relevant habitats.				0: No 1: Yes
Comments and Next Steps				
21b. Land and water planning for connectivity: Management of corridors linking the protected area provides for wildlife passage to key habitats outside the protected area (e.g. to allow migratory fish to travel between freshwater spawning sites and the sea, or to allow animal migration).				0: No 1: Yes
Comments and Next Steps				
21c. Land and water planning for ecosystem services and species conservation: "Planning addresses ecosystem-specific needs and/or the needs of particular species of concern at an ecosystem scale (e.g. volume, quality and timing of freshwater flow to sustain particular species, fire management to maintain savannah habitats etc.)"				0: No 1: Yes
Comments and Next Steps				



22. State and commercial neighbours: Is there co-operation with adjacent land and water users?				0: There is no contact between managers and neighbouring official or corporate land and water users 1: There is contact between managers and neighbouring official or corporate land and water users but little or no cooperation 2: There is contact between managers and neighbouring official or corporate land and water users, but only some co-operation 3: There is regular contact between managers and neighbouring official or corporate land and water users, and substantial co-operation on management
Comments and Next Steps				
23. Indigenous people: Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions?				0: Indigenous and traditional peoples have no input into decisions relating to the management of the protected area 1: Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management 2: Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved 3: Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management
Comments and Next Steps				
24. Local communities: Do local communities resident or near the protected area have input to management decisions?				0: Local communities have no input into decisions relating to the management of the protected area 1: Local communities have some input into discussions relating to management but no direct role in management 2: Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved 3: Local communities directly participate in all relevant decisions relating to management, e.g. co-management
Comments and Next Steps				
24 a. Impact on communities: There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers				0: No 1: Yes
Comments and Next Steps				
24 b. Impact on communities: Programmes to enhance community welfare, while conserving protected area resources, are being implemented				0: No 1: Yes
Comments and Next Steps				
24 c. Impact on communities: Local and/or indigenous people actively support the protected area				0: No 1: Yes
Comments and Next Steps				
25. Economic benefit: Is the protected area providing economic benefits to local communities, e.g. income, employment, payment for environmental services?				0: The protected area does not deliver any economic benefits to local communities 1: Potential economic benefits are recognised and plans to realise these are being developed 2: There is some flow of economic benefits to local communities 3: There is a major flow of economic benefits to local communities from activities associated with the protected area
Comments and Next Steps				

26. Monitoring and evaluation: Are management activities monitored against performance?				0: There is no monitoring and evaluation in the protected area 1: There is some ad hoc monitoring and evaluation, but no overall strategy and/or no regular collection of results 2: There is an agreed and implemented monitoring and evaluation system but results do not feed back into management 3: A good monitoring and evaluation system exists, is well implemented and used in adaptive management
Comments and Next Steps				
27. Visitor facilities: Are visitor facilities adequate?				0: There are no visitor facilities and services despite an identified need 1: Visitor facilities and services are inappropriate for current levels of visitation 2: Visitor facilities and services are adequate for current levels of visitation but could be improved 3: Visitor facilities and services are excellent for current levels of visitation
Comments and Next Steps				
28. Commercial tourism operators: Do commercial tour operators contribute to protected area management?				0: There is little or no contact between managers and tourism operators using the protected area 1: There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters 2: There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values 3: There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values
Comments and Next Steps				
29. Fees: If fees (i.e. entry fees or fines) are applied, do they help protected area management?				0: Although fees are theoretically applied, they are not collected 1: Fees are collected, but make no contribution to the protected area or its environs 2: Fees are collected, and make some contribution to the protected area and its environs 3: Fees are collected and make a substantial contribution to the protected area and its environs
Comments and Next Steps				
30. What is the overall condition of the biodiversity of the protected area in terms of the indicator(s) indicated in Data Sheet 2 above?				0: Severely degraded 1: Partially degraded 2: Mostly intact 3: Completely intact
Comments and Next Steps	Please complete Data Sheet 5 for Question 30 that follows below.			
<b>Total METT Score</b> (automatically calculated)	0	0	0	<b>Provide comments here (optional)</b>
TOTAL POSSIBLE SCORE	96	96	96	
% SCORE	0.0%	0.0%	0.0%	

# Appendix B: LLL

## Detailed Component and Activity Description

## **Component 1: Investing in Natural Wealth and Resilience in Forest Landscapes**

*Total financing: US\$31,535,500*

*IDA financing: US\$ 16,993,524*

*GEF co-financing: US\$6,541,97*

*CCEFCF co-financing: US\$8,000,000*

*Implementation: DOF*

1. **The objective of this component is to build natural capital from improved forest landscape management.** The Building natural capital helps secure multiple economic, environmental, climate, and resilience benefits. Climate and disaster risks such as flood, drought, erosion, and landslide risks be reduced by maintaining and restoring forest cover, combined with promoting soil and water conservation structures, small irrigation, and other natural solutions in targeted sites. Such village-based green infrastructure will also contribute to job creation. Collaborative management in PAs and Village Forest Management in PFAs and PtFAs will be the main governance modalities to implement SFM in LLL. Enabling activities will leverage parallel private sector investment (environmentally and socially sustainable industrial and smallholder tree plantations, tourism development) and other complementary public sector investments. The project will support public sector interventions organized under two subcomponents: a) Protected Areas and Nature-based Tourism; and b) Sustainable Forestry and Resilient Village Infrastructure.

2. *Climate co-benefits:* Component 1 will generate the bulk of the project's climate adaptation and mitigation co-benefits, deriving from improved management of the forest landscape including protected areas, production forests, protection forests, and village forests, and the consequent reduced emissions from deforestation and forest degradation, while investing in climate resilience and response mechanisms to shocks such as flood, drought, forest fires, and erosion.

3. *Project financing* will support public sector interventions organized under two subcomponents: a) 1.1 Protected Areas and Nature-based Tourism; and b) 1.2 Sustainable Forestry and Resilient Village Infrastructure.

### ***Subcomponent 1.1: Protected Areas and Nature-based Tourism***

*Total financing: US\$14,190,500*

*IDA: US\$6,776,250*

*GEF: US\$4,214,250*

*CCEFCF co-financing: US\$ 3,200,000*

*Implementation: DOF (Protected Area Management Division)*

4. **The objective of this subcomponent is to strengthen management of PAs for biodiversity conservation and tourism opportunities.** The subcomponent focuses on investing in national parks and other protected areas within targeted landscapes, defined by internationally significant biodiversity values and high potential for sustainably developing nature-based tourism, and by doing so, creating direct and indirect jobs and livelihoods opportunities.

5. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs, in 8 PA management units to: a) build and maintain collaborative management capacity among PA management units, districts, and selected Guardian Villages; b) build and maintain park infrastructure and facilities such as trails, access roads, boat landings, ranger stations, interpretation centers, and so on depending on local needs (direct green jobs contribution); c) delineation<sup>1</sup>, re-delineation<sup>2</sup> and participatory demarcation<sup>3</sup> of existing boundaries, as required or relevant (potential green jobs contribution); d) biodiversity and ecosystem services monitoring and research (potential green jobs contribution); e) strengthen park ranger services to curb poaching and encourage conservation-friendly behavior; f) outreach (extension); g) preparation and approval of village forest and land use management plans, including associated village regulations, and socio-economic assessments as needed, h) preparation and approval of Village (Community) Action Plans, i) approval, implementation, modification, and/or regular reporting of Village Conservation Agreements, (a pre-condition to access village livelihoods block grants funded in Component 2.1.1 through the respective Village Development Fund), j) support village forest fire prevention teams in selected PAs, and k) promote and manage nature-based tourism in selected PAs, working closely with the private sector and selected Guardian Villages (indirect green jobs opportunities).

6. These activities are from the regulatory guidelines developed under the Bank-financed Green Growth Development Policy Operation series as well as the Community Engagement Framework developed under ENS2 that has been serving as the basis for safeguarding all Bank-financed rural development operations in Lao PDR. Specific activities are outlined below per protected area.

7. This subcomponent is linked to Component 2 as follows: a) village livelihoods block grants provided under Component 2 support based on Village Conservation Agreements developed under Component 1, and b) preparation of nature-based tourism investment agreements between PA Authorities, villages, and private service providers under Component 2, based on tourism development activities in Component 1. This subcomponent is also linked to Component 3 on support to the Protected Area Management Division in DOF, as a central coordinator for PA-specific activities financed under Component 1.1.

8. This subcomponent will contribute to climate change adaptation by improving local management of forest and natural resources, including protection and improvement of key ecosystem services. This activity will also contribute to climate change mitigation, by rationalizing the use of land and forest resources.

### *Project location*

9. *Protected areas.* The eight targeted protected areas listed below supported by LLL together form the conservation backbone of the country especially the Annamites as well as areas with good tourism potential to drive green job creation and growth. The targeted PAs, of which three are recently upgraded National Parks, total almost 1.6 million hectares and include: a) Nam Et-Phou Louey (NEPL) National Park, b) Phou Khao Khouay (PKK) National Protected Area, c) Tor Sib/ Phou Samsoum, d) Phou

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<sup>1</sup> Delineation is the method of defining the protected area boundaries of a new protected area, or a new extension of a protected area. This delineation process is undertaken precisely to match the understanding of forest cover and topographic features of the protected area with regards to the village lands.

<sup>2</sup> Re-delineation is the method of defining the protected area boundaries precisely. This method is designed to match the improved understanding of forest cover and topographic features of a protected area with regards to the village lands at the field level. The boundaries of the first 18 National Protected Areas were designated in Prime Minister Decree No 164 dated 29th October 1993. Under this PM Decree, many of these 18 protected areas were coarsely designated to the nearest 10,000 hectares, using maps at a scale 1: 250,000. The project will utilize Free, Prior and Informed Consent (FPIC) as a methodology in boundary re-delineation. This methodology has been effectively utilized by the Department of Forestry in the designation of Hin Nam No National Park in January 2020.

<sup>3</sup> Participatory boundary demarcation: Village meetings are convened to discuss the sighting of concrete PA boundary posts and complimentary signage. Field excursions are made by village representatives and PA counterparts to confirm the location of each boundary post. Once boundary post locations are agreed, a boundary post agreement is signed by the concerned village headman, the PA official and the district official.

Hin Poun NPA, e) Nakai Nam Theun NP, f) Hin Nam No NP, g) Khoun Xe Nongma PPA, and h) Laving Laverne NPA. Approximately 200 “guardian villages” inside or bordering PAs will be supported.

10. *Districts* that overlap with the targeted PAs will be included. Village from within these protected areas and districts will be selected according to the following criteria:

- a) Guardian villages located in immediate proximity to high biodiversity zones within or bordering targeted protected areas;
- b) Guardian villages located in immediate proximity to (proposed) nature-based tourism assets;

**Activity 1.1.1: Nam Et-Phou Louey (NEPL) National Park. US\$2,175,000 (US\$1,206,250 IDA; US\$408,750 GEF; US\$560,000 CCEFCF).**

11. The PA has a total of 107 Guardian Villages, with a total population of 50,190 individuals as of 2018. In February 2019, Nam Et-Phou Louey National Park was one of two NPAs re-designated as a national park, requiring a higher conservation standard than an NPA. It is the largest protected area in the northern highlands, a region of the country with biodiversity values shared with both Vietnam and Thailand. It has been the focus of dedicated Wildlife Conservation Society (WCS) support for approximately 15 years. The award-winning Nam Nern Night Safari offered by the park is constrained by limited tourism visits, which in turn limits the viability of sustainable financing streams for park operations. Since 2016, the Bank and GEF have been co-financing the national park through the Second Lao Environment and Social Project (LENS2) which has been supporting the development of the institutional capacity of the GoL and 43 of the 107 Guardian Villages to manage the park and its resources through Village Conservation Agreements. LENS2 has also supported, and LLL will continue supporting, park management capacity development, park ranger operations, park infrastructure and facilities, tourism development, and continued protection of vulnerable high biodiversity zones (total protection zones).

12. LLL will finance works, goods, non-consulting services, consulting services, and incremental operating costs for the Management Authority of NE-PL National Park, through DOF/PAMD. Approximately 30 Guardian Villages will be engaged by the project for livelihoods or potential tourism participation. The Management Authority will contract its current NGO partner, the Wildlife Conservation Society, as a service provider to implement the following activities:

- a) Collaborative management with the three Provincial authorities and 10 District authorities. This involves convening meetings and workshops at the provincial, district and village level to enhance stakeholder engagement in the different technical fields of protected area management. It also includes the development of the NE-PL National Park Management Plan (2025-2030).
- b) Operating costs including vehicle maintenance;
- c) Development and maintenance of park infrastructure and facilities,<sup>4</sup> which could create jobs;
  - i) Park ranger training and operations in priority Total Protection Zones and tourism development zones (four teams). Activities include:
    - ii) Ranger equipment,
    - iii) Mobilization of district inter-agency patrol teams,
    - iv) Border ranger teams,
    - v) Guardian Village ranger teams in village lands,

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<sup>4</sup> Tourism infrastructure planning (including designs) will be carried out with input from potential private sector investors, tourism stakeholders working group and tourism authorities.

- vi) Ranger training,
- vii) Supervision of the ranger database.
- d) Outreach (extension). A set of activities (including workshops, meetings and trainings) aimed at engaging the rural populations in up to 43 Guardian Villages, students and government officials of concerned law enforcement agencies to elicit positive attitudes and behavior change. This change in attitudes and behavior will reduce the threats to the National Protected Area. These outreach activities will also include the use of local radio, television and other media avenues to raise awareness on forest and land management, conservation, and natural hazards.
- e) Village forest and land use management plans, including associated village regulations, and socio-economic assessments as needed, will be prepared or updated, and approved.
- f) Village (Community) Action Plans will be prepared or updated, and approved.
- g) Village Conservation Agreements will be prepared, approved, implemented, updated as needed, and/or regularly monitored (a pre-condition to access village livelihoods block grants funded in Component 2.1.1 through the respective Village Development Fund).
- h) Forest fire prevention. This activity will include the establishment and training of Village Fire Prevention Groups in affected Guardian Villages. It will include fire danger ratings and village fire-fighting teams.
- i) Tourism development (linked to Component 2) in consultation with private sector operators as appropriate. Activities include:
  - i) Creation of and capacity building for tourism stakeholder working groups;
  - ii) Tourism zoning, strategy and action plan development by stakeholders working group (including surveys) which will be part of the overall PA zoning;
  - iii) Training and support for private sector-led anti-poaching support teams in tourism concession areas;
  - iv) Joint marketing and promotion (websites, events, familiarization trips, etc.).
  - v) Produce a portfolio of potential tourism investment sites for the landscape, and disseminate to and engage with the private sector.

**Activity 1.1.2: Phou Khao Khouay (PKK) National Protected Area. US\$2,960,000 (US\$ 1,250,250 IDA; US\$1,133,750 GEF; US\$560,000 CCEFCF).**

13. This PA has 56 Guardian Villages, with a total population of 63,638 individuals as of 2018. This PA is a very large and valuable area near Vientiane for development of domestic and international tourism opportunities, and for raising the profile of park policy, profession, and practice within Lao PDR. PKK also provides protective watershed services for the strategically important reservoirs including Nam Leuk, Nam Mang, and Nam Mang III, which in addition to water and energy supply, also provide opportunities for tourism development and fishing. Parts of PKK have relatively good seasonal road access while other parts are difficult to access. Road access to two of the main waterfalls popular with tourists, Tad Leuk and Tad Xay, is somewhat constrained, as are other locations that could host good visitor experiences. PKK will be a strategic location to support hands-on national-level training opportunities in protected area management, including zoonotic diseases mitigation. Finally, PKK has the potential to experience a resurgence of wildlife.

14. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs for the Protected Area Management Division at DOF<sup>5</sup> to implement:

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<sup>5</sup> When the Phou Khao Khouay NPA Management Authority is formally established and receives legal status, implementation responsibilities and funds will be transferred to the NPA Authority.

- a) Collaborative management with the four provincial authorities and seven district authorities, and approximately 50 Guardian Villages. This involves convening meetings and workshops at the provincial, district and village level to enhance stakeholder engagement in the different technical fields of protected area management. It also includes the development of the PKK National Protected Area Management Plan (2025-2030). The collaborative management approach will strengthen village forest and land use planning and management, outreach (extension), and livelihood development linked to conservation (village livelihood block grants are funded and implemented under Component 2.1.1 based on a Village Conservation Agreement). These aspects and other activities are listed below.
- b) Operating costs, including vehicle maintenance.
- c) Development and maintenance of park infrastructure and facilities<sup>6</sup> which will create jobs.
- d) Participatory demarcation of the existing NPA boundary, including marking the boundary with permanent concrete posts, signs and large signs at major road access points. Villagers will participate in this boundary demarcation process, and each Village Committee will sign off on the positioning of each boundary post. Villagers are usually hired to install these markers.
- e) Biodiversity monitoring.
  - i) Monitoring of flagship species, as well as population censuses of Northern White-cheeked Gibbons and Green Peafowl and other threatened species.
  - ii) Support research training in the National Training Center (see activity 1.1.2.k and subcomponent 3.1) and reintroduction;
- f) Park ranger operations. Park ranger training and operations in priority total protection zones and tourism development zones (four teams) including:
  - i) Construction of ranger stations
  - ii) Ranger equipment
  - iii) Mobilization of district inter-agency patrol teams,
  - iv) Guardian Village ranger teams in village lands
  - v) Ranger training
  - vi) Supervision of the ranger database.
- g) Outreach (extension). A set of activities (including workshops, meetings and trainings) aimed at engaging the rural populations within the 56 Guardian Villages, students and government officials of concerned law enforcement agencies to elicit positive attitudes and behavior change. This change in attitudes and behavior will reduce the threats to the National Protected Area. These outreach activities will also include the use of local radio, television and other media avenues to raise awareness on forest and land management, conservation, and natural hazards.
- h) Village forest and land use management plans, including associated village regulations, and socio-economic assessments as needed, will be prepared and approved.
- i) Village (Community) Action Plans will be prepared and approved.
- j) Village Conservation Agreements will be prepared, approved, implemented, modified as needed, and/or regularly monitored (a pre-condition to access village livelihoods block grants funded in Component 2.1.1 through the respective Village Development Fund).
- k) Forest fire prevention. This activity will include the establishment and training of Village Fire Prevention Groups in approximately 12 Guardian Villages in the western portion of the protected area. It will include fire danger ratings and village fire-fighting teams.

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<sup>6</sup> Tourism infrastructure planning (including designs) will be carried out with input from potential private sector investors, tourism stakeholders working group and tourism authorities, and relevant government agencies as needed.



- l) Tourism development (linked to Component 2) in consultation with private sector operators as appropriate, including:
  - i) Creation of and capacity building for tourism stakeholder working groups;
  - ii) Tourism zoning, strategy and action plan development by stakeholders working group (including surveys) which will be part of the overall PA zoning;
  - iii) Training and support for private sector-led anti-poaching support teams in tourism concession areas;
  - iv) Joint marketing and promotion (websites, events, etc.);
  - v) Produce tourism investment potential portfolio for the landscape. Disseminate on website and at national workshop.
- m) Upgrade existing training facilities in the core zone to service the national PA system and raise the visibility of PKK NPA (funded under Component 3.1).

15. The PKK NPA Management Authority will contract a national PA management advisor to coordinate with PAMD in DOF. However, PKK is currently administered by the Lao PDR Army, and there are current plans to transfer management to DOF/PAMD completely or partially.

**Activity 1.1.3 Tor Sip/Phou Samsoum Proposed National Protected Area. US\$1,437,500 (US\$555,750 IDA; US\$593,750 GEF; US\$288,000 CCEFCF)**

16. The NPA hosts approximately 30 Guardian Villages, with a total population of 18,150 individuals. Located in Xiengkhouang Province, Tor Sip Provincial PA and Phou Samsoum National Protection Forest encompass the 2nd and 3rd highest mountains respectively in the country, and support unique montane forest vegetation and range-restricted Annamites biodiversity with global value. MAF is considering combining them into a new National Protected Area. These mountain landscapes can be attractive to tourists (although visitation is currently negligible), for panoramic scenic views, cool weather and unusual flora and fauna, and have reasonable accessibility. These mountains are accessible via a 6-hour drive from Vientiane although not on an established tourism route. Nevertheless, there is longer-term potential for tourism products to be developed by the private sector once the basic PA management unit is established (currently there is no budget or staff).

17. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs for Xiengkhouang PAFO<sup>7</sup> to implement:

- a) A feasibility study by DOF/PAMD and PAFO on the designation of the combined units as a new National Protected Area. This activity will include biodiversity assessments (different taxa) and socio-economic assessments and an assessment of boundary demarcation options and their implications. These datasets will contribute to the designation process for the site to be upgraded as a new National Protected Area.
- b) Support for establishing and maintaining a new NPA Management Authority (Note: project cannot fund salaries of government staff);
- c) Collaborative management with the Xiengkhouang provincial authorities two district authorities, and approximately 30 Guardian Villages. This involves convening meetings and workshops at the provincial, district and village level to enhance stakeholder engagement in the different technical fields of protected area management. It also includes the development of the Tor Sip National Protected Area Management Plan (2025-2030). The collaborative management approach will strengthen village forest and land use planning and management, outreach (extension), and livelihood development linked to conservation

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<sup>7</sup> When Tor Sip/Phou Sam Soum NPA Management Authority is formally established and receives legal status, implementation responsibilities and funds will be transferred to the NPA Authority.

(village livelihood block grants are funded and implemented under Component 2.1.1 based on a Village Conservation Agreement). These aspects and other activities are listed below.

- d) Operating costs including vehicle maintenance;
- e) Development and maintenance of park infrastructure and facilities,<sup>8</sup> which will create jobs;
- f) Participatory boundary demarcation, including marking the boundary with permanent concrete posts, signs and large signs at major road access points. Villagers will participate in this boundary demarcation process, and the Village Committee will sign off on the location of each post. Villagers will also be hired to install these markers.
- g) Park ranger operations. This activity includes:
  - i) construction of ranger stations
  - ii) ranger field equipment
  - iii) the mobilization of district inter-agency patrol teams
  - iv) border ranger teams
  - v) village ranger teams in village lands
  - vi) ranger training
  - vii) supervision of the ranger database.
- h) Outreach (extension). A set of activities (including workshops, meetings and trainings) aimed at engaging the rural populations within the approximately 30 Guardian Villages, students and government officials of concerned law enforcement agencies to elicit positive attitudes and behavior change. This change in attitudes and behavior will reduce the threats to the National Protected Area. These outreach activities will also include the use of local radio, television and other media avenues to raise awareness on forest and land management, conservation, and natural hazards.
- i) Village forest and land use management plans, including associated village regulations, and socio-economic assessments as needed, will be prepared and approved.
- j) Village (Community) Action Plans will be prepared and approved.
- k) Village Conservation Agreements will be prepared, approved, implemented, modified as needed, and/or regularly monitored (a pre-condition to access village livelihoods block grants funded in Component 2.1.1 through the respective Village Development Fund);
- l) Tourism development (linked to Component 2) in consultation with private sector operators as appropriate, including:
  - i) Creation of and capacity building for tourism stakeholder working groups;
  - ii) Tourism zoning, strategy and action plan development by stakeholders working group (including surveys) which will be part of the overall PA zoning;
  - iii) Training and support for private sector-led anti-poaching support teams in tourism concession areas;
  - iv) Joint marketing and promotion (websites, events, etc.);
  - v) Produce tourism investment potential portfolio for the landscape. Disseminate on website and at national workshop.

**Activity 1.1.4 Phou Hin Poun (PHP) National Protected Area. US\$2,005,000 (US\$754,250 IDA; US\$898,750 GEF; US\$352,000 CCEFCF)**

18. The protected area has 97 Guardian Villages, which had a total population of 66,843 individuals in 2018. PHP NPA protects a large area of Indo-Chinese karst in Khammouane Province. It protects significant endemic biodiversity, including the Lao langur,

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<sup>8</sup> Tourism infrastructure planning (including designs) will be carried out with input from potential private sector investors, tourism stakeholders working group and tourism authorities, and relevant government agencies as needed.

Kha-Nyou and several bird species. The limestone karst scenery is particularly attractive to tourists, for scenic views, and unusual flora and fauna. PHP is accessible from Vientiane, and is the gateway to the Khammouane biodiversity complex. There is potential for private sector investment to develop products that can attract both weekend visitors from Vientiane, those on the Khammouane Loop, as well as long-haul visitors traveling the length of the country by car, motorbike and bicycle.

19. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs for the PAFO Khammouane<sup>9</sup> to implement:

- a) Collaborative management with provincial authorities, district authorities, and a subset of Guardian Villages. This involves convening organized meetings and workshops at the provincial, district and village level to enhance stakeholder engagement in the different technical fields of protected area management. It also includes the development of the Phou Hin Poun National Protected Area Management Plan (2025-2030); the current five-year plan is being developed by IUCN – the World Conservation Union. The collaborative management approach will strengthen village forest and land use planning and management, outreach (extension), and livelihood development linked to conservation (village livelihood block grants are funded and implemented under Component 2.1.1 based on a Village Conservation Agreement). These aspects and other activities are listed below, reaching approximately 40 Guardian Villages in the buffer zone.
- b) Operating costs including vehicle maintenance.
- c) Development and maintenance of park infrastructure (headquarters, ranger stations, checkpoints, trails) and facilities,<sup>10</sup> which will create jobs;
- d) Participatory boundary demarcation and re-demarcation of existing boundaries, including marking the boundary with permanent concrete posts, signs and large signs at major road access points. Villagers will participate in this boundary demarcation process, and the Village Committee will sign off on the location of each boundary post. Villagers will also be hired to install these markers.
- e) Biodiversity monitoring and research. This activity primarily focuses on biodiversity monitoring linked to forest ranger patrolling, which will be undertaken throughout the project period. It may also include population censuses of targeted primates, birds and other species. Complimentary intensive biodiversity research activities are anticipated to be undertaken by IUCN using matching funds during years 1-4, involving camera trapping, line transects and occupancy surveys.
- f) Park ranger operations. This activity includes:
  - i) the construction of four ranger stations,
  - ii) ranger field equipment,
  - iii) the mobilization of district inter-agency patrol teams,
  - iv) village ranger teams in village lands,
  - v) ranger training,
  - vi) supervision of the ranger database.
- g) Outreach (extension). A set of activities (including workshops, meetings and trainings) aimed at engaging the rural populations within the approximately 40 Guardian Villages, students and government officials of concerned law enforcement agencies to elicit positive attitudes and behavior change. This change in attitudes and behavior will reduce the threats to the

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<sup>9</sup> When the Phou Hin Poun NPA Management Authority is formally established and receives legal status, implementation responsibilities and funds will be transferred to the NPA Authority.

<sup>10</sup> Tourism infrastructure planning (including designs) will be carried out with input from potential private sector investors, tourism stakeholders working group and tourism authorities, and relevant government agencies as needed.

National Protected Area. These outreach activities will also include the use of local radio, television and other media avenues to raise awareness on forest and land management, conservation, and natural hazards.

h) Village forest and land use management plans, including associated village regulations, and socio-economic assessments as needed, will be prepared and approved.

i) Village (Community) Action Plans will be prepared and approved.

j) Village Conservation Agreements will be prepared, approved, implemented, modified as needed, and/or regularly monitored (a pre-condition to access village livelihoods block grants funded in Component 2.1.1 through the respective Village Development Fund).

k) Tourism development (linked to Component 2) in consultation with private sector operators as appropriate, including:

l) Tourism zoning, strategy and action plan development by stakeholders working group (including surveys) which will be part of the overall PA zoning;

i) Training and support for private sector-led anti-poaching support teams in tourism concession areas;

ii) Creation of and capacity building for tourism stakeholder working groups;

iii) Joint marketing and promotion (websites, events, familiarization trips, etc.);

iv) Produce tourism investment potential portfolios for the landscape. Disseminate on website and at national workshop;

**Activity 1.1.5 Nakai-Nam Theun National Park. US\$1,601,000 (US\$981,250 IDA; US\$155,750 GEF; US\$464,000 CCEFCF)**

20. In 2018, the protected area had 50 Guardian villages, with a total population of 34,314 individuals. NNT National Park, situated in the Khammouane biodiversity complex and Bolikhamxay Province, encompasses one of the largest areas of wet evergreen forest in the country and provides a strategic role in protecting a critical reservoir for hydropower production. Nakai-Nam Theun was declared a national park in February 2019 and has since been placed in the upstream process for consideration as a serial natural World Heritage Site by UNESCO. The park's significant global faunal diversity is threatened by transboundary snaring. Tourism, before COVID-19, was starting to develop in the park and reservoir as part of the "The Loop" in Khammouane Province. The park receives funding from Nam Theun 2 Power Company (NTPC) as part of a 31-year concession agreement to 2035. Since 2014 the Bank and GEF have been co-financing the national park through the Second Lao Environment and Social Project (LENS2) which has been supporting the development of the institutional capacity of the GoL, NNT Management Authority<sup>11</sup> and all 50 Guardian Villages to manage the park and its resources through Village Conservation Agreements.

21. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs for the NNT Management Authority, to implement:

a) Collaborative management with two provincial authorities, four district authorities, and all 50 Guardian Villages. This involves convening organized meetings and workshops at the provincial, district and village level to enhance stakeholder engagement in the different technical fields of protected area management. It also includes the development of the Nakai Nam Theun National Park Management Plan (2025-2030); the current five-year plan is being developed by the Management Authority. The collaborative management approach will strengthen village forest and land use planning and management, outreach (extension), and livelihood development linked to conservation (village livelihood block grants are funded and

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<sup>11</sup> The NNT National Park Management Authority used to be referred to as the Nam Theun 2 Watershed Management Protection Authority (NTT WMPA).

implemented under Component 2.1.1 based on a Village Conservation Agreement). These aspects and other activities are listed below, reaching all 50 Guardian Villages in the buffer zone.

- b) Operating costs including vehicle maintenance.
- c) Development and maintenance of park infrastructure (headquarters, ranger stations and checkpoints) and facilities<sup>12</sup> which will create jobs;
- d) Biodiversity monitoring and research; This activity includes camera trapping, occupancy assessments, wildlife population censuses, and other biodiversity monitoring techniques.
- e) Park ranger training and operations. This activity includes:
  - i) maintenance of the ranger stations and checkpoints,
  - ii) ranger field equipment,
  - iii) the mobilization of district inter-agency patrol teams,
  - iv) border ranger teams,
  - v) village ranger teams in village lands,
  - vi) reservoir patrol teams,
  - vii) ranger training,
  - viii) supervision of the ranger database.
- f) Outreach (extension). A set of activities (including workshops, meetings and trainings) aimed at engaging the rural populations within the 50 Guardian Villages, students and government officials of concerned law enforcement agencies to elicit positive attitudes and behavior change. This change in attitudes and behavior will reduce the threats to the National Park. These outreach activities will also include the use of local radio, television and other media avenues to raise awareness on forest and land management, conservation, and natural hazards.
- g) Village forest and land use management plans, including associated village regulations, and socio-economic assessments as needed, will be prepared and approved.
- h) Village (Community) Action Plans will be prepared and approved.
- i) Village Conservation Agreements will be prepared, approved, implemented, modified as needed, and/or regularly monitored (a pre-condition to access village livelihoods block grants funded in Component 2.1.1 through the respective Village Development Fund).
- j) Tourism development (linked to Component 2) in consultation with private sector operators as appropriate. Activities include:
  - i) Tourism zoning, strategy and action plan development by stakeholders working group (including surveys) which will be part of the overall PA zoning;
  - ii) Training and support for private sector-led anti-poaching support teams in tourism concession areas;
  - iii) Creation of and capacity building for tourism stakeholder working groups;
  - iv) Joint marketing and promotion (websites, events, familiarization trips, etc.);
  - v) Produce tourism investment potential portfolio for the landscape. Disseminate on website and at national workshop;

**Activity 1.1.6 Hin Nam No National Park. US\$1,270,000 (US\$570,250 IDA; US\$411,750 GEF; US\$ 288,000 CCEFCF)**

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<sup>12</sup> Tourism infrastructure planning (including designs) will be carried out with input from potential private sector investors, tourism stakeholders working group and tourism authorities, and relevant government agencies as needed.

22. Located in the Khammouane biodiversity complex along the Ho Chi Minh Trail, Hin Nam No National Park encompasses one of the two largest areas of Indo-Chinese karst in the country. Hin Nam No is contiguous with Phong Nha Ke Bang National Park in Central Vietnam, which is already a natural World Heritage site. Hin Nam No itself was declared a national park in January 2020. It is currently being assessed to become the nation's first natural World Heritage site. To receive World Heritage status from UNESCO, which will help support tourism development, the GoL needs to demonstrate that it is implementing its own management plan for park management and tourism, building on support from GIZ since 2012 that is scheduled to end in early 2024. LLL will begin to provide matching support in 2021 to co-finance the National Park's Management Plan. GIZ's financing centers on national and international advisors, who will provide technical assistance to the National Park Management Authority.

23. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs for the HNN National Park Management Authority, to implement ongoing management activities including:

- a) Collaborative management with provincial authorities and district authorities, and the 19 Guardian Villages. This involves convening organized meetings and workshops at the provincial and district and village level to enhance stakeholder engagement in the different technical fields of protected area management. It also includes the development of the Hin Nam No National Park Management Plan (2025-2030); the current five-year plan development is being supported by GIZ. The collaborative management approach will support all 19 Guardian Villages in the buffer zone, which will receive outreach and livelihood development linked to conservation as described below (village livelihood block grants are funded and implemented under Component 2.1.1 based on a Village Conservation Agreement).
- b) Operating costs including vehicle maintenance.
- c) Development and maintenance of park infrastructure (headquarters, ranger stations and checkpoints) and facilities<sup>13</sup> which will create jobs;
- d) Biodiversity monitoring and research. This activity is being supported by GIZ up to 2024 and by LLL after that. Activities will include population censuses, and biodiversity monitoring conducted during field ranger patrols.
- e) Park ranger operations. This activity will support:
  - i) District inter-agency patrol teams,
  - ii) Border patrol teams,
  - iii) 19 village ranger teams in village lands,
  - iv) Ranger training,
  - v) Supervision of the ranger database.
- f) Outreach (extension). A set of activities (including workshops, meetings and trainings) aimed at engaging the rural populations within the 19 Guardian Villages, students and government officials of concerned law enforcement agencies to elicit positive attitudes and behavior change. This change in attitudes and behavior will reduce the threats to the National Park. These outreach activities will also include the use of local radio, television and other media avenues to raise awareness on forest and land management, conservation, and natural hazards.
- g) Village forest and land use management plans, including associated village regulations, and socio-economic assessments as needed, will be prepared and approved.
- h) Village (Community) Action Plans will be prepared and approved.

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<sup>13</sup> Tourism infrastructure planning (including designs) will be carried out with input from potential private sector investors, tourism stakeholders working group and tourism authorities, and relevant government agencies as needed.

- i) Village Conservation Agreements will be prepared, approved, implemented, modified as needed, and/or regularly monitored (a pre-condition to access village livelihoods block grants funded in Component 2.1.1 through the respective Village Development Fund).
- j) Tourism development (linked to Component 2) in consultation with private sector operators as appropriate. Activities include:
  - i) Tourism zoning, strategy and action plan development by stakeholders working group (including surveys) which will be part of the overall PA zoning;
  - ii) Training and support for private sector-led anti-poaching support teams in tourism concession areas;
  - iii) Creation of and capacity building for tourism stakeholder working groups;
  - iv) Joint marketing and promotion (websites, events, familiarization trips, etc.);
  - v) Produce tourism investment potential portfolio for the landscape. Disseminate on website and at national workshop.

**Activity 1.1.7 Khouan Xe Nongma National Protected Area. US\$1,385,000 (US\$871,250 IDA; US\$113,750 GEF; US\$400,000 CCEFCF)**

24. There are 9 Guardian Villages, comprising five enclave villages and four overlapping villages. This comprises a total population of 2,659 individuals (according to the KXN management plan 20020-2025). KXN, located in Khammouane Province on the Vietnam border, is currently a Provincial PA and is being re-designated as a National Protected Area. KXN protects some of the richest biodiversity in the wet evergreen forests of the Annamites, and has been listed in the upstream process for designation as a UNESCO natural World Heritage Site. The NPA has received technical support from the Integrated Conservation and Biodiversity Forestry Project (ICBF) during 2016-2021. Asian Arks, a conservation business entity, is in discussion with the GoL to have a 20,000-hectare concession in the Total Protection Zone, with 10,000 hectares managed in an initial 10-year period.

25. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs for the Khammouane PAFO<sup>14</sup> to implement:

- a) Collaborative management with Khammouane provincial authorities and Boualapha district authorities, and the nine Guardian Villages. This involves convening organized meetings and workshops at the provincial and district and village level to enhance stakeholder engagement in the different technical fields of protected area management. It also includes the development of the Khouan Xe Nongma National Protected Area Management Plan (2025-2030); the current five-year plan is being developed by ICBF. The collaborative management approach will involve all nine Guardian Villages in the buffer zone, and will be supported through outreach, planning, and livelihood development linked to conservation as described below (village livelihood block grants are funded and implemented under Component 2.1.1 based on a Village Conservation Agreement).
- b) Operating costs including vehicle maintenance;
- c) Development and maintenance of park infrastructure (headquarters, ranger stations and checkpoints) and facilities.<sup>15</sup>
- d) Biodiversity monitoring and research. This activity is anticipated to be largely supported by Asian Arks with negligible costs to the NPA Management Authority.
- e) Park ranger operations. This activity includes support for:

<sup>14</sup> When the Khouan Xe Nongma NPA Management Authority is formally established and receives legal status, implementation responsibilities and funds will be transferred to the NPA Authority.

<sup>15</sup> Tourism infrastructure planning (including designs) will be carried out with input from potential private sector investors, tourism stakeholders working group and tourism authorities, and relevant government agencies as needed.

- i) district inter-agency patrol teams,
  - ii) border patrol teams,
  - iii) the 9 village ranger teams in village lands
  - iv) ranger training
  - v) supervision of the ranger database.
- f) Outreach (extension). A set of activities (including workshops, meetings and trainings) aimed at engaging the rural populations within the 9 Guardian Villages, students and government officials of concerned law enforcement agencies to elicit positive attitudes and behavior change. This change in attitudes and behavior will reduce the threats to the National Protected Area. These outreach activities will also include the use of local radio, television and other media avenues to raise awareness on forest and land management, conservation, and natural hazards.
- g) Village forest and land use management plans, including associated village regulations, and socio-economic assessments as needed, will be prepared and approved.
- h) Village (Community) Action Plans will be prepared and approved.
- i) Village Conservation Agreements will be prepared, approved, implemented, modified as needed, and/or regularly monitored (a pre-condition to access village livelihoods block grants funded in Component 2.1.1 through the respective Village Development Fund).
- j) Tourism development (linked to Component 2) in consultation with private sector operators as appropriate. Activities include:
- i) Tourism zoning, strategy and action plan development by stakeholders working group (including surveys) which will be part of the overall PA zoning;
  - ii) Training and support for private sector-led anti-poaching support teams in tourism concession areas;
  - iii) Creation of and capacity building for tourism stakeholder working groups;
  - iv) Joint marketing and promotion (websites, events, familiarization trips, etc.);
  - v) Produce tourism investment potential portfolio for the landscape. Disseminate on website and at national workshop;

**Activity 1.1.8 Laving Laverne (LL) National Protected Area. US\$1,357,000 (US\$587,250 IDA; US\$497,750 GEF; US\$272,000 CCEFCF)**

26. This NPA had 26 Guardian Villages, comprising 15 enclave villages and 11 overlapping villages, with a total population of 8,829 individuals in 2018. The park is located on the Vietnam border in Savannakhet Province, and is contiguous with Khouan Xe Nongma Provincial Protected Area in Khammouane Province. Laving Laverne has an instrumental role in the World Heritage Site designation of Khouan Xe Nongma. The park is a strong representation of wet evergreen forest in the Annamites. The northern portion is ecologically intact and supports rich endemic biodiversity, while the southern portion is degraded.

27. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs for the Savannakhet PAFO<sup>16</sup> to implement:

- a) Collaborative management with the Savannakhet provincial authorities, two district authorities, and the 26 Guardian Villages. This involves convening meetings and workshops at the provincial and district and village level to enhance stakeholder

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<sup>16</sup> When the Lavine Laverne NPA Management Authority is formally established and receives legal status, implementation responsibilities and funds will be transferred to the NPA Authority.



engagement in technical fields of protected area management. It also includes the development of the Laving Laverne National Protected Area Management Plan (2025-2030). The collaborative management approach will involve all 26 Guardian Villages in the buffer zone, and will be supported through outreach, planning, and livelihood development linked to conservation as described below (village livelihood block grants are funded and implemented under Component 2.1.1 based on a Village Conservation Agreement).

- b) Operating costs including vehicle maintenance.
- c) Development and maintenance of park infrastructure and facilities;<sup>17</sup>
- d) Participatory boundary demarcation, including marking the boundary with permanent concrete posts, signs and large signs at major road access points. Villagers will participate in this boundary demarcation process, and the Village Committee will sign off on each boundary post. Villagers will also be hired to install these markers.
- e) Biodiversity monitoring of flagship species;
- f) Park ranger operations, including:
  - i) Construction of ranger stations;
  - ii) Ranger field equipment;
  - iii) Mobilization of district inter-agency patrol teams;
  - iv) Border ranger teams;
  - v) Village ranger teams in village lands;
  - vi) Ranger training;
  - vii) Supervision of the ranger database.
- g) Outreach (extension). A set of activities (including workshops, meetings and trainings) aimed at engaging the rural populations within the 26 Guardian Villages, students and government officials of concerned law enforcement agencies to elicit positive attitudes and behavior change. This change in attitudes and behavior will reduce the threats to the area. These outreach activities will also include the use of local radio, television and other media avenues to raise awareness on forest and land management, conservation, and natural hazards.
- h) Village forest and land use management plans, including associated village regulations, and socio-economic assessments as needed, will be prepared and approved.
- i) Village (Community) Action Plans will be prepared and approved.
- j) Village Conservation Agreements will be prepared, approved, implemented, modified as needed, and/or regularly monitored (a pre-condition to access village livelihoods block grants funded in Component 2.1.1 through the respective Village Development Fund).
- k) Tourism development (linked to Component 2) in consultation with private sector operators as appropriate. Activities include:
  - i) Tourism zoning, strategy and action plan development by stakeholders working group (including surveys) which will be part of the overall PA zoning;
  - ii) Training and support for private sector-led anti-poaching support teams in tourism concession areas;
  - iii) Creation of and capacity building for tourism stakeholder working groups;
  - iv) Joint marketing and promotion (websites, events, familiarization trips, etc.);

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<sup>17</sup> Tourism infrastructure planning (including designs) will be carried out with input from potential private sector investors, tourism stakeholders working group and tourism authorities, and relevant government agencies as needed.

- v) Produce tourism investment potential portfolio for the landscape. Disseminate on website and at a national workshop.

28. Laving Laverne NPA Management Authority will be able to contract a national PA management advisor to coordinate with DOF/PAMD.

### ***Subcomponent 1.2: Sustainable Forestry and Resilient Village Infrastructure***

*Total financing: US\$ 10,217,274*

*IDA: US\$15,017,274*

*GEF: US\$2,327,726*

*CCEFCF: US\$4,800,000*

*Implementation: DOF*

29. **The objective of this subcomponent is to strengthen sustainable forest management (SFM) and landscape restoration in production, protection, and village forests.** The long-term goal is to support job creation, reduce poverty and climate risks, reduce pressure on natural forest, and boost forest sector productivity for green growth and recovery.

30. Under this subcomponent, MAF/DOF, working with other agencies as appropriate (MONRE, MOIC, MPWT, MPI, LWU, LNFCD), will promote solutions for improving forest management and restoration of degraded forestlands in: a) forests managed by villages for production, protection and/or conservation objectives, b) smallholder tree plantations, and c) industrial tree plantations combined with smallholder/out-grower/agroforestry plantations. In all three systems the project will also support community-based climate-resilient green infrastructure for flood, landslide and drought risk reduction (such as small irrigation linked to upstream forest vegetation conservation, climate resilient feeder roads, slope stabilization with tree cover) linked to SFM.

31. The subcomponent will support public sector capacity to facilitate, regulate, and leverage private sector investment in environmentally and socially sustainable industrial forest plantations (the project will not provide financing for these plantations). A key public sector barrier that will need to be overcome is the need for allocating transparent concessions within the PFAs for credible plantation investors that commit to developing out-grower capacity and socially and environmentally sustainable production, and local economic and environmental benefits (Component 3.1 includes support for improving the enabling environment to alleviate this barrier).

32. The subcomponent will support the review and update of state forest management plans for PFAs, to include zoning and priority areas suitable to develop environmentally and socially sustainable industrial tree plantations. The subcomponent will also finance the systematization of selected state protection forest areas, zoning, and development of PtFA management plans.

33. Village level activities will be organized into Village Landscapes and Livelihoods Sub-projects that include Village forest and land use planning and zoning (1.2.2), Village forest management (VFM) and restoration (1.2.3), village livelihoods block grants through the Village Development Funds (Component 2.1), Extension (1.2.4) and local green infrastructure such as small irrigation (1.2.7). Approximately 400-600 villages outside protected areas will be supported, representing 264,000 to 396,000 people. Forest restoration grants under activity 1.2.3 (US\$2000 per village) will be disbursed to each participating village to fund some of the

village forest restoration objectives identified in the village forest and land use plan (1.2.2). Forest restoration grants could be used to purchase equipment or materials, or to employ villagers for casual labor linked to village forest restoration activities.

34. Village section criteria include:

- a) Villages with relatively good forest cover, and interest to adopt VFM and take advantage of economic opportunities for wood products<sup>18</sup> and NTFP;
- b) Villages with stated desire to restore degraded village forests;
- c) Villages in which the administration and most of the community are supportive of VFM or who have been trained in PSFM by previous projects;
- d) Villages vulnerable to forest fire, floods, droughts, erosion and landslides, and opportunities for climate and disaster risk reduction.

35. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs, to support the following activities:

**Activity 1.2.1 State forest management planning in state production forest areas and protection forest areas. US\$125,000 (US\$61,000 IDA; 0 GEF; US\$64,000 CCEFCF)**

36. This activity will support the drafting, review, and update of forest management plans for PFAs and PtFAs, in accordance with the 2019 forestry law. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs to conduct the following:

- a) PFAs. In selected PFAs, review and update existing management plans where necessary, in accordance with new provisions in the 2019 Forestry Law. Updates will include, among others, the assessment of existing degraded areas suitable for new environmentally and socially sustainable industrial tree plantations, assessment of existing tree plantations and planned expansion, etc.
- b) PtFA. In selected PtFAs:
  - i) survey and compare maps with existing forest area on the ground and complete boundary demarcation where missing;
  - ii) zoning PtFAs as control use zone (CUZ) and total protection zone (TPZ). CUZs could be used for village forest management activities, including smallholder tree plantation, forest restoration, NTFP collection etc. TPZs are managed for forest cover and biodiversity conservation;
  - iii) develop PtFAs management plans.

**Activity 1.2.2 Village forest and land use planning and zoning in village forests. US\$495,000 (US\$ 335,000 IDA; 0 GEF; US\$160,000 CCEFCF)**

37. This activity will support villages to develop their own participatory village forest and land use plan, a requisite to participate in NRM and livelihoods activities financed by the project. The process starts with introduction of the concept of village forest and land use planning. The next step is the participatory mapping and analysis of the village landscapes, leading to the assessment of current forests and land use and livelihoods and identification of potential complementary green local infrastructure.

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<sup>18</sup> From planted wood in PFAs and PtFAs. Under VFM, natural wood from PFA and PtFA can only be used for household needs. Natural wood inside village land could be harvested for commercial purpose, but the current availability of such 'good wood' inside village land is limited.

Following analysis, reflection and discussions to gain consensus between the village and local authorities, plans and maps are developed to guide improvements in forest and land zoning and management, with a view to both stabilize and improve agricultural land productivity, and maintain or expand where feasible, the area of forests in the village, as well as effective village forest management, utilization and restoration of forest cover, vegetation, and NTFPs.

38. If villages already have existing forest and land use plans developed by other projects, LLL will review them and update where necessary to meet NRM and livelihoods criteria which are the condition for the village to access LLL funds under component 1 and 2.

39. Forest and land use planning will also include the support to develop village regulations, where appropriate and needed, on natural resource management and benefits sharing for collective economic activities such as VFM, managing rotations, or small irrigation.

40. The main output of this activity is the approval of a Village Forest and Land Use and Management Plan, which is the condition to access Forest restoration grants (Activity 1.2.3 b).i)) and village livelihoods block grants from the Village Development Fund under by Component 2.1.2.

**Activity 1.2.3 Village Forest Management (VFM) and Restoration. US\$5,585,000 (US\$3,825,000 IDA; 0 GEF; US\$1,760,000 CCEFCF)**

41. Based on the approval of the village forest and land use plan (activity 1.2.2), a package of natural resource management activities will be implemented by the respective VFM Sub-committee under the existing Village Committee. The VFM Sub-committee will be established and trained by the project. It will be supported by technical and extension advice (provided under activity 1.2.3). VFM activities are customized according to village locations, their endowment of forest, proximity to economic and or ecosystem-based opportunities. These activities include:

- a) Skills capacity building and village organization for VFM;
  - i) Village Forest Registration and Demarcation;
  - ii) (annual) Tree management inventory, and harvest planning;
  - iii) (annual) NTFP inventory, management, and harvest planning;
  - iv) supplementary inventories;
  - v) Improved used of firewood, and charcoal production management;
- b) Communal VFM activities:
  - i) Assisted natural regeneration and forest restoration grants (US\$2000 per village)<sup>19</sup>;
  - ii) NTFP domestication, and village tree nurseries;
  - iii) Forest fire control;
  - iv) Partnerships and agreements with commercial tree plantations in PFAs (based on markets and location, linked with activity 1.2.4 below)
- c) Household VFM activities:
  - i) Timber harvesting, processing and marketing of wood products in PFAs (as permitted by the country's legal framework);

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<sup>19</sup> Forest restoration grants could be used to purchase equipment or materials, or to employ villagers for casual labor linked to village forest restoration activities.

- ii) Harvesting, processing and marketing of NTFPs<sup>20</sup>;
- iii) Smallholder tree plantations on private land (in PFAs and PtFAs).

42. *Link to Activity 2.1.1 Village Livelihoods Block Grants.* Block grants for villages to select and implement their own livelihoods development activities in line with VFM, or other non-forestry or non-farm livelihoods activities, will be provided to selected villages through the Village Development Fund. Other costs for VFM will be borne here under Component 1.2.

43. *Link to Activity 1.2.6 Green Infrastructure.* This activity is linked to activity 1.2.6 on green infrastructure which seeks to support small irrigation, climate resilient feeder roads, and slope stabilization with trees in association with VFM.

**Activity 1.2.4 Extension and Village advisory services. US\$4,000,000 (US\$1,144,274 IDA; US\$2,327,726 GEF; US\$528,000 CCEFCF)**

44. This activity will support PAFOs and DAFOs to provide extension and advisory services to villages on the forestry and agronomic topics supported under Components 1 and 2, supporting village-level collective activities such as VFM and small irrigation and household activities such as smallholder forestry and agriculture. Topics include forest and land management techniques and approaches, agroforestry practices based on context and demand, crop and livestock management practices, conservation, and reducing vulnerability to natural hazards such as flooding and drought. Specific forestry extension activities will include tree and NTFP planting and establishment, in silviculture, harvest and processing.

45. The project will fund continuous training of PAFO and DAFO extension staff, and supplement these teams with dedicated project consultants:

- a) A Provincial Project Coordinator will oversee the provision of technical support by District project teams, and report to the national project coordination team in DOF.
- b) District project teams (2-4 based on needs and location), consisting of local consultants with different expertise on forest and natural resource management, community development, small infrastructure, and administration, will oversee delivery of technical and extension services to the villages and report to the provincial project coordinator. The district project team will coordinate workplans, training and tasks with District and Province government technical staff, based on skills and availability. The district project team will be supported by local project assistants/young graduates for village level mobilization.
- c) Village Facilitators (project assistants or young graduates, each covering 3-4 villages) will support DAFO and PAFO staff in daily village engagement, mobilize communities, follow up on technical and extension support and monitor village level activities and report to the District project team.

46. These activities will be complemented using local radio, television and other media. Targeted trainings will be provided on climate change and disaster response, including key concepts of climate-related risks and opportunities adapted to the local context. Key output of these trainings will be the preparation of evacuation protocols and timely and actionable information through multiple channels on the onset of climate change-induced disasters such as flash floods.

**Activity 1.2.5 Enabling activities for private investment in environmentally and socially sustainable industrial tree plantations. US\$440,000 (US\$296,000 IDA; 0 GEF; US\$144,000 CCEFCF)**

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<sup>20</sup> Examples could include: a) Bamboo shoot processing and bamboo forest management; b) promotion of medicinal root NTFPs; c) survey, management and value chain development of wild mushroom; d) co-management of native fish conservation zones.

47. This set of activities aim to support DOF to enhance governance and risk management capacity to facilitate, regulate, and leverage the current and planned private sector investment in industrial tree plantations, which are set to expand.

48. The project will finance DOF, and other agencies where appropriate, to:

- a) Identify appropriate areas for environmentally and socially sustainable plantation development opportunities in interested villages. If villages agree, share the village forest and land use plans (from 1.2.1 above) with private investors (or even include private investors in the forest and land use planning process with villages where suitable);
- b) Pilot out grower demonstration schemes;
- c) Develop and provide incentives through improved genetic stock, technical support, fertilizer and access to markets encouraging smallholders/farmers to invest in environmentally and socially sustainable out-grower plantation initiatives in suitable identified areas inside PFAs, or outside the three official forest categories.

**Activity 1.2.6 Research and development for production forestry. US\$900,000 (US\$612,000 IDA; 0 GEF; US\$288,000 CCEFCF)**

49. This activity will support DOF, coordinating with the National Agriculture and Forestry Research Institute (NAFRI), the National University of Laos (NUOL) and others as needed, to conduct applied research and development on the following:

- a) Natural Forest Restoration. Priorities include:
  - i) Monitor, analyze and share results of natural regeneration, growth and yield in permanent sample plots (PSP) in natural forests and in assisted natural regeneration forest areas to estimate annual allowable cuts for sustainable forest management;
  - ii) Establish in situ and ex situ gene conservation areas;
  - iii) Establish certified seed production stands and seed management facilities to provide quality germplasm for planting of selected natural forest species;
  - iv) Rejuvenate and up-skill the National Tree Seed Centre for natural forest species planting;
  - v) Undertake carbon and financial analyses on natural forest restoration to evaluate the environmental and social sustainability of natural forest restoration in different forest types.
- b) Environmentally and Socially Sustainable Plantation Forests. Research priorities may include:
  - i) Strengthen soils and site productivity and site-specific matching for soil and foliar analyses and laboratory capacity and capability;
  - ii) Evaluate viability of alternative tending (manual and chemical methods of weed control and nutrition maintenance), silviculture (thinning and pruning) and harvesting (mechanized and manual);
  - iii) Improve disease-resistant seed and seedling production particularly for smallholder and SMEs;
  - iv) Strengthen forest pathology and entomology research, skills and laboratory facilities within the existing agricultural research centers;
  - v) Enable smallholders and outgrowers to accurately assess quantity of wood produced according to standard, proven methodologies;
  - vi) Improve plantation forestry survey techniques to monitor social, environmental and economic impacts of plantation forest developments (large scale and smallholder); and
  - vii) Analyze supply/value chains to provide smallholders and SMEs market feedback on specifications, demand, supply and price for wood and non-wood products.

**Activity 1.2.7 Green infrastructure for resilient villages, livelihoods and jobs. US\$5,800,000 (US\$3,944,000 IDA; 0 GEF; US\$1,856,000 CCEFCF)**

50. The project will finance the development of locally appropriate green and green/grey infrastructure for multiple benefits including jobs, climate and disaster risk reduction, and economic development from forests and nature-based tourism. Some of the infrastructure will be identified in the local and village forest and land use planning processes supported in Components 1.1 and 1.2. Extension and technical support will be provided through the extension arrangements described in activity 1.2.4 above, with national, provincial, district and local partners where appropriate. These community works will generate jobs and household income through labor mobilization of villages in the project area. Women will be expected to be among the employed. No large-scale labor influx will be expected, except in a handful of potential cases where a longer feeder or access road might be constructed. Climate benefits include reduced vulnerability to flood, drought, landslides and erosion.

51. There are three main types of green infrastructure financed under the Project:

- a) Small-scale irrigation systems (under US\$20,000 per village). These systems will be accompanied by upstream forest protection in the command area (averaging 650 ha), using inter-village agreements and payments for ecosystem services (i.e., part of a harvest) as relevant, and embedded into the village forest plan. Water User Groups will be formed and supported to provide labor for constructing and maintaining the irrigation. This will contribute to climate change adaptation, by reducing yield variability from climate shocks such as drought and floods.
- b) Climate-resilient feeder roads, small bridges, small cross drainage, and small village-managed reservoirs. This will contribute to climate change adaptation, by improving access and general disaster risk preparedness of villages in case of climate shocks such as flood, drought, landslides and erosion.
- c) Stabilization of fragile steep slopes, lakeshores, riverbanks, and road corridors through re-vegetation (i.e., vetiver grass, moringa, etc), contours/terracing, forest restoration, reforestation, assisted natural regeneration, with partial economic uses. These sustainable land management measures will boost resilience, especially where combined with grey infrastructure. These labor-intensive works will contribute to climate change adaptation, by improving slope stability and reducing risks from flooding. In addition, it will also contribute to climate change mitigation, by planting and maintaining trees strategic areas to improve the flow of ecosystem services and carbon storage capacity.

**Component 2: Livelihoods Opportunities from Sustainable Forest Landscapes**

*Total financing: US\$9,245,000*

*IDA: US\$6,285,000*

*GEF: US\$0*

*CCEFCF: US\$ 2,960,000*

*Implementation: DOF*

52. **The objective of this component is to improve forest-smart livelihoods opportunities, vocational skills, and nature-based tourism development in targeted landscapes.** Key rural livelihoods supported or facilitated by the project are community-driven and relate to local forest management and sustainability objectives.

53. This component is closely linked to the natural resource planning and management activities in Component 1 and targets the same villages. There are three subcomponents: a) 2.1 Village Livelihood Block Grants to Village Development Funds, b) 2.2 Vocational Training, and skills development c) 2.3 Nature-based Tourism Business Leveraging Facility.

54. *Response to COVID-19 economic impacts:* This component will play a pivotal role in boosting the recovery of rural livelihoods in forest areas. The project will use existing government systems to channel funds to forest villages through the VDFs, based on successful models used in other on-going projects in Lao PDR. Vocational training for locally appropriate market-based activities will provide additional employment opportunities.

55. *Addressing gender gaps in Component 2.* This component will facilitate the active and effective participation of women in village meetings, planning and decision making. Locating and timing of trainings to accommodate women's work schedules and preferences will enhance equitable participation and outreach. Partnerships with Lao Women Union (LWU), Lao National Front for Construction (LNFC), and local women's organizations will be leveraged to build on existing networks and best practices. Local livelihood activities will be designed in a participatory and inclusive way, ensuring that these activities do not merely increase women's workload, and ideally lower it instead (e.g. through less time spent collecting firewood and water, and cooking). Village level activities will include actions to ensure that women can receive direct payments, for example via cell phone, or new local bank accounts. 20 percent of the VLBG (US\$2,000 per village) will be earmarked for fast disbursing grants to the most vulnerable households, identified by the villages. 50 percent of the remaining VLBG (US\$4,000 per village) will be reserved for households with a female member as signatory. . Rural development NGOs will have opportunities to become implementation partners. Private businesses will be encouraged to become partners for tourism, value chain development, and handicrafts.

56. The component is organized in 3 subcomponents:

- a) 2.1: Village Livelihood Block Grants to Village Development Funds;
- b) 2.2: Vocational Training; and
- c) 2.3: Nature-based Tourism Business Leveraging Facility

***Subcomponent 2.1: Village Livelihood Block Grants to Village Development Funds***

*Total financing: US\$4,080,000*

*IDA: US\$6,000,000*

*GEF: 0*

*CCEFCF: US\$ 1,920,000*

*Implementation: DOF*

57. The objective of this subcomponent is to strengthen forest-smart village livelihoods and job opportunities in targeted landscapes.

58. This subcomponent will support the villages supported in Component 1 to implement forest-smart livelihood activities identified during the village forest and land use planning exercise under Component 1. Village Livelihoods Block Grants (VLBGs) will be provided through the existing Village Development Funds (VDFs) based on the successful initiation of the mobilization, resource planning, and extension activities funded in Component 1.



59. In Lao PDR, the VDFs are revolving funds generally managed by the villages themselves through a Village Committee. Generally, credits from the VDF are provided to households for specific farm and non-farm income-earning activities based on specific criteria. The VDFs are usually operated as revolving mechanisms to expand impact and reach more households than a grant-based system will reach. VDF funds can also be used for collective activities that benefit all households, such as local small infrastructure. LLL financing under this subcomponent will rely on and reinforce the VDF system.

60. In LLL, VLBGs will be US\$10,000 per village. 20 percent (US\$2000) will be allocated to the 10 most vulnerable households in the village as grants. These households are identified by the villages themselves through a community targeting exercise, based on criteria including:

61. In LLL, VLBGs will be US\$10,000 per village. 20 percent (US\$2000) will be allocated to the 10 most vulnerable households in the village as grants. These households are identified by the villages themselves through a community targeting exercise. This portion of grants will be disbursed upfront as soon as village are selected and the community targeting is completed, while the remaining 80 percent will be disbursed after the forest and land use planning (component 1) is completed. Some criteria for community targeting include:

- a) Poverty;
- b) economic disaster (can include excessive debt, sudden death, etc.);
- c) health problems (chronical diseases/disabilities, or other livelihoods impeding conditions);
- d) nature-induced disaster (destruction on agricultural harvest or livestock, pest outbreak, etc.
- e) natural disasters (e. g flood, draughts, erosion, fire);
- f) Social exclusion (that limits ability to rights to social and economic development).

62. The remaining 80 percent of the VLBG (US\$8000 per village) will be disbursed in phases after the approval of the village forest and land use plan and village conservation agreements (in villages inside PAs) (supported under component 1). These funds will be managed by the VDF as revolving funds to implement household level projects compatible with the village forest and land use plan, according to village location. Half of the revolving funds (US\$4000) will be allocated to households with a female member as signatory, to incentivize women participation in the public life. In this category, the female member registers with the VDF, subscribes the loan, and is accountable for planning, implementation and financial reporting on the household project itself (irrespective of the status of the male in the household).

63. Female headed households where the woman is the only income earner (widow, separated, divorced, single mother, husband working outside of the village or abroad and not sending money) could also be considered vulnerable and therefore benefit of the 20 percent most vulnerable grants described above depending on the case and situation.

64. Filling gender gap assumptions. A first level assumption is that with a set quota women will by default participate more in village planning and meetings if they are to be the main signatories on the household's credit. Second level assumption is that by being more involved in village public life, women and men will see the added value of this participation and the overall village (included men) will benefit from this empowerment.

65. This subcomponent will rely on two community-driven development models proven in Lao PDR: one model for PAs' Guardian Villages, and one model for villages in other forest areas, as described below.

66. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs and village block grants for village subprojects to support the following activities:

**Activity 2.1.1 Village Livelihood Block Grants in PAs and buffer zones. US\$2,000,000 (US\$1,360,000 IDA; 0 GEF; US\$640,000 CCEFCF)**

67. This activity will provide funds to villages supported under Component 1.1 to implement, monitor and evaluate village livelihood development sub-projects identified in Component 1.1. Village Conservation Agreements (output under Component 1.1) are a pre-requisite to release village livelihoods block grants to the VDFs (except for the 20 percent direct allocation for the most vulnerable households which is disbursed immediately after village selection). This approach builds on experience from the LENS-2 project. Under the collaborative PA management approach promoted and financed by the project, “buffer villages” serve as empowered “guardians” for the protected areas, playing a role in regulating access by others into the area and monitoring activities.

**Activity 2.1.2 Village Livelihoods Block Grants in production and protection forest areas. US\$4,000,000 (US\$2,720,000 IDA; 0 GEF; US\$1,280,000 CCEFCF)**

68. This activity will provide funds to villages supported under Component 1.2 to implement, monitor and evaluate village livelihood development subprojects identified in Component 1.2. Village forest and land use plans (output under Component 1.2) are a pre-requisite to release village livelihoods block grants to the VDFs (except for the 20 percent direct allocation for the most vulnerable households which is disbursed immediately after village selection). This approach builds on the village grants system successfully implemented under the SUFORD SU project. Example of eligible livelihood activities implemented in the past are:

- a) ‘Nor Ja’ bamboo production promotion (consumption, income generation);
- b) Crispy riverweed production and quality improvement for value chain;
- c) Promotion of improved native and black chicken raising and value chain;
- d) Promotion of *Thysanolaena maxima* (broom grass) planting;
- e) Promotion of *Araceae* spp germplasm collection and plantation;
- f) Organic vegetable cultivation promotion;
- g) Organic production, seed improvement, value chain of ‘Khao Gai Noi’ rice;
- h) Promotion of sustainable banana and orange plantation;
- i) Intercropping maize with beans to improve short rotation upland fallow;
- j) Legume inter/cover cropping in upland fields;
- k) High value crops and wet rice field development irrigated by infrastructure built in component 1.

**Subcomponent 2.2: Vocational training and skills development**

*Total financing: US\$1,000,000*

*IDA: US\$680,000*

*GEF: 0*

*CCEFCF: US\$320,000*

*Implementation: DOF*

69. **The objective of this subcomponent is to improve employment and livelihoods opportunities for people in villages supported by the project.** The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs to support vocational training and skills development for local people in the same villages supported under Component 1 to enter the labor market or even start micro-businesses.

70. **Training will be delivered in the village and through a scholarship system for selected youth to attend vocational schools in district or province capitals.** Selection criteria will be developed and third-party service providers or CSOs could be hired to manage the vocational training program under DOF NPCU supervision.

71. Topics will be based on local market demand and could include, for example:

- a) Skills for service industries such as tourism and hospitality (guiding, driving, language, cooking, hotel operations). Such trainings will be supplied through higher education institutions, by INGOs and consultants specializing in such subjects, and through practical learning opportunities;
- b) Small business management skills (bookkeeping, business planning, etc.);
- c) Timber-based enterprise skills such as smallholder tree plantations, wood processing, and furniture making;
- d) NTFP and food processing for value chains;
- e) Non-farm skills such as handicrafts, engine repair, construction, and household energy installations including efficient cookstoves. Partnerships with the private sector will be encouraged for such training to ensure that trainings are market oriented and meet market demands and standards;

72. To help address gender gaps related to economic opportunities and skills development, a special focus will be placed on encouraging women to participate in the training, and devising courses responding to their vocational interests and job market opportunities.

### ***Subcomponent 2.3: Nature-based Tourism Business Leveraging Facility***

*Total financing: US\$ 1,525,000*

*IDA: US\$2,245,000*

*GEF: 0*

*CCEFCF: US\$720,000*

*Implementation: DOF NPCU through a third-party facility management company*

73. **The objective of this subcomponent is to strengthen development of nature-based tourism by encouraging private sector participation, especially in and around PAs.** This objective will be accomplished through a “nature-based tourism business leveraging facility” to be established with project support.

74. The nature-based tourism business leveraging facility will provide:

- a) Advisory services to tourism companies on product development, market surveys, etc.
- b) Financing for small public infrastructure, marketing, and other aspects of the local enabling environment for tourism development in accordance with private sector investment plans and public destination management plans;

c) Training and capacity building for the management and staff. Support will be provided to private nature-based tourism firms (legally registered and licensed) and registered micro or community tourism businesses based on an application process overseen by a third party and approved by the project coordination and implementation units (MAF/PAFO and other relevant authorities).

75. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs, and MSME funds to support the following activities:

- a) Design of the facility and contracting a fund facility management company;
- b) Information dissemination to the business community about the facility;
- c) Technical assistance to review applications and support businesses:
  - i) Expression of interest with a brief proposal;
  - ii) Screening and selection;
  - iii) Business plan development.
- d) MSME funds to disburse;
- e) Monitoring and reporting.

76. Access to the facility will require tourism businesses a) meet standards set by MOICT and relevant authorities, b) are registered micro, small, and medium enterprises (MSME) in the tourism sector that have built, or are willing to build, economic partnerships with communities in target sites and PAs, c) follow protected area management plans (where relevant), tourism development plans and guidelines of PAs in which the proposed investment is located, and d) are willing to follow all relevant laws and regulations relating to enterprises and investment.

77. The facility will have three types of financing available:

- a) Planning and feasibility work (No matching required from the applicant): which will have no minimum amount per application, no matching required and a maximum contribution of US\$2,500. Such funds will account for no more than 10 percent of the total funds available.
- b) Challenge Funds: These will target investment in particular areas or for more specific investments, typically to attracting concession investments or public private partnerships identified by the project as high priorities. Maximum contribution of US\$40,000 per challenge to support investments of US\$100,000 or more. Such funds will account for no more than 40 percent of the total funds available.
- c) Matching funds for MSMEs: For product development and marketing work for businesses located in and around the project areas and other protected areas around the country up to US\$10,000 per application and a maximum of 2 applications per MSME. This type of funding will account for at least 50 percent of the total funds. The following matching requirements can include in-kind contributions. Matching requirement will be as follows:

**Table A2.1. Amount of Matching Funds Required**

Type of work	Project will fund:	Applicant will fund:
Construction of new facilities / buildings	50 percent	50 percent (can include in-kind contributions of materials and labor)

Upgrade to existing facilities and equipment	70 percent	30 percent (can include in-kind contributions of materials and labor)
Training	90 percent	10 percent (can include accommodation, per diem, and travel for trainers and trainees)
Development of new or improved activities, attractions, tours, and key equipment	70 percent	30 percent
Development of new or improved websites, brochures, marketing campaigns, marketing materials / advertising	90 percent	10 percent (can include in-kind contributions of accommodation, food and travel)

78. *Administration:* The facility will be managed by a fund facility management company, with approval of contracts by the NPCU/PPCU (MAF/PAFO) and providing funds to MSMEs. The company responsible for the NBT business leveraging facility will be selected by the NPCU using World Bank Procedures. The company will employ a short-term international tourism expert for 1-2 months per year to advise and support overall design, vetting of applications, and recommendations on how to technically support the businesses. It will employ 1-2 full-time national tourism experts to follow up with up with the PIUs/sites to disseminate information about the fund, follow up with processing application, and provide or procure technical support for the businesses. The NPCU will be responsible for following up with applications and for monitoring effectiveness of disbursements. Monitoring will also be done remotely by the company/NPCU through photo reporting, sent via an online medium such as WhatsApp or Facebook.

79. *Contracting:* Contracts for the matching grants will follow a similar template used by the Business Assistance Facility (BAF)<sup>21</sup>. Approval will be made by an approval committee, which will include national and provincial PMU members, other relevant authorities (tourism) and include a tourism expert or representative from the tourism industry. Contracting for the grants will be made between the project (NPCU) and the grantee.

### **Component 3: Institutions, Incentives and Information**

*Total: US\$8,770,000*

*IDA: US\$5,700,000*

*GEF: US\$350,000*

*CCEFCF: US\$2,720,000*

*Implementation: Various agencies*

80. **The objective of this component is to strengthen institutions, policies, incentives and information for sustainable forest landscapes.** This component will finance forest governance activities via three subcomponents:

- a) 3.1 Strengthening Institutions and Policies for Landscape Management,
- b) 3.2 Strengthening Institutions and Policies to Curb Forest and Wildlife Crimes, and
- c) 3.3 Information for Decision Support.

<sup>21</sup> BAF is financed under the Lao PDR Small and Medium Enterprise Access to Finance Project (P131201) supported by the Bank.

### ***Subcomponent 3.1: Strengthening Institutions and Policies for Landscape Management***

*Total: US\$5,190,000*

*IDA: US\$3,400,000*

*GEF: US\$350,000*

*CCEFCF: US\$1,440,000*

*Implementation: DOF*

81. **The objective of this subcomponent is to strengthen institutions and policies for sustainable forest landscapes.** The subcomponent supports government institutions to strengthen and develop relevant public policy, strategy, regulations, and guidelines and to meet various international commitments. The subcomponent also supports a GoL-led multisector and multi-stakeholder platform and capacity building for GoL to inform decision-making, manage trade-offs and identify mutual opportunities across sectors.

82. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs to implement the following activities:

#### ***Activity 3.1.1: Centralized support to the Protected Area Management Division (PAMD) and Wildlife Management Division (WMD) of the Department of Forestry. US\$2,713,000 (US\$1,611,000 IDA; US\$350,000 GEF; US\$752,000 CCEFCF)***

83. This activity centers on building central level expertise for each specialization of PA management. The central level divisions in DOF supported by this activity will technically and operationally support PA authorities funded under Component 1.1. The PAMD is insufficiently staffed. Human resources will be enhanced through consultancies. The Wildlife Management Division is comparatively quite well staffed, but also could benefit from consultancies.

84. The project will finance:

- a) *Centralized support for PAMD.* The Protected Area Management Division of DOF will be supported to strengthen its capacity to provide technical supervision to the PAs supported under LLL in particular as well as the overall National Protected Area system. Key institutional capacities to be strengthened include:
  - i) Collaborative PA management,
  - ii) Ranger patrolling;
  - iii) Outreach;
  - iv) Livelihood development for conservation;
  - v) Tourism development; and
  - vi) Training support (linked to Activity 3.1.2)
- b) *Centralized support for WMD.* The Wildlife Management Division will be supported to strengthen its capacity to provide technical supervision on biodiversity monitoring and research to the emerging National Protected Areas. This might include:
  - i) Biodiversity monitoring;
  - ii) Biodiversity assessments;
  - iii) Biodiversity research (basic level); and

- iv) Development of a biodiversity information database.

**Activity 3.1.2: Renovation and upgrading of existing forestry training facilities, and field training on NBT management. US\$904,000 (US\$272,000 IDA; 0 GEF; US\$632,000 CCEFCF)**

85. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs to:
- a) Renovate training facilities, upgrading the existing forestry national training center, and other existing structures for field level training. Existing facilities in the eastern portion of PKK NPA (approximately two hours' drive outside Vientiane), will be renovated to host field-based training in nature-based tourism management.
  - b) Organize and hold periodic field training on nature-based tourism management for PA staff and university graduates. Training could include: (i) tourism site planning, (ii) management of tourism concessions, (iii) waterfalls management, (iv) trail design and maintenance, (v) interpretation and signage, and (vi) litter management. These field courses would be built on domestic nature-based tourism activities. The field center would be managed by a modest administration team, supported by short-term training consultants.

**Activity 3.1.3: Support to enhance policy framework for protected area management and biodiversity conservation US\$153,000 (US\$121,000 IDA; 0 GEF; US\$32,000 CCEFCF)**

86. DOF and relevant partners will be supported to enhance the policy and legal framework on key topics such as:
- a) Carry out relevant assessments and consultations for policy development;
  - b) 10 year Action Plan for National Protected Areas;
  - c) Training needs assessment for protected areas;
  - d) Revision/updating of approved guidelines in relation to the 2019 Forestry Law (e.g. buffer zones inside NPAs);
  - e) Preparation of new guidelines (e.g. transboundary collaboration, conducting social and environment impact assessments inside PAs, wildlife release and reintroduction);
  - f) Preparation of field manuals to provide practical interpretation of the approved Guidelines;
  - g) Assessments to establish/upgrade new National Parks and other protected areas following IUCN categories;
  - h) World or ASEAN Heritage assessments and designations.

**Activity 3.1.4: Support to enhance regulatory framework for tourism concessions in protected areas, including the preparation of regulatory guidelines for concessions. US\$160,000 (US\$128,000 IDA; 0 GEF; US\$32,000 CCEFCF)**

87. A joint committee, chaired by MPI, on tourism concessions and licensing policy development will be supported for continued improvements in the enabling environment for NBT investment in Lao PDR. The committee will include MAF/DOF, MOICT, MONRE, MPWT, LWU, and other relevant agencies:
- a) Carry out relevant assessments and consultations for policy development;
  - b) Determine concession fee structures, along with the required steps for approval that bring together investment, forestry and tourism laws and regulations;
  - c) Hold workshops with local governments in target areas on procedures for investment;
  - d) Review regulations at the local level to reduce barriers to investment in tourism in select PAs and ensure that investors adhere to management objectives and regulations;

- e) Lead the development of a national investment strategy for tourism concessions in PAs;
- f) Develop best practice guidelines for concessions; and
- g) Develop regulatory procedures that can be followed by relevant agencies at national and provincial levels and pilot examples.

**Activity 3.1.5: Support to enhance the policy framework for environmentally and socially sustainable forest plantations and village forestry. US\$300,000 (US\$204,000 IDA; 0 GEF; US\$96,000 CCEFCF)**

88. DOF and other relevant agencies will be supported to:

- a) Carry out relevant assessments and consultations for policy development;
- b) Enhance the legal and policy framework related to enabling environmentally and socially sustainable forest plantations with respect to PFAs; and
- c) Develop village forestry policy, procedures, and practitioners' guidelines and regulations.

**Activity 3.1.6: Timber legality assurance system (TLAS) piloting and certification support throughout the value chain. US\$800,000 (US\$544,000 IDA; 0 GEF; US\$256,000 CCEFCF)**

89. This activity seeks to continue and expand Lao PDR's effort to meet the growing global demand for legal, certified sustainable wood ("good wood") if and when wood harvesting and exports are allowed, and where relevant. The project will support DOF to:

- a) Expand of SFM and controlled wood certification. Priority will be given to LLL project areas, as relevant. In the SUFORD-SU project, SFM and controlled wood certification was successfully verified by a third party on 110,000 hectares in 2019.
- b) Develop information campaigns for Chain of Custody (CoC) certification in the supply and value chain if timber harvesting in the SFM certified areas is allowed on an exceptional basis by the Government.
- c) Contribute to the TLAS process by pilot testing the control mechanism for the supply chain in PFAs and support further development of the legal framework. Priority will be given to LLL project areas, as relevant;
- d) Explore the establishment, requirements, and feasibility of developing a Lao National Forest Management Standard (similar to Vietnam's and others').

### ***Subcomponent 3.2: Strengthening Institutions and Policies to Reduce Forest and Wildlife Crimes***

*Total Financing: US\$2,480,000*

*IDA: US\$1,680,000*

*GEF: 0*

*CCEFCF: US\$800,000*

*Implementation: EPF leads, implemented by DOFI and other collaborating GoL agencies*

90. **The objective of this subcomponent is to strengthen institutions and policies to reduce forest and wildlife crimes.** This subcomponent will support government institutions in: a) strengthening and developing relevant public policy, strategy,



regulations, and guidelines in coordination with among agencies as relevant; b) participating in and meeting various international commitments such as CITES, in coordination with among agencies as relevant; c) developing and maintaining public awareness efforts and local networks on how to reduce wildlife and forest crime in coordination with among agencies as relevant; d) strengthening and implementing a GoL-led multi-agency coordination platform on reducing wildlife and forest crimes (Lao Wildlife Enforcement Network, or Lao WEN); e) carry out field activities by relevant national agencies, in cooperation among agencies when and where relevant; and f) supporting the capacity of provincial agencies to implement field activities through Provincial Wildlife Enforcement Networks (P-WEN) in selected provinces.

91. The subcomponent provides dedicated resources to reinforce multi-agency coordination on selected activities, which is an important aspect for achieving the subcomponent objective. As such, the subcomponent will support some of the agencies that are collaborating together under the GOL's Lao-WEN, which is chaired by DOFI. Relevant agencies include: DOFI, DOF, Department Combatting Natural Resource and Environmental Crime (DCNEC, of the Ministry of Public Security), Army (of the Ministry of Defence), Anti-Money Laundering Intelligence Office (AMLIO), Lao Customs Department (LCD, of the Ministry of Finance) and Office of Public Prosecutions (OPP, of the Ministry of Justice). Of these, project-financed activities will be implemented.

92. Project support will also be channelled through national institutions to strengthen selected key provincial agencies to carry out their legal mandates to reduce forest and wildlife crimes. These provincial agencies are members of selected P-WENs. Project support will initially focus on the same priority landscapes supported in Components 1 and 2, namely Bolikhamxay, Khammouane, Savannakhet and Houaphan provinces. P-WENs are at an early stage of development. LLL will focus on establishing and maintaining their function so agencies can better work together, as relevant, to gather intelligence, investigate crimes, and disrupt criminal enterprises.

93. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs to implement the following activities by DOFI, DOF, DCNEC and LCD, respectively.

94. **Activity 3.2.1: Support to DOFI and POFIs US\$1,500,000 (US\$1,020,000 IDA; 0 GEF; US\$480,000 CCEFCF).** The project will support DOFI on: a) strengthening and developing relevant public policy, strategy, regulations, and guidelines,<sup>22</sup> such as leading development of the Lao WEN Cooperation Framework, updating of the Lao WEN Strategy, and participating in DOF's update of the Wildlife Law; b) developing and maintaining public awareness efforts and local networks on how to reduce wildlife and forest crime in coordination with relevant agencies; c) carry out relevant field activities, in cooperation with other agencies when and where relevant; d) strengthening and maintaining Lao WEN, including by (i) developing MOUs between the concerned law enforcement agencies; (ii) organizing key inter-agency working groups or task forces on various topics; (iii) arranging study tours and training for all Lao WEN agencies; (iv) organizing bilateral MOUs among neighboring countries, and participating in international wildlife and forest law enforcement networks and various international commitments; e) supporting the capacity of selected Provincial Offices of Forest Inspection (POFI) to implement field activities initially in Bolikhamxay, Khammouane, Savannakhet and Houaphan, and to establish and maintain the respective P-WEN.

95. **Activity 3.2.2: Support to DOF US\$120,000 (US\$88,000 IDA; 0 GEF; US\$32,000 CCEFCF).** The project will support DOF on: a) strengthening and developing relevant public policy, strategy, regulations, and guidelines, such as leading the update of the Wildlife Law, and participating in DOFI's development of the Lao WEN Cooperation Framework and update of the Lao WEN Strategy;

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<sup>22</sup> Regulations and guidelines could include, for example, relevant topics such as PA law enforcement, airports, international and traditional border crossings, highways, wildlife crime suppression, investigations, data sharing and reporting, and awareness raising

b) participating in international dialogues and meeting various international commitments such as CITES and FLEGT; c) participating in Lao WEN. Note that PA ranger patrolling and village outreach are funded in subcomponent 1.1 under the specific PA activity budgets.

96. **Activity 3.2.3: Support to DCNEC US\$720,000 (US\$480,000 IDA; 0 GEF; US\$240,000 CCEFCF).** The project will support DCNEC on: a) strengthening and developing relevant public policy, strategy, regulations, and guidelines, such as participating in DOF's update of the Wildlife Law, and DOFI's development of the Lao WEN Cooperation Framework and update of the Lao WEN Strategy; b) participating in international dialogues and meeting various international commitments such as CITES and FLEGT; c) carry out relevant field activities, in cooperation with other agencies when and where relevant; d) participating in Lao WEN; (e) supporting the capacity of selected provincial offices of the environmental police to implement field activities initially in Bolikhamxay, Khammouane, Savannakhet and Houaphan, and to participate in the respective P-WEN.

97. **Activity 3.2.4: Support to LCD US\$140,000 (US\$92,000 IDA; 0 GEF; US\$48,000 CCEFCF).** The project will support LCD on: a) strengthening and developing relevant public policy, strategy, regulations, and guidelines, such as participating in the update of the Wildlife Law, and participating in DOFI's development of the Lao WEN Cooperation Framework and update of the Lao WEN Strategy; b) developing and maintaining public awareness efforts at international and national entry and exit points; c) participating in international dialogues and meeting various international commitments such as CITES and FLEGT; d) carrying out relevant field activities, in cooperation with other agencies when and where relevant; e) participating in Lao WEN and P-WENs as relevant.

### ***Subcomponent 3.3: Information for Decision Support***

*Total financing: US\$1,100,000*

*IDA financing: US\$620,000*

*GEF co-financing: 0*

*CCEFCF: US\$ 480,000*

*Implementation: EPF leads, implemented by various agencies (MONRE, MAF, Lao Statistics Bureau under Ministry of Planning and Investment)*

98. **The objective of this subcomponent is to strengthen information, monitoring, and planning to support better landscape-level decision making.** The subcomponent will support the information infrastructure for managing key environmental and social risks related to natural disasters and large-scale investments, and generate, manage and share relevant data for better-informed decision making for managing trade-offs and mutual opportunities in the landscape.

99. The project will finance works, goods, non-consulting services, consulting services, and incremental operating costs to implement the following activities.

#### ***Activity 3.3.1 Support for implementation of the policy framework for Strategic Environmental Assessment (SEA) US\$150,000 (US\$78,000 IDA; 0 GEF; US\$72,000 CCEFCF)***

100. This activity supports the Department of Environment (DOE) under the ministry of Natural Resources and Environment (MONRE) to carry out the regulatory mandate of MONRE to oversee SEA, and enhance and fill gaps in the regulatory environment through policy development. This activity will involve orientation workshops and training on SEA with national and provincial

agencies to strengthen the overall SEA process in line with the SEA policy actions carried out in 2016-2019. SEA is a key tool for helping manage trade-offs and mutual opportunities in the broader landscape.

**Activity 3.3.2 Support for implementation of the policy framework for Environmental and Social Impact Assessment (ESIA) US\$210,000 (US\$122,000 IDA; 0 GEF; US\$88,000 CCEFCF)**

101. This activity supports the Department of Environment (DOE) to carry out the regulatory mandate of MONRE to oversee ESIA and enhance and fill gaps in the regulatory environment through policy development. This activity will involve orientation workshops and training on ESIA with national and provincial agencies to strengthen the overall ESIA process in line with the ESIA policy actions carried out in 2016-2019. ESIA is a key tool for ensuring that individual projects do not harm the sustainability of the broader landscape including conservation and social development objectives. In particular the project will:

- a) Support the development, validation, and approval of targeted regulations (guidelines) on ESIA for landscape related investments. The process will be consultative in nature and include relevant government agencies and other partners where appropriate. Key guidelines will be developed on:
  - i) ESIAs for industrial tree plantations (with MAF and Ministry of Industry and Commerce);
  - ii) ESIAs for large concessions for nature-based tourism inside and outside PAs (with MAF, MPI, and Ministry of Information, Culture and Tourism).
  - iii) Environmental Compliance Certificates for small-scale tourism businesses and projects
- b) Support continued implementation of the ESIA public participation and disclosure including a fully operational database.
- c) Support an ESIA advisory review panel at DEP to assist DEP/MONRE in fulfilling its ESIA mandate.

**Activity 3.3.3 Monitor and report on NDC implementation nationally US\$45,000 (US\$5,000 IDA; 0 GEF; US\$40,000 CCEFCF)**

102. This activity will support the Department of Climate Change (DCC/MONRE) to monitor progress towards implementation of forest and land use commitments taken under the Nationally Determined Contribution (NDC) to the Paris Climate Accord, which was revised in 2020. The project will finance workshops, meetings, and working sessions that convene all relevant sectors and line ministries focusing to maintain and expand forest cover, which is the main strategy to meet NDC targets.

**Activity 3.3.4 Intergovernmental capacity on natural capital accounting for decision making US\$115,000 (US\$59,000 IDA; 0 GEF; US\$56,000 CCEFCF)**

103. This activity will support effective landscape management by monitoring and systematizing data of key issues such as water, wetlands, land, spatial assessment capacity, etc. Collaboration with the Natural Capital Working Group and the Environmental Statistics Division in the Lao Statistics Bureau (LSB) will be sought to improve data management and collection. The project will support LSB, MONRE, MAF and other ministries in the development of ecosystem accounts (EEA), and water and land accounts (as sub-sets of EEA). The project will finance:

- a) A survey on water abstraction for household use and land use;
- b) An analysis/study to support the development of water and land accounts;

Workshops and training on data collection and analysis.

104. The activity will build on ongoing Bank engagement with the inter-ministerial Lao PDR Natural Capital Working Group supported by a past grant of the Global Program on Sustainability (GPS) Trust Fund and leverage parallel bilateral support from Luxembourg to LSB.

**Activity 3.3.5 Advancing the policy framework on land tenure recognition inside forestlands US\$220,000 (US\$132,000 IDA; 0 GEF; US\$88,000 CCEFCF)**

105. This activity will support the ongoing national process for recognition of land tenure in forestlands and fill existing policy and regulatory gaps. The project will support coordination between Department of Land (DOL) of MONRE, DOF, and the Department of Agricultural Land Management (DALaM) at MAF to advance the development of technical expertise and tools to clarify access, use, ownership, and rights to land inside the three forest categories. Activities will include, for example:

- a) Development of assessments and regulations (guidelines) on the recognition of:
  - i) Individual rights in forestlands;
  - ii) Collective rights in forestlands;
  - iii) Customary rights in forestlands;
  - iv) Private rights in forestlands (use, sale, lease, commercial);
  - v) Land use designation and change in forestlands.
- b) Multi-stakeholder workshops, meetings, and consultations at national and sub-national levels, including village level.
- c) If and when good policy is approved by the GoL, the project could support operating costs for developing operational manuals and training programs to support implementation of the policy framework on forestland tenure.

106. The activity will leverage and complement the ongoing dialogue between the Bank and DOL as part of the preparation of the Systematic Land Registration IPF (P169669), which will target land registration only outside forestland and broader institutional support.

**Activity 3.3.6 Impact assessments for landscape management US\$360,000 (US\$224,000 IDA; 0 GEF; US\$136,000 CCEFCF)**

107. This activity will support innovative adaptive project management and learning (see activity 4.1.2), as well as expanding the broader information base for effective decision making at landscape level in Lao PDR. The project will finance the development, and validation by stakeholders of the following assessments:

- a) Impacts on livelihoods, jobs and poverty;
- b) Impacts on landscape valuation and ecosystem services Landscape governance (including collaborative and decentralized natural resource management);
- c) Impact of landscape governance modalities (including collaborative PA management and village forestry);
- d) Gender;
- e) Resilience;
- f) Wildlife law enforcement, zoonotic disease prevention and One Health.

108. The assessments complement project M&E, inform the project's adaptive learning activities and the mid-term review. Impact assessments help understand, learn from, and adapt project management and activities related to key results areas that are often too complex for conventional project results frameworks. Methodologies for these assessments are diverse (e.g., these

are not necessarily randomized controlled trials) and will generally include baseline data collection and dialogues with key stakeholders. Different assessments will be completed at different times starting in year 3, depending on the topic, to complement project M&E, and will inform the project’s adaptive learning activities and the mid-term review.

**Component 4: Project Management, Monitoring, and Learning**

*Total financing: US\$6,816,476*

*IDA financing: US\$4,341,476*

*GEF co-financing: US\$475,000*

*CCEFCF: US\$2,000,000*

*Implementation: DOF*

109. **The objective of this component is to maintain and enhance project management, monitoring and learning.** This component finances works, goods, non-consulting services, consulting services, and incremental operating costs to support the activities of the Project Coordination Units (PCU) at central and provincial levels, and key support at district level. Support at the national level PCU in DOF includes overall project management, technical expertise, financial management, procurement, ESF implementation, M&E, learning, and targeted action research such as impact assessments. Provincial level PCUs will be established at PAFOs in seven provinces with slightly different staffing profiles than the national PCU profile. Each district will host district teams (described in Component 1.2.3) and village facilitators that will be the face of the project on the ground mobilizing and supporting villages and district staff alike. District teams are reinforced with limited financing under component 1.2.3.

110. This component will also finance learning events, study tours, strategic communication and regional dialogues and coordination on relevant topics such as forest plantations, forest products, wildlife, protected area management, and nature-based tourism.

**Subcomponent 4.1: Project Management and Monitoring**

*Total: US\$6,556,476*

*IDA financing: US\$4,101,476*

*GEF co-financing: US\$475,000*

*CCEFCF: US\$1,920,000*

*Implementation: DOF, PAFOs*

111. **The objective of this subcomponent is to provide effective and timely project management to LLL.** The subcomponent will finance works, goods, non-consulting services, consulting services, and incremental operating costs to support the following activities.

**Activity 4.1.1. Fiduciary and technical team US\$6,306,476 (US\$4,400,476 IDA; US\$270,000 GEF; US\$ 1,906,000 CCEFCF)**

112. Project management and technical teams in the NPCU, teams at partner ministries and sub-PCUs at provincial levels will be formed by a combination of government staff and supporting consultants hired by MAF, as well as GoL Volunteers. See tables A2.1, A2.2, and A2.3 below for a list of national, provincial and district team members. Consultants will be hired individually or

collectively via a firm contract by DOF using project funds. Importantly for the GoL, grants from trust funds have been mobilized for this purpose so the GoL can direct more IDA financing toward on-ground investment. To boost sustainability post-project, all consultants will be required to deliver targeted capacity development of GoL staff as part of their TORs, with metrics to monitor consultant delivery and GoL staff participation in the training.

**Table A2.2: Project management staffing support at national level**

<b>Position</b>	<b>Status</b> (Seconded Government staff or Consultant hired by DOF)	<b>International or national</b>
National project coordinator	Government staff	N/A
2 National deputy project coordinators	Government staff (or consultant?)	N/A
Chief technical advisor (6 years)	Consultant	International
Communication advisor (part time)	Consultant	National
FM advisor (6 years)	Consultant	National
2 accountants	Consultants	National
Procurement advisor (6 years)	Consultant	National
Environmental risk and sustainability advisor (6 years)	Consultant	National
Social risk and sustainability advisor (6 years)	Consultant	National
Senior M&E advisor (6 years)	Consultant	National
International M&E advisor (part time)	Consultant	International
International livelihoods advisor (part time) (4 years)	Consultant	International
Livelihood (development) management advisor	Consultant	National
Natural resources management advisor	Consultant	National
International nature-based tourism advisor (part time)	Consultant	International
International forestry advisor (4 years)	Consultant	International
Senior rural engineer (roads, small irrigation, drainage, slope stabilization)	Consultant	National
Senior GIS advisor (part time)	Consultant	National

**Table A2.3: Project management staffing support at provincial level (each province)**

<b>Position</b>	<b>Status</b> (Seconded Government staff or Consultant hired by DOF)	<b>International or national</b>
Provincial Project Coordinator ok	Government staff	N/A
Provincial Deputy Project Coordinator ok	Government staff	National
International project facilitation and support	Consultant	International
FM ok	Consultant or Government staff	National
Procurement assistant	Government staff	National
Senior environmental risk and sustainability advisor ok	Consultant	National
Senior social risk and sustainability advisor ok	Consultant	National
M&E ok	Consultant or Government staff	National
Livelihoods ok	Consultant	National
Forestry and NRM ok	Consultant or Government staff	National
Senior rural engineer (roads, small irrigation, drainage, slope stabilization) ok	Consultant	National

**Table A2.3: Project management staffing support at district level (Extension team financed under 1.2.3)**

<b>Position</b>	<b>Status</b> (Seconded Government staff or Consultant hired by DOF)	<b>International or national</b>
District Project Coordinator	Government staff	N/A
Village development advisor (1 per 3-4 districts) different from village facilitators	Consultant	National
Natural resources management advisor (1 per 3-4 districts)	Consultant / Government staff	National
Village facilitators (1 per 3-4 villages)	Project assistant	National

**Activity 4.1.2. Monitoring, evaluation, and learning. US\$250,000 (US\$31,000 IDA; US\$205,000 GEF; US\$14,000 CCEFCF).**

113. This set of activities includes project M&E and other action research, monitoring of broader landscape and ecosystem health, cross-project monitoring exchanges and capacity development. To boost learning from project activities, institutional service delivery, transparency, and the timeliness and accuracy of results reporting, a highly skilled international M&E advisor will be hired by the DOF PCU to support the project team.

114. The project will take an adaptive project management approach based on learning; an innovation introduced by LLL in Lao PDR. The M&E system will inform the learning, but action research is also needed to measure key results areas that are often too complex for conventional project results frameworks. Impact assessments in these key areas include will be financed under activity 3.3.5.

**Subcomponent 4.2: Strategic communication, partnerships and investment coordination**

*Total: US\$260,000*

*IDA financing: US\$260,000*

*GEF co-financing: 0*

*CCEFCF: US\$1,920,000*

*Implementation: DOF and EPF*

115. **The objective of this subcomponent is to build partnerships and share knowledge through a robust knowledge management approach to convene and influence a wider cohort of actors beyond the direct project stakeholders.** The subcomponent will finance works, goods, non-consulting services, consulting services, and incremental operating costs to support the following knowledge and communications activities. Other key awareness campaigns and knowledge products will be developed under component 1 and 3 on a variety of topics.

**Activity 4.2.1 Partnership and fund raising for Green Growth. (EPF) US\$60,000 (US\$28,000 IDA; 0 GEF; US\$32,000 CCEFCF)**

116. This activity will help maximize and channel financing that contribute to sustainable forest landscapes, and the broader National Green Growth Strategy and includes dialogues, fundraising, roundtables, and so on.

**Activity 4.2.2 Strategic communication and leadership development (DOF) US\$100,000 (US\$68,000 IDA; 0 GEF; US\$32,000 CCEFCF)**

117. This activity will be carried out to advance the aims of all other components. It will in particular communicate project results that can assist in leveraging new financing. It will also support leadership development among GoL officials on landscape management.

**Activity 4.2.3 Regional joint dialogue (DOF) US\$60,000 (US\$44,000 IDA; 0 GEF; US\$16,000 CCEFCF)**

118. Dialogues will be supported in the Greater Annamites and broader Mekong region on biodiversity, resilient landscapes, nature-based tourism, and trade in forest products. Transboundary cooperation activities on wildlife and timber law enforcement (joint training, intel cooperation, etc.) are indicative early actions that can be strengthened as the agenda advances with neighboring countries in the context of the regional Mekong Forest Program, CITES, FLEGT, the World Bank / GEF Global Wildlife Program, and other entry points.



# Appendix C: LLL Climate Co-benefits

## Introduction

1. This document is an appendix to the PAD and summarizes the climate change mitigation and adaptation co-benefits generated by the Lao Landscapes and Livelihoods Project (LLL). The document follows the project design structure, and will outline for component 1, 2, and 3 the expected contribution to climate change mitigation and adaptation. Component 4 is not expected to provide climate co-benefits.
2. For more details on the project, see the PAD and Appendix B, Detailed Component and Activity Description.

### Component 1: Investing in Natural Wealth and Resilience in Forest Landscapes

3. Component 1 will generate the bulk of the project's climate adaptation and mitigation co-benefits, deriving from improved management of the forest landscape including protected areas, production forests, protection forests, and village forests, and the consequent reduced emissions from deforestation and forest degradation, while investing in climate resilience and response mechanisms to shocks such as flood, drought, forest fires, and erosion.

#### ***Subcomponent 1.1: Protected Areas and Nature-based Tourism***

4. The sub-component focuses on investing in national parks and other protected areas within targeted landscapes, defined by internationally significant biodiversity values and high potential for sustainably developing nature-based tourism, and by doing so, creating direct and indirect jobs and livelihoods opportunities.
5. **Mitigation co-benefits:** Co-benefits will result from: (a) improved management effectiveness of 8 targeted protected areas (PAs) for a total of over 1,500,000 ha, thus reducing deforestation and forest degradation; (b) investment in park ranger training and patrol teams, reducing illegal logging and other land use change inside the conservation forest areas; (c) investment in forest fire prevention and fighting, contributing to reduce outbreaks of fires and mitigate effects, thus reducing potential GHG emissions.
6. **Adaptation co-benefits:** Co-benefits will result from: (a) preparation of Community Action Plans to react to climate-related shocks such as forest fire, drought, floods, and landslides; (b) preparation of forest and land use plans that minimize climate hazards and increase resilience (stabilization of slopes next to waterways, reduction pioneering shifting cultivation, and so on); (c) use climate resilient materials for the construction of ranger stations, PA infrastructure, and tourism-enabling infrastructure.

#### ***Subcomponent 1.2: Sustainable Forestry and Resilient Village Infrastructure***

7. The subcomponent will promote solutions for improving forest management and restoration of degraded forestlands in: (a) forests managed by villages for production, protection and/or conservation objectives, (b) smallholder tree plantations, and (c) industrial tree plantations combined with smallholder/out-grower/agroforestry plantations. In all three systems the project will also support community-based climate-resilient green infrastructure for flood, landslide and drought risk reduction linked to sustainable forest management.
8. **Mitigation co-benefits:** co-benefits will result from: (a) reduced emissions from deforestation and forest degradation in 11 production forest areas (PFA) (875,000 ha) and 6 protection forest areas (PtFA) (1,260,000 ha) due to improved management effectiveness and updated forest management plans; (b) village forest management and village forest restoration grants will contribute to expand forest cover and generate additional long-term emission reductions; (c) investment in smallholder tree plantations will contribute to increase forest cover and reduce emissions from deforestation and forest degradation.

9. **Adaptation co-benefits:** co-benefits will result from: (a) preparation of Community Action Plans to react to climate-related shocks such as forest fire, drought, floods, and landslides; (b) preparation of forest and land use plans that minimize climate hazards and increase resilience; (c) forest restoration near waterways to reduce erosion and stabilize slopes; (d) construction of climate-resilient green infrastructure (such as small irrigation linked to upstream forest vegetation conservation, climate resilient feeder roads, and so on).

## **Component 2: Livelihoods Opportunities from Sustainable Forest Landscapes**

10. This component is closely linked to the natural resource planning and management activities in Component 1 and targets the same villages. There are three sub-components: (a) 2.1 Village Livelihood Block Grants to Village Development Funds, (b) 2.2 Vocational Training, and skills development (c) 2.3 Nature-based Tourism Business Leveraging Facility.

### ***Subcomponent 2.1: Village Livelihood Block Grants to Village Development Funds***

11. The project will finance villages in the three forest categories to select and implement forest-smart livelihood activities. The project will provide funding to Village Development Funds (VDF) in the form of village livelihood block grants (VLBGs). VDFs are managed by the villages themselves as revolving mechanisms through a Village Committee and are provided to households or groups as credits for specific farm and nonfarm income-earning activities based on specific criteria and risk management.

12. **Mitigation co-benefits:** co-benefits will result from agroforestry activities, contributing to soil stabilization and reduced emissions from deforestation and forest degradation.

13. **Adaptation co-benefits:** co-benefits will result from diversification of forest smart livelihoods activities and reduction of dependence to forest resources, thus increasing villagers' resilience to climate-related shocks.

### ***Subcomponent 2.2: Vocational training and skills development***

14. The project will support vocational training and skills development for local people in the same villages supported under Component 1 to enter the labor market or start micro-businesses. Training will be delivered in the village and through a scholarship system for selected youth to attend vocational schools in district or province capitals.

15. **Mitigation co-benefits:** co-benefits will result from improved of farm productivity and due to new skills acquired during the training, reducing time and need to clear forest land for pioneering cultivation, ultimately reducing GHG emissions.

16. **Adaptation co-benefits:** co-benefits will result from improved life skills (general hygiene, waste management, and so on) as result of the training, resulting in increased awareness of climate-related hazards and improved resilience to potential shocks.

### ***Subcomponent 2.3: Nature-based Tourism Business Leveraging Facility***

17. The project will finance the establishment and operating costs of a facility to encouraging private sector participation, especially in and around protected areas. The Facility will provide (a) Advisory services to tourism companies on product development, market surveys; (b) Financing for small public infrastructure, marketing, and other aspects of the local enabling environment for tourism development; (c) Training and capacity building for SMEs management and staff.

18. **Mitigation co-benefits:** co-benefits will result from reduced deforestation and forest degradation resulting from new nature based tourism products and services. Additional awareness, supervision and financing in and around protected areas and its forest cover will result in improved management.

### **Component 3: Institutions, Incentives and Information**

19. This component will finance governance-related activities. Issues such as policy and regulatory development, institutional capacity building, interagency law enforcement coordination for illegal wildlife trade, environmental and social risk management, land and forest tenure, climate change monitoring, and natural capital valuation and impact assessments will be supported by this component.

#### ***Subcomponent 3.1: Strengthening Institutions and Policies for Landscape Management***

20. The sub-component supports government institutions to strengthen and develop relevant public policy, strategy, regulations, and guidelines and to meet various international commitments. The subcomponent also supports a GoL-led multisector and multi-stakeholder platform and capacity building for GoL to inform decision-making, manage trade-offs and identify mutual opportunities across sectors.

21. **Mitigation co-benefits:** co-benefits will result from the continued support for third-party certification of PFAs under international best practices, resulting in improved forest management and reduced emissions from deforestation and forest degradation.

22. **Adaptation co-benefits:** co-benefits will result from the improved government capacity in regulating the industrial tree plantation and nature based tourism sectors, enabling more stringent environmental management requirements for companies and reduced risks for local communities.

#### ***Sub-component 3.2: Strengthening Institutions and Policies to Reduce Forest and Wildlife Crimes***

23. The subcomponent will support (a) strengthening and developing relevant public policy, strategy, regulations, and guidelines in coordination with and among agencies as relevant; (b) participating in and meeting various international commitments such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), in coordination with and among agencies as relevant; (c) developing and maintaining public awareness efforts and local networks on how to reduce wildlife and forest crime in coordination with and among agencies as relevant; (d) strengthening and implementing a GoL-led multiagency coordination platform on reducing wildlife and forest crimes (Lao Wildlife Enforcement Network [Lao-WEN]); (e) carrying out field activities by relevant national agencies, in cooperation with and among agencies when and where relevant; and (f) supporting the capacity of provincial agencies to implement field activities through Provincial Wildlife Enforcement Networks (P-WENs) in selected provinces.

24. **Mitigation co-benefits:** co-benefits will result from reduces emissions from deforestation and forest degradation, due to improved forest inspection and enforcement capacity to tackle illegal logging and forest encroachment.

#### ***Subcomponent 3.3: Information for Decision Support***

25. The project will support the information infrastructure for managing key environmental and social risks related to natural disasters and large-scale investments including (a) enhancing and implementing the policy framework for Strategic Environmental Assessments (SEA) and Environmental and Social Impact Assessments (ESIAs); (b) monitoring and reporting on UNFCCC NDC implementation; (c) building capacity to carry out natural capital accounting for decision-making; (d) enhancing the policy framework on land tenure recognition inside forestlands; and (e) carrying out impact assessments on key topics to complement the project Results Framework and learning.

# Appendix D: Selected Landscapes and Selection Criteria for Landscapes, PAs, and Villages in LLL

## Introduction

27. This document is an appendix to the PAD and summarizes the selected five landscapes in the Lao Landscapes and Livelihoods Project (LLL). The project will invest in 5 landscapes, 8 provinces and 1 Prefecture, 49 Districts, 8 PAs, 6 PtFAs, and 13 PFAs. Some Provinces and Districts overlap in two or three landscapes. Each landscape is described in table E.1 below.

28. For more details on the project, see the PAD and the tables E.2, E.3, and E.4 below on criteria for selecting Landscapes, Protected Areas, and Villages.

**Table E.1: Criteria for Landscape selection**

Province/District	Characteristics of the Landscape
<b>Landscape 1. Greater Nam Et - Phou Louey</b>	
<p><b>Provinces:</b></p> <ul style="list-style-type: none"> <li>Houaphan Province</li> <li>Luang Prabang Province</li> <li>Xieng Khouang Province</li> </ul> <p><b>Districts:</b></p> <p><i>Houaphan (6):</i></p> <ul style="list-style-type: none"> <li>Et</li> <li>Xiengkhor</li> <li>Hiem</li> <li>Houa Meung</li> <li>Xone</li> <li>Xam Neua</li> </ul> <p><i>Louang Prabang(5):</i></p> <ul style="list-style-type: none"> <li>Pakxeng</li> <li>Phonthong</li> <li>Phonxai</li> <li>Viengkhan</li> <li>Ngoi</li> </ul> <p><i>Xieng Khouang (1):</i></p> <ul style="list-style-type: none"> <li>Phoukhout</li> </ul> <p><b>PAs:</b></p> <ul style="list-style-type: none"> <li>Nam Et - Phou Louey</li> </ul> <p><b>PFAs:</b></p> <ul style="list-style-type: none"> <li>Phouliew</li> </ul> <p><b>PtFAs:</b></p> <ul style="list-style-type: none"> <li>Nam Sueng - Seng</li> <li>Nam Et - Nam Xam</li> </ul>	<p><b>Nature-based tourism.</b> Nam Et - Phou Louey is one of the first two designated national parks in the country. The site protects a rich biodiversity representative of the northern Highlands. It is currently best known for its ‘Nam Nern Night Safari’, one of the best nature-based tourism experiences. Options to expand nature-based tourism experiences within the reserve remain high, including the montane peaks, treks, and cultural and historical sites. But this will require greater investment and inclusion by the private sector to realize its potential.</p> <p><b>Illegal wildlife trade.</b> Houaphan Province is a notable transit site for illegal wildlife trade, while Luang Prabang is a major international tourism hub with associated wildlife trade issues and a transit node on the railway link between China and Vientiane.</p> <p><b>Disaster risks.</b> Forest fires are a perennial problem in Nam Et - Phou Louey National Park and surrounding agroforestry landscapes. There are no organized village fire prevention groups (village conservation volunteers), danger ratings, or creation of firebreaks to mitigate these threats. The area is also vulnerable to floods and landslides.</p> <p><b>VFM and plantations.</b> Luang Prabang and Houaphan Provinces have the potential to host smallholder teak and NTFP plantations and in the two PtFAs and PFA supported by the project.</p>

Province/District	Characteristics of the Landscape
<b>Landscape 2. Greater Phou Khao Khouay</b>	
<b>Provinces:</b> <ul style="list-style-type: none"> <li>• Bolikhamxay Province</li> <li>• Xaysomboun Province</li> <li>• Vientiane Province</li> <li>• Vientiane Prefecture</li> </ul> <b>Districts:</b> <i>Bolikhamxay (1):</i> <ul style="list-style-type: none"> <li>• Thapabath*<sup>23</sup></li> </ul> <i>Xaysomboun (2):</i> <ul style="list-style-type: none"> <li>• Hom*</li> <li>• Long Xan</li> </ul> <i>Vientiane Province (9):</i> <ul style="list-style-type: none"> <li>• Keo Udom</li> <li>• Thulakom</li> <li>• Kasi</li> <li>• Vang Vieng</li> <li>• Hinher</li> <li>• Feuang</li> <li>• Mad</li> <li>• Meun</li> <li>• Xanakharm</li> </ul> <i>Vientiane Prefecture(2):</i> <ul style="list-style-type: none"> <li>• Xaythany</li> <li>• Pak Ngeum</li> </ul> <b>PAs:</b> <ul style="list-style-type: none"> <li>• Phou Khao Khouay</li> </ul> <b>PFA</b> <ul style="list-style-type: none"> <li>• Phou Gneuy</li> <li>• Nongpet - Naxeng</li> </ul> <b>PtFAs:</b> <ul style="list-style-type: none"> <li>• Nam Ngiep - Nam Mang</li> </ul>	<p>Phou Khao Khouay NPA straddles four provinces and seven districts. The southern perimeter districts of the NPA are linked to the Vientiane urban economy, although most of these districts' economies depend on rural livelihoods from forest products. The greater landscape includes industrial plantation and processing facilities managed by three different firms committed to sustainability standards.</p> <p><b>Nature-based tourism.</b> As one of the closest PAs to Lao PDR's capital and the most well-known PAs in the country, Phou Khao Khouay NPA itself has an un-met potential for supplying nature-based tourism demand and tourism concession models, with excellent road access from three hydropower schemes. The site also has unparalleled potential for increasing awareness and interest in biodiversity conservation by the general public through tourism, as it could easily be marketed and frequented by a wide variety of local markets, including student and school groups, urban civil society, and decision-makers. Its training potential for environmental education aimed at many diverse, domestic target groups is very high.</p> <p><b>Illegal wildlife trade.</b> Vientiane Capital is a hub for transnational illegal wildlife trade.</p> <p><b>Controlled wood certification for SFM.</b> Phak Beuk PFA, Bolikhamxay, and Nongpet Naseng PFA in Vientiane Province are forests currently certified by FSC.</p> <p><i>Potential agreements with tree plantations:</i></p> <p><b>Vientiane Province.</b> Bourapha company has eucalyptus plantations in Nong Phet - Naxeng PFA stretching over Hin Hom and Maet Districts. Additional concessions in Phou Gneuy PFA span across Xanakharm District and Fuang District. In 2021, Bourapha will have a fully operational plywood mill in Hin Hom District and the intention to build an additional pulp mill if and when the concession agreement is signed.</p> <p><b>Disaster risk management.</b> Forest fires are a perennial problem in Phou Khao Khouay NPA and surrounding agroforestry landscapes. There are no village fire prevention groups (village conservation volunteers), danger ratings, or coordinated creation of firebreaks. There are three reservoirs inside the NPA which are strategic for Vientiane Capital water supply and will benefit from good forest management to maintain ecosystem services.</p>

<sup>23</sup> Districts with \* (Thapabath, Hom, and Khamkeut) appear in 2 landscapes, and are therefore counted once only in the total count.

Province/District	Characteristics of the Landscape
<b>Landscape 3. Northern Annamites</b>	
<p><b>Provinces:</b></p> <ul style="list-style-type: none"> <li>• Xieng Khouang Province</li> <li>• Xaysomboun Province</li> <li>• Bolikhamxay Province</li> </ul> <p><b>Districts:</b></p> <p><i>Xieng Khouang (2):</i></p> <ul style="list-style-type: none"> <li>• Khoun</li> <li>• Mokmay</li> </ul> <p><i>Xaysomboun (2):</i></p> <ul style="list-style-type: none"> <li>• Thathom</li> <li>• Hom*</li> </ul> <p><i>Bolikhamxay (6):</i></p> <ul style="list-style-type: none"> <li>• Paksan</li> <li>• Vienthong</li> <li>• Bolikhanh</li> <li>• Papkading</li> <li>• Xaychamphone</li> <li>• Khamkeuth*</li> </ul> <p><b>PAs:</b></p> <ul style="list-style-type: none"> <li>• Tor Sip</li> <li>• Phou Samsoum (pending denomination)</li> </ul> <p><b>PFA:</b></p> <ul style="list-style-type: none"> <li>• Houy Soup</li> <li>• Pak Buek</li> <li>• Phoupasang - Pounghok</li> <li>• Photume</li> </ul> <p><b>PtFAs:</b></p> <ul style="list-style-type: none"> <li>• Nam Mouane - Nam Gnouang</li> </ul>	<p><b>Nature-based tourism.</b> Xieng Khouang Province's Tor Sip Provincial Protected Area (PPA) and Phou Samsoum represent nature-based tourism attractions for their unique high- mountain ecosystem and the existing tourism hub of the Plain of Jars, Lao PDR's second United Nations Educational, Scientific and Cultural Organization World Heritage Site, inscribed in 2019. Tor Sip and Phou Samsoum encompass the second highest mountain (2,700 m) and third highest mountain (2,640 m) in the country and support unique montane forest vegetation and range-restricted biodiversity. Tor Sip PPA in Lao PDR is contiguous with Pu Mat National Park in Vietnam, one of Vietnam's best-managed reserves, with exceptional wet evergreen biodiversity. These mountain landscapes are attractive to tourists, for panoramic scenic views, cool weather, and unusual flora and fauna. Yet, there is negligible tourism, and trans-boundary tourism Memoranda of Understanding with Vietnam could increase visitor numbers from Pu Mat.</p> <p><b>Disaster risk management.</b> Forest fires are a seasonal problem in the two districts. There are no village fire prevention groups (village conservation volunteers), danger ratings, or coordinated creation of firebreaks.</p> <p><i>Potential agreements with tree plantations:</i></p> <p>Khamseng company requested 3,600 ha in Pak Bua PFA and also in Bolikham District.</p> <p>Mekong Timber Plantations company requested potential 1,130 ha in Phou Tum PFA and also in Bolikham District.</p> <p><b>VFM.</b> There is potential for smallholder NTFP and eucalyptus plantations in Nam Mouane - Nam Gnouang PtFA.</p> <p><b>Poverty.</b> The two districts of Mok and Kham have high poverty concentrations.</p>



Province/District	Characteristics of the Landscape
<b>Landscape 4. Khammouane biodiversity complex</b>	
<p><b>Provinces:</b></p> <ul style="list-style-type: none"> <li>• Khammouane Province</li> <li>• Bolikhamxay Province</li> </ul> <p><b>Districts:</b></p> <p><i>Khammouane (9):</i></p> <ul style="list-style-type: none"> <li>• Nakai</li> <li>• Gnommalath</li> <li>• Boualapha</li> <li>• Hinboun</li> <li>• Khounkham</li> <li>• Mahaxay</li> <li>• Thakek</li> <li>• Xebangfay</li> <li>• Xayboathong</li> </ul> <p><i>Bolikhamxay (1):</i></p> <ul style="list-style-type: none"> <li>• Khamkeut*</li> </ul> <p><b>PAs:</b></p> <ul style="list-style-type: none"> <li>• Phou Hin Poun</li> <li>• Nakai Nam Theun</li> <li>• Hin Nam No</li> <li>• Khoun Xe-Nong Ma's</li> </ul> <p><b>PFA:</b></p> <ul style="list-style-type: none"> <li>• Dong Phousoy</li> <li>• Nakathing - Nongkapath</li> </ul> <p><b>PtFAs:</b></p> <ul style="list-style-type: none"> <li>• Phoulouang - Phoukhaonok</li> <li>• Lad Duea - Lad yang</li> </ul>	<p><b>Nature-based tourism.</b> Khammouane Province's prospects for green economic growth and poverty reduction are promising, as the province is blessed with world-class caves, karst mountain landscapes, diverse native forests, and a network of PAs that represent one of the world's top biodiversity hot spots and globally significant biodiversity values. There is a growing market for nature-based tourism throughout the province via 'The Loop', which passes multiple PAs including two of Lao PDR's first three national parks, Nakai Nam Theun and Hin Nam No, as well as Phou Hin Poun NPA and its many caves and adventure tourism options and Khoun Xe-Nong Ma's remote, outback jungles.</p> <p><b>Illegal wildlife trade.</b> Wildlife and forest crimes severely threaten the biodiversity, including trans-boundary international crimes and small-scale widespread illegal hunters from Vietnam.</p> <p><b>Forest products and plantations.</b> At the same time, the province is attracting continued interest from timber producers and in the past had an active timber processing sub-sector. Portions of Nakathing PFA and Dong Phousoi PFA have been certified for controlled wood, with high potential for PSFM and village forestry. Dong Phousoi PFA already hosts sustainable eucalyptus tree plantations from MTP company, and other companies have manifested interest in expanding operations in the PFA. Stora Enso company has manifested interest in Na Ka Tin - Na Ka Pa PFA in Boualapha District while MTP company has requested 600 ha in the same PFA but in Xe Bang Fai and Ma Ha Say Districts.</p> <p><b>Disaster and climate risks.</b> Khammouane is highly vulnerable to floods, which have increased in severity over the last two decades. In 2019, large parts of the Xe Ban Fai river basin were flooded for over two weeks, with serious damage to the people and the economy. Irrigated rice and other high-value agricultural products are produced downstream, but these farming villages are vulnerable to repeated floods in part due to upstream forest loss and degradation. Nam Theun 2 hydropower facility will face costly erosion risks if neighboring Nakai Nam Theun National Park were to experience significant forest loss and degradation, including forest fires within the watershed.</p> <p><b>Poverty.</b> Khammouane hosts some of the poorest districts nationwide, and provincial and key stakeholders (like the Nam Theun 2 Power Company [NTPC]) have a long commitment to continuous engagement and support with the most fragile communities.</p>

Province/District	Characteristics of the Landscape
<b>Landscape 5. Savannakhet conservation and production landscape</b>	
<b>Province:</b> <ul style="list-style-type: none"> <li>Savannakhet Province</li> </ul> <b>Districts:</b> <i>Savannakhet (7):</i> <ul style="list-style-type: none"> <li>Songkhone</li> <li>Thapangthong</li> <li>Phin</li> <li>Phalanxay</li> <li>Xonbully</li> <li>Xepon</li> <li>Vilabuly</li> </ul> <b>PAs</b> <ul style="list-style-type: none"> <li>Lavine Laverne</li> </ul> <b>PFA</b> <ul style="list-style-type: none"> <li>Dong Sithouane</li> <li>Dong Ka Pho</li> </ul>	<p><b>Nature-based tourism.</b> Savannakhet Province has a few PAs and nature tourism attractions worth considering, some of which have had initial success in tourism development, including Dong Natad for community-led day treks, the Eld's deer forest, and Dong Phou Vieng and Phou Xang Hae for multi-day treks (these PAs are not funded by the project, but potential private investors could apply to the nature-based tourism business leverage facility). Other parks in the province known for biodiversity that are yet to be developed for tourism but hold potential include Laving Laverne NPA (directly supported by LLL), which has globally significant endemic Annamite species contiguous with Khouan Xe Nongma in Khammouane Province, Xe Bang Nouan NPA, which has gaur and other large species (not funded by LLL), and Xe Champone Wetlands (not funded by LLL), one of two of Lao PDR's Ramsar sites that is habitat for the country's last remaining breeding population of wild Siamese crocodiles.</p> <p><b>Pulp and paper.</b> The presence of the largest pulp and paper mill in the country (Sun Paper) and existing 30,000 ha private eucalyptus plantation in Xepon District gives the province a high potential for smallholder tree plantations and out-grower schemes but also poses risks of losing access to land and resources for rural forest-dependent communities.</p> <p><b>Third-party certification.</b> Forest management certification is currently in place in Dong Sithouane PFA while Kapho PFA is certified for controlled wood.</p> <p><b>Boosting village forestry.</b> Due to the long-term PSFM engagement PFAs, there is high potential to scale up village forestry and enhanced livelihoods opportunities, also taking advantage of economic opportunities and market access from the existing main road connecting Thailand and Vietnam. There is a chance to promote links to Savannakhet University.</p> <p><b>Disaster risk management (forest fires, flood, drought, and erosion risk).</b> There is a high risk of drought and subsequent flooding. This is the result of unplanned forest fire prevention and of unplanned irrigation and water management, which, exacerbated by climate change, requires more integrated support to stop erosion of agriculture land and possible encroachment into forest areas.</p>

**Table E.2 Criteria for Landscape selection**

No.	Criteria	Note
1	PA value in terms of global biodiversity significance	Focus is on the uniqueness of the biodiversity. It includes national parks and national and provincial PAs, as well as species and habitat management areas, and has potential for World Heritage Site designation.
2	Nature-based tourism potential in the landscape	Tourism occurs throughout the landscape across multiple natural and built assets.
3	Active or high potential for forest plantation investment in PFAs	Industrial plantations are expanding, which have potential for poverty reduction by creating jobs and securing livelihoods while also providing opportunities for more sustainable land use by reducing pressure on native forest and PAs. Growing demand for land has the potential to change land use patterns in the country, requiring environmentally, socially, and fiscally sound private investments and good governance.
4	PFA suitable for implementing village forestry and PSFM	This includes areas that (a) have been independently assessed for FSC forest management or controlled wood certification, (b) have recently implemented village forestry or SFM investments, or (c) are important for connectivity of forest cover across the landscape. Village forestry could restore forest cover and secure the production functions of these forests.
5	National protection forest suitable for securing watershed services and implementing village forestry	This includes national protection forests important for connectivity of forest cover across the landscape. National protection forests are the largest land use category in Lao PDR and are highly degraded. Village forestry could restore forest cover and secure the watershed functions of these forests to reduce risks from flooding, erosion, and drought.

6	Presence of natural hazards to villages and infrastructure in or downstream from the forest estate	Flood risk maps are under preparation. There seems to be an overlap between areas with flooding recurrence and areas with potential forest plantation expansion. Project preparation will include a vulnerability assessment of landslide, flood, and drought risks.
7	Illegal wildlife or timber trade present in the area	Parts of the illegal wildlife and timber trades are geographically defined in and around PAs, along certain transportation corridors, gateways, or access points.
<b>No.</b>	<b>Supporting Criteria</b>	<b>Note</b>
8	Poverty rates by province or district	There is a reasonably strong correlation between poverty rates, forest cover, remoteness, and ethnic minorities.
9	Commitment of the province and key stakeholders to take a multi-sector spatial approach	The GoL has experience in multi-sector spatial planning and development: (a) PA management plans developed by multi-sector PA supervisory committees, (b) forest landscape management frameworks prepared, and (c) larger-scale land use plans and river basin management plans prepared.
10	Commitment of villagers to participate in the project.	Project resources will center on participatory community approaches to village forestry, conversation, and livelihoods and could complement sustainable private sector engagements in industrial plantations and nature-based tourism.

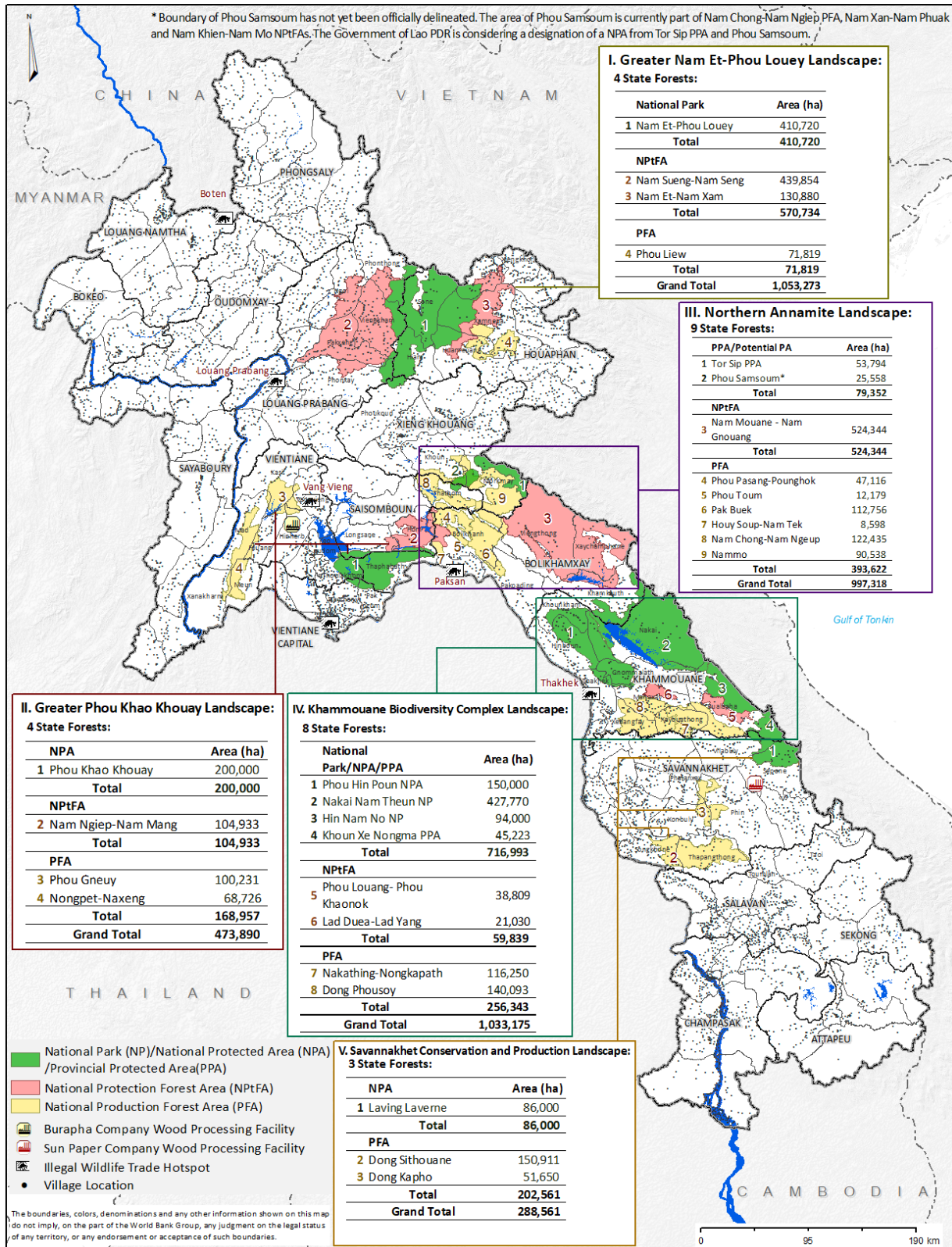
**Table E.3 Criteria for PA selection**

<b>No.</b>	<b>Criteria</b>
1	PA in LLL target landscape
2	PA supporting globally and nationally significant biodiversity
3	PA with nature-based tourism potential

**Table E.4 Criteria for village selection**

<b>No.</b>	<b>Criteria</b>
<b>Villages inside or around PAs (supported under Subcomponent 1.1 and activity 2.1.1)</b>	
1	Guardian villages located in immediate proximity to high biodiversity zones within or bordering targeted PAs
2	Guardian villages located in immediate proximity to (proposed) nature-based tourism assets
<b>Villages inside or around PFAs and PtFAs (supported under Subcomponent 1.2 and activity 2.1.2)</b>	
3	Villages with relatively good forest cover and interest to adopt VFM and take advantage of economic opportunities for wood products and NTFP
4	Villages with stated desire to restore degraded village forests
5	Villages in which the administration and most of the community are supportive of VFM or have been trained in PSFM
6	Villages vulnerable to forest fire, floods, droughts, erosion, and landslides and opportunities for climate and disaster risk reduction

## The Target Landscapes of the LLL Project



# Appendix E: LLL Gender Action Plan

## Introduction

1. This document is an appendix to the PAD and is part of the project documentation. For additional information on the project, refer to the PAD and Appendix B on Detailed Component and Activity Description.

### Gender Action Plan for LLL

2. **The project is gender tagged, including actions to address the project-relevant gender gaps identified and indicators to measure them, to ensure differential impacts are addressed.** A gender analysis informed the development of the Gender Action Plan, aimed at assisting the client to enhance gender equality and contribute to closing targeted gender gaps that could potentially limit the effectiveness of the project. The project design team has considered gender roles and their implications for project beneficiaries in preparing and implementing forestry, tourism, conservation and livelihoods activities, ESF documentation, citizen engagement, and grievance redress arrangements.

3. **LLL's Gender Action Plan has been largely based upon two recent and relevant gender assessments in the context of forest landscapes in Lao that describe key gender gaps, actions to address them, and indicators to monitor progress toward gender-related outcomes.**<sup>24</sup> These are the Gender Integration Development (GID) study for the World Bank-supported Lao PDR Emissions Reduction Program<sup>25</sup>. The other was a GIZ-supported gender assessment and gender action plan for an associated project to be financed by the Green Climate Fund support project to the Emissions Reduction Program (ER-P), the findings of which were incorporated in the GID study. The study provides a comprehensive assessment of the importance of land-based livelihood activities for women in six provinces of northern Lao PDR, for the four main ethnic groups found in these landscapes (Tai-Kadai, Mon-Khmer, Hmong-Mein, and Sino-Tibetan). It shows that forestry-based activities are generally more important to the latter three groups than the Tai-Kadai.

4. **The findings highlight many gender gaps (proportionate differences between men and women) related to the access to, use of, and control over both agricultural lands and forests.** The major gender gaps described in detail in the report are synthesized as follows:<sup>26</sup>

- (a) **Less access to communal lands/forests.** The study results suggest that communal/customary land areas in many villages have become smaller due to land 'expropriations' by elites and foreign companies, affecting poor households and women disproportionately.
- (b) **Lack of inclusion and decision-making power in participatory land use planning.** Land use planning approaches have not been fully inclusive of women and other marginalized groups.
- (c) **Workloads of women are greater than men.** Women's work burdens (home and farm) constrain them from seeking out and undertaking new agroforestry or forest-related livelihood-enhancing opportunities. Women spend more time collecting (and selling) NTFPs and collecting firewood than men.
- (d) **Lack of awareness of, and benefits from, forest landscape-related programs.** Few women, and less women than men, are aware of, or benefiting from, forest landscape-related interventions/forest-smart activities.
- (e) **Lack of gender awareness and capacity within forestry agencies.** The study highlighted that the provincial and district forestry agencies have a limited awareness of the relevance of gender-responsive measures.

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<sup>24</sup> Gaps, actions, and indicators are the three areas that address the World Bank's gender strategy and 'gender tagging' requirement.

<sup>25</sup> FCPF. 2019. *Gender Integration Development (GID) Study for the Lao PDR Emissions Reduction Program (ER-P)*.

<sup>26</sup> While these gaps were identified and verified in the six northern provinces included in the ER-P, they have been confirmed as being also relevant to the LLL program areas.

## Relevance of These Gender Gaps for LLL, Actions to Address Them, and Indicators in the Results Framework

5. **This Gender Action Plan includes the following key project-related gender gaps, actions to address them, and indicators to monitor progress.**

6. Component 1 focuses on investments in natural capital, particularly in national parks and PAs. It includes support to forest and land use planning and management and aims to catalyze nature-based tourism initiatives (that is, it also will strengthen human capital).

(a) Gaps:

- (i) The main gender gaps applicable here relate to participation: women and the poorest and minority ethnic community members in many villages have been virtually excluded from both participation and decision-making in land and forest use planning at local and higher levels of governance.
- (ii) Another gender gap relevant here relates to capacity and lack of technical skills of women to be involved in forest-related initiatives and employment. Compared to men, women have fewer economic opportunities and skills especially in forestry and conservation, and some tourism activities.

(b) Actions:

- (i) Nature-based tourism and other forest/conservation initiatives supported by LLL, such as trainings and creation of new jobs, will ensure they are accessible and applicable to women as well as men.

(c) Indicators:

- (i) PDO Indicator 4: Beneficiaries of job-focused interventions (number of females; target: 50 percent).

7. The main focus of Component 2 lies in enhancing livelihood opportunities.

(a) Gap:

- (i) Compared to men, women have less access to credit or grants for forest-related activities and livelihood improvements.

(b) Actions:

- (i) Technical assistance and communication efforts will be targeted to women household members on what the VLBGs are and how to access, implement, and report on them.
- (ii) Targeting. In addition, the project will earmark 50 percent of the revolving funds in the VLBGs for women-owned or co-owned household sub-projects.

(c) Gap:

- (i) Women (and those more vulnerable) have less access to extension and outreach services in the project areas than do men.

(d) Actions:

- (i) LLL will strengthen extension and outreach to mobilize and facilitate village empowerment, resource management, and livelihoods development in an equitable way.
- (ii) LLL will facilitate the active and effective participation of women in community meetings and locate and time trainings to accommodate women's work schedules and preferences to enhance equitable participation and outreach. This can be done in coordination with LWU, Lao National Front for Construction (LNFC), and local women's organizations to build on existing networks and best practices for outreach.

- (iii) The livelihood activities supported cannot merely increase women's workload and ideally will lower them (for example, through less time spent collecting firewood and water and cooking). The project will explore actions to ensure women can receive direct payments, for example, via cellphone, or new local bank accounts.

(e) Indicator:

- (i) Intermediate Result Indicator on Gender: Villagers using extension or outreach services, number (percentage female).

(f) Gap:

- (i) Village livelihood grants to communities have been reaching less vulnerable households disproportionately more than the MVHs.

(g) Action:

- (i) A proportion of these grants (20 percent) will be earmarked to ensure they go to the MVHs in the villages supported and female-headed households will be monitored.

8. Component 3 includes investments in strengthening institutions, incentives, and information. It will review legal and policy frameworks and guidelines for PA management, PFAs, and village forestry regulations.

(a) Gaps:

- (ii) Low participation and capacity of government forest agencies at various levels, including LWU, to implement gender-responsive activities.
- (iii) Forest policy gender gap: Laws, regulations, and guidelines do not consider gender as an explicit factor in forest protection, user rights, and benefit sharing.

(b) Actions:

- (i) LLL will engage gender experts to analyze and recommend revisions to relevant regulations and guidelines to reflect gender considerations critical for improved resource management, forest protection, monitoring, equal user rights, and benefit sharing.
- (ii) LLL will include female representatives on project-related committees, working groups, and so on and ensure local women's views and gender issues are captured in reviews of legal and policy frameworks and policy briefs.
- (iii) LLL will contribute to actions (for example, in collaboration with other projects focusing on land reforms) that strengthen a village's legal rights to use and benefit from forestlands and, within this, strengthen the rights of women within the village to access and use forestlands.

(c) Indicator:

- (i) Intermediate Result Indicator 9: Share of target beneficiaries with a score 'Satisfied' or above on project interventions (percentage female).

#### **Enhanced Gender Responsiveness in LLL Management Activities**

9. **Good gender practices suggest setting targets for the percentage of the project implementing team that are women that play managerial/leadership roles and an additional target of the female staff that are ethnic minorities especially at the local level.**

10. **Indicators to monitor project management performance (tracked outside the Results Framework) will include**



4. Percentage of women appointed to managerial positions in the LLL PCUs,
5. Assessment of gender-related outcomes after Year 1, and
6. Resolution of ESF grievances lodged by village women relating to the LLL.

11. **In addition, impact assessments that include gender-disaggregated data will be undertaken to analyze a range of impacts on women and vulnerable households.**

# Appendix F: Economic and Financial Analysis of LLL

## Introduction

13. This document is an appendix to the PAD and is part of the project documentation. For additional information on the project, refer to the PAD and Appendix B on Detailed Component and Activity Description.

## Economic and Financial Analysis (EFA) for LLL

14. The benefits of the project derive from sustainable forest management and increased private sector development and livelihood opportunities in the Project areas. Specifically, benefits are: i) increased household income from NTFPs, NBT, tree plantations, and agriculture; ii) NBT sector development; iii) increased sustainability of industrial tree plantation development; iv) water shed protection and natural disaster risk reduction; and v) biodiversity protection and carbon sequestration.

15. A feasible subset of these benefits is quantified in the economic and financial analysis. The analysis is undertaken for six components of the Project (Table 1). No analysis is undertaken for “Institutions, Incentives, and Information” (Component 3) and “Project Management, Monitoring and Learning” (Component 4). The cost of these components is rather allocated to each of the six components in proportion to their costs.

**TABLE 1: Project activities and benefits**

Component	Activity area	Main Benefits	Quantified benefits
Comp 1.1	Sustainable management of PAs	<ul style="list-style-type: none"> <li>• NTFPs;</li> <li>• Biodiversity protection;</li> <li>• Carbon sequestration;</li> <li>• Watershed protection services &amp; natural disaster reduction</li> </ul>	<ul style="list-style-type: none"> <li>✓ NTFPs;</li> <li>✓ Carbon sequestration</li> </ul>
Comp 1.2	Sustainable forest management in PtFAs	<ul style="list-style-type: none"> <li>• NTFPs;</li> <li>• Carbon sequestration;</li> <li>• Watershed protection services &amp; natural disaster reduction</li> </ul>	<ul style="list-style-type: none"> <li>✓ NTFPs;</li> <li>✓ Carbon sequestration</li> </ul>
Comp 1.2	Sustainable production forestry in PFAs	<ul style="list-style-type: none"> <li>• Yields;</li> <li>• Carbon sequestration;</li> <li>• UXO clearance cost savings;</li> <li>• Watershed protection services</li> </ul>	<ul style="list-style-type: none"> <li>✓ Yield;</li> <li>✓ Carbon sequestration;</li> <li>✓ UXO clearance cost savings</li> </ul>
Comp 2.3 & Share of 1.1; 2.2	Nature Based Tourism	<ul style="list-style-type: none"> <li>• Private sector tourism development; Jobs and income;</li> <li>• Tourist consumer surplus;</li> <li>• Biodiversity protection</li> </ul>	<ul style="list-style-type: none"> <li>✓ Private sector tourism development;</li> <li>✓ Jobs and income</li> <li>✓ Tourist consumer surplus</li> </ul>
Comp 1.2	Resilient Village Infrastructure	<ul style="list-style-type: none"> <li>• Agricultural yields from irrigation;</li> <li>• Tourism development and disaster risk reduction from small civil works;</li> <li>• Natural disaster risk reduction from land stabilization</li> </ul>	<ul style="list-style-type: none"> <li>✓ Agricultural yields;</li> <li>✓ Tourism development</li> </ul>
Comp 2.1 & Share of 2.2	Village Livelihood Block Grants (VLBGs)	<ul style="list-style-type: none"> <li>• NTFP production and marketing;</li> <li>• Non-forest income activities (e.g., poultry, vegetables and high value crops);</li> <li>• Biodiversity protection</li> </ul>	<ul style="list-style-type: none"> <li>✓ NTFPs;</li> <li>✓ Non-forest income activities</li> </ul>

16. The economic analysis applies a social discount rate of 12% for calculation of present values (PV) and net present values (NPV).<sup>27</sup> Carbon sequestration benefits in the low case are valued at a carbon price of US\$ 5 per tCO<sub>2</sub>e. This is the indicative price that Lao PDR may receive according to the Governance, Forest Landscapes and Livelihoods (GFLL) Project in Northern Laos and the World Bank's Northern Laos Emission Reductions Payments Project. Carbon prices of US\$40 and US\$80 per tCO<sub>2</sub>e are also applied in accordance with the recommended values of the World Bank "Guidance note on shadow price of carbon in economic analysis."<sup>28</sup> The time horizon of the economic analysis is 20 years from 2021 to 2041, except for tree plantations in the PFAs, for which the time horizon extends 24 years (smallholder teak plantation rotation) from project completion in 2027 to 2051.

17. Quantified local benefits (i.e., benefits excluding CO<sub>2</sub>e sequestration benefits) over the time horizon of the analysis is US\$ 39 million (PV) giving NPV of US\$ 1.6 million and an economic internal rate of return (EIRR) of 13.1%. The carbon sequestration benefit of the Project is 9.7 million tons of CO<sub>2</sub>e (MtCO<sub>2</sub>e) over the time horizon of the analysis. At a carbon price of US\$ 5 per tCO<sub>2</sub>e the EIRR is 23.2% with 80% of carbon sequestration coming from sustainable management of the PAs. The EIRR increases to 120% and 190% with carbon prices of US\$40 and US\$80 per tCO<sub>2</sub>e.

18. About 50% of quantified *local* Project benefits are from sustainable forest management in PAs, PtFAs and PFAs. This includes increased NTFP consumption and income from PAs and PtFAs and efficiency gains (improved yields; UXO clearance cost savings) in tree plantations in PFAs. The remaining 50% are from NBT development, village infrastructure and the VLBGs.

**TABLE 2: Project benefits and costs, US\$ million (PV @ 12%)**

	Local benefits	CO <sub>2</sub> e benefits			Total benefits		
		\$5/t	\$40/t	\$80/t	\$5/t	\$40/t	\$80/t
Sustainable management of PAs	7.9	16.7	161	323	24.6	169	331
Sustainable forest management in PtFAs	4.7	3.6	31.6	63.3	8.3	36	68
Sustainable production forestry in PFAs	7.0	0.5	5.1	10.2	7.5	12.1	17.2
Nature Based Tourism	7.8				7.8	7.8	7.8
Resilient Village Infrastructure	5.4				5.4	5.4	5.4
Village Livelihood Block Grants (VLBGs)	6.1				6.1	6.1	6.1
Total benefits	39.0	20.8	198	396	59.8	237.2	435.3
Project cost	-37.4				-37.4	-37.4	-37.4
<b>NPV</b>	<b>1.6</b>				<b>22.4</b>	<b>200</b>	<b>398</b>
<b>EIRR</b>	<b>13.1%</b>				<b>23.2%</b>	<b>120%</b>	<b>190%</b>

<sup>27</sup> This follows from the recommendation in World Bank "Discounting Costs and Benefits in Economic Analysis of World Bank Projects" dated May 9, 2016 of a social discount rate at twice the economic growth rate. GDP per capita growth was nearly 6% per year from 2009 to 2019 in Lao PDR according to World Bank Development Indicators (World Bank, 2020).

<sup>28</sup> Note dated November 12, 2017. Carbon prices increase at an annual rate of 2.25%.

# Appendix G: Lessons Learned and Incorporated in LLL

1. **The management of the forests and forestland estate is undergoing a rapid state of change catalyzed by the 2016 Prime Minister Order 15 (halting logging and timber exports) and the new 2019 Forestry Law.** Some of the conservation forests (also known as NPAs) are being redesignated as national parks, while most of the rest of the estate will include VFM. Degraded lands in national production forests have been opened to industrial plantations, which are expanding or will do so soon.
2. **Lao conservation forests possess globally significant biodiversity and habitat integrity, which is a comparative advantage for tourism.** No other region of the world has so high a rate of endemism or endangerment among its biota. Conservation forests, also referred to as PAs, total 15 percent of the country and are homes to some of the poorest households, comprising diverse ethnic groups. Three ecosystems are high priority, globally outstanding conservation landscapes: (a) the wet evergreen forest ecosystem in the Annamites bordering Vietnam arguably having the highest biodiversity, (b) the massive karst formations of central Lao PDR, and (c) the montane forest ecosystem in the Greater Annamites occurring in the higher elevations generally with high species uniqueness.
3. **Three priority ecosystems are fairly well represented within the PA system, although some notable gaps remain.** To strengthen its commitment to conservation, the Government announced the designation of the first two national parks in February 2019, including Nakai Nam Theun National Park, the largest tract of wet evergreen forest in the world, and Nam Et Phou Louey National Park. Hin Nam No, a karst massif which is currently being assessed for natural World Heritage Site designation, was redesignated to become a national park in January 2020. DOF has identified six more PAs as candidates for upgrading to national park status, as nature-based tourism has become a high priority in the country's most recent strategic policy frameworks.
4. **Tourism in Lao PDR is driven by the growing regional demand for opportunities to interact with conservation landscapes and wildlife, as well as traditional cultures.** Tourism could increase from the current 4 percent of the economy to the global average of 10 percent, requiring protection of landscapes with good forest, water, and wildlife assets. Yet, the PAs that anchor these landscapes face challenges including low budgets, staffing, and capacity; weak concession management; overlapping institutional mandates; infrastructure expansion; low revenues; and tourism products that respond to regional demand.
5. **Lessons are informed by relevant current World Bank lending operations** including SUPSFM (P130222) and the IDA/GEF-supported LENS2 (P128393). The operation will also continue the close coordination with the IFC and FIP-supported Lao Smallholder Forestry Project. The operation will also be informed by the Lao PDR Green Growth Development Policy Operation (P171431) series, the REDD+ Readiness grant (LA - FCPF Readiness Grant, P125082) and emerging ER-P (FCPF Carbon Fund: Lao PDR Northern Laos Emission Reduction Payments Project, P165751), regional disaster risk management project (Lao PDR Southeast Asia Disaster Risk Management Project, P160930), Agricultural Competitiveness Project (P161473), Poverty Reduction Fund III (P157963) project, and integrated water management project (Additional Financing for Mekong Integrated Water Resources Management (Lao PDR), P159447).
6. **Lessons are also informed by non-lending World Bank operations including**
  - (a) Managing Forest Resources for Sustainable Development (IEG 2013),
  - (b) Project Performance Assessment Report: Lao People's Democratic Republic Sustainable Forestry for Rural Development Project (IEG 2018),
  - (c) A Case Study of the Lao PDR FIP: SUPSFM Project (World Bank 2019),
  - (d) Filling the data gap: FIP contribution to poverty alleviation and green growth (P167044) (World Bank 2020), and
  - (e) Lao PDR Green Growth Advisory Program (Exploring Lao PDR's Green Growth Potential, P162394 and Resilient Green Growth Programmatic Analytical and Advisory Services, P171011), which includes
    - (i) Lao PDR Forest Note: Toward Sustainable Forest Landscapes for Green Growth, Jobs, and Resilience (2020) (Forest Note for the Lao People's Democratic Republic, P168798),

- (ii) Lao PDR Landscapes Valuation (2020) (P169455),
- (iii) Lao Biodiversity: A Priority for Resilient Green Growth (2020) (P174103),
- (iv) Partnerships and Opportunities for a New Green Forest Economy in Lao PDR: Sustaining Forest Landscapes and Livelihoods (2019) (Sustainability in Lao PDR Forest, P164376),
- (v) Developing Nature-Based Tourism as a Strategic Sector for Green Growth in Lao PDR (2019) (P164372), and
- (vi) Environmental Challenges in Lao PDR: (2020).

**7. Below, detailed lessons and incorporation in the project design.**

**8. Lesson 1. Results Frameworks are limited by their nature, and to capture a fuller sense of project contributions to sustainability, impact assessments are needed to complement and promote learning.**

9. This lesson is incorporated in the project design by a dedicated activity to capture knowledge and reinforce learning through project monitoring and evaluation (M&E) as well as impact assessments carried out by the client. This work will inform adaptive project management and NRM.

**10. Lesson 2. Pursuing programmatic convergence of planning, policy, and projects across sectors and institutional boundaries can lead to durable outcomes that address complex environmental and development challenges. For example, coordination among World Bank, IFC, ministries, NGOs, firms, and others helped align the incentives now defined in the 2019 Forestry Law, allowing public-private partnerships to be increasingly viable.<sup>29</sup>**

11. This lesson is incorporated in the project design by strengthening and supporting multi-stakeholder and multi-sector advisory and policy groups, to foster strategic collaboration and formulate technical solutions to challenges.

**12. Lesson 3. Diversification and sustainability of income-earning opportunities and job creation in specific landscapes for specific villages can help reduce pressure on biodiversity and natural resources and boost resilience.<sup>30</sup> The Scaling-Up Participatory Sustainable Forest Management Project (P130222, SUPSFM) was successful in diversifying income-generating activities, with the additional income mostly spent on food, housing, or medical expenses. Despite not being directly advised by SUPSFM, village livelihoods grants were implemented through a revolving fund for households or groups, which brought benefits to a wider range of people by increasing social cohesion, financial security, and sustainability. The mechanism also created barriers to long-term positive impacts of village livelihoods grants, such as the exclusion of the poorest in some instances, who are more risk adverse and do not borrow from the village fund. The choice of livelihoods options was top-down and insufficiently linked to markets and natural resources, with weak follow-up technical assistance provided after the disbursement of the grants to the village. Under the Second Lao Environment and Social Project (P128393, LENS 2), the direct link between livelihood development and threat mitigation has proven effective in guardian villages located within or in close proximity to PAs. The link was formalized by binding development assistance to biodiversity in Village Conservation Agreements.**

13. This lesson is incorporated in the project design by (a) explicitly supporting the revolving mechanism of the VDFs, (b) strengthening targeting of the poorest households by earmarking 20 percent of VLBGs up front for early disbursement as grants for the MVHs selected by the village, (c) connecting VLBGs to village-centered NRM under Component 1, (d) strengthening

<sup>29</sup> World Bank. 2019. *A Case Study of the Forest Investment Program, SUFORD-SU*.

<sup>30</sup> World Bank. 2020. *Welfare and Forests: Lessons from Assessments of the FIP Co-funded Projects in Lao PDR and Mexico*.

extension and outreach to mobilize and facilitate village empowerment, resource management, and livelihoods development, and (e) strengthening Village conservation agreements and biodiversity conservation-oriented livelihoods in nature-based tourism.

**14. Lesson 4. Private sector-led tourism development has greater benefits for both employment and income generation for local people and greater investment and benefits for conservation than public-led.<sup>31</sup>**

15. This lesson is incorporated in the project design by supporting the development of institutional frameworks and establishing a new nature-based tourism business leveraging facility to support such private sector-led models that include communities and generate rural employment and multiplier effects in the local economy.

**16. Lesson 5. World Bank support for legal and regulatory reform of industrial timber concessions in the moist forests in Africa and East Asia has improved forest governance at the national level, enhanced transparency and accountability, put environmental standards in place, and increased the capture of legal revenues in the sector.<sup>32</sup> Universally recognized preconditions for successful smallholder forestry are (a) clear and unequivocal ownership of the land and the trees, (b) the certainty of attractive and reliable markets, (c) a robust technical package of practices that help minimize risk, and (d) sympathetic legal and regulatory frameworks and environment.<sup>33</sup>**

17. This lesson is incorporated in the project design by promoting a model for sustainable timber plantations centered on environmental sustainability, close involvement of and benefits to local communities, third-party certification, and at times agroforestry techniques. The model includes the adoption of free prior and informed consent, inter-cropping among planted trees in the early years of tree rotation, a first-option clause for local villages to access jobs at the plantation or buying agreements for small-scale out-growers, clearance of unexploded ordinance, and appropriate compensation to villages for the use of land. On the environmental side, this model divides plantations into three zones: (a) area planted with fast-growing species (70 percent); (b) area left for natural regeneration on steep slopes, riverbanks, and buffer zones (20 percent); and (c) area planted with indigenous tree species (10 percent).

**18. Lesson 6. Trade-offs among conservation, development, and poverty reduction goals can be better managed by addressing customary land and resource use claims ex ante and by more meaningfully incorporating community knowledge and livelihood needs into system design.<sup>34</sup>**

19. This lesson is incorporated in the project design by adopting the Community Engagement Frameworks and Community Action Plans that bring together World Bank Environmental and Social Standards (ESS) and community investment activities. In PAs and their buffer zones, villages develop VCAs as well which enshrine rights and responsibilities. Village management of forest resources is meant to also define rights and responsibilities.

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<sup>31</sup> World Bank. 2019. *Developing Nature-Based Tourism as a Strategic Sector for Green Growth in Lao PDR*.

<sup>32</sup> World Bank. 2019. *Developing Nature-Based Tourism as a Strategic Sector for Green Growth in Lao PDR*.

<sup>33</sup> IFC. 2018. *Diagnostic Assessment of Out-grower Schemes and Demonstration Pilots in Lao PDR*.

<sup>34</sup> IEG. 2013. *Managing Forest Resources for Sustainable Development: An Evaluation of World Bank Group Experience*.



# Appendix H: Maximizing Financing for Development (MFD) in LLL

## **Background**

### ***Objective***

20. The objective of MFD is to attract in-country private investment in forest restoration, environmentally and socially sustainable plantation forest resources, wood industries and supply chain efficiencies to help create 100,000 or more new jobs from improved forest management and expanded downstream wood processing, marketing and trade that can earn up to US\$1.5-2 billion per year in export earnings, reduce rural poverty, boost shared prosperity, improve stewardship of natural and plantation forests and contribute to climate action and disaster risk reduction by 2030.

### ***LLL project Role***

21. The LLL project will support the Government of Lao PDR (GoL) to enhance the enabling policy, legal, regulatory, planning and institutional framework to mobilize private sector investment; strengthen the technical guidelines and standards for legally and sustainably grown wood in production forestry; introduce and share new knowledge and technologies through enhanced training and extension services; and improve the monitoring, evaluation and reporting of compliance in sustainable management of selected forest landscapes. Private sector investment in forest restoration or environmentally and socially sustainable plantation forests is raised independently of the LLL project resources through their shareholders and/or funding institutions.

### ***The Key Issues***

22. In Lao PDR, inefficiencies, including overuse, under-budgeting, and unsustainable and unscientific management, have led to a reduction in forest cover, natural wealth, and public revenues. Current levels of public investment in the production forestry sector in Lao PDR are insufficient to achieve key development goals by 2030. The GoL recognizes that creating green jobs, green growth, resilience, and reducing poverty requires financing for restoration of natural forest resources and investment in environmentally and socially sustainable plantation forests, particularly through investment by the private sector to achieve increased productivity and sustainability.

23. Weak governance has been characterized by financial and human resource gaps within responsible government agencies; unclear concession licensing and industry regulation for environmentally and socially sustainable plantation forests; unsustainable forest management practices and forest conversion; poor forest products sales and royalty management systems; inefficient revenue collection and management, which has led to evasion of fees, taxes and royalties; and insufficient enforcement of existing regulations and laws (with some exceptions). Other issues included insufficient intersectoral coordination on spatial planning resulting in encroachment into forests; allocation of concessions to land otherwise legitimately occupied by local people; threats to the livelihoods of forest-dependent people and customary communities, misaligning industry development with resource availability; and stalling of legitimate investments by credible domestic and international forest enterprises that practice corporate social and environmental responsibility. Consistent and clear jurisdictions, interpretation and application of policies, principles and practices from central, provincial, district and village levels and the lack of cross-sectoral collaboration between ministries have remained challenges.

24. Delays in providing legal, long-term access to large contiguous areas of suitable and available degraded and barren forest land, including within production forest areas (PFAs), and slow processing of land concession agreements, have constrained environmentally and socially sustainable plantation forest investment, forest restoration, and forest industry development.

### ***Solutions***

25. The 2019 Land Law and 2019 Forestry Law enable clearer land access opportunities and the Prime Minister's Order 9 (2018) promotes investment in environmentally and socially sustainable plantation forests and permits private sector access to PFAs to invest in restoration and reforestation.

26. Reputable multi-national companies have raised funds to substantially expand their forestry investments in Lao PDR. The stage has been set for MAF Department of Forestry (DoF), Ministry of Industry and Commerce (MoIC), Ministry of Planning and Investment (MPI), Ministry of Public Works and Transport and Ministry of Natural Resources and Environment (MoNRE) to work with private companies and local communities to prepare restoration and reforestation programs and forest industries processing. Stronger vertical and horizontal cooperation, coordination and consistency among sectors and institutions will improve investment certainty by enhancing efficiency and enabling more clear interpretation of regulations.

27. Scarce public investment in the forestry sector can be refocused to strengthen the enabling legal, regulatory, policy, planning, institutional framework, technical standards and guidelines to facilitate private sector investment in forest restoration, environmentally and socially sustainable plantation forest development, wood processing industries and value chain efficiencies. Recent policy and legal reforms, institution-building and community engagement reflect the emerging vision of a new green forest economy in Lao PDR aimed to build a new foundation to sustain the Lao forest estate; empower forest dependent communities; and encourage private sector investment in forest restoration, environmentally and socially sustainable plantation forests and wood industries, marketing and trade in forest products. The aim has been to achieve financially, environmentally, and socially sustainable, resilient, and inclusive economic growth, especially through credible private sector investment.

28. These actions to improve the enabling environment have supported the Government of Lao PDR's (GoL) plan to expand forest cover from 58 percent to 70 percent; reduce poverty; create green jobs; improve livelihoods; support local industry; expand village-based sustainable forest management (SFM); increase forest products exports; meet Lao PDR's Nationally Determined Contribution (NDC) to climate action; and reduce vulnerability to risks from landslides, floods, droughts, and fire, and to social shocks such as pandemics like Covid-19. Simultaneously, credible private sector investors are scaling up investment in environmentally and socially sustainable plantation forests, forest restoration and forest industries development in Lao PDR.

### ***Finance for Production Forestry***

29. Forestry is not a standalone economic activity and cannot be considered in isolation from other sectors with which the forest sector interacts, including agriculture, water, infrastructure (transport, hydro-electricity), urban development, and tourism. Food security, poverty reduction, livelihoods, industry, financial services, disaster risk reduction and energy all play vital roles in supporting forestry value chains and vice versa.

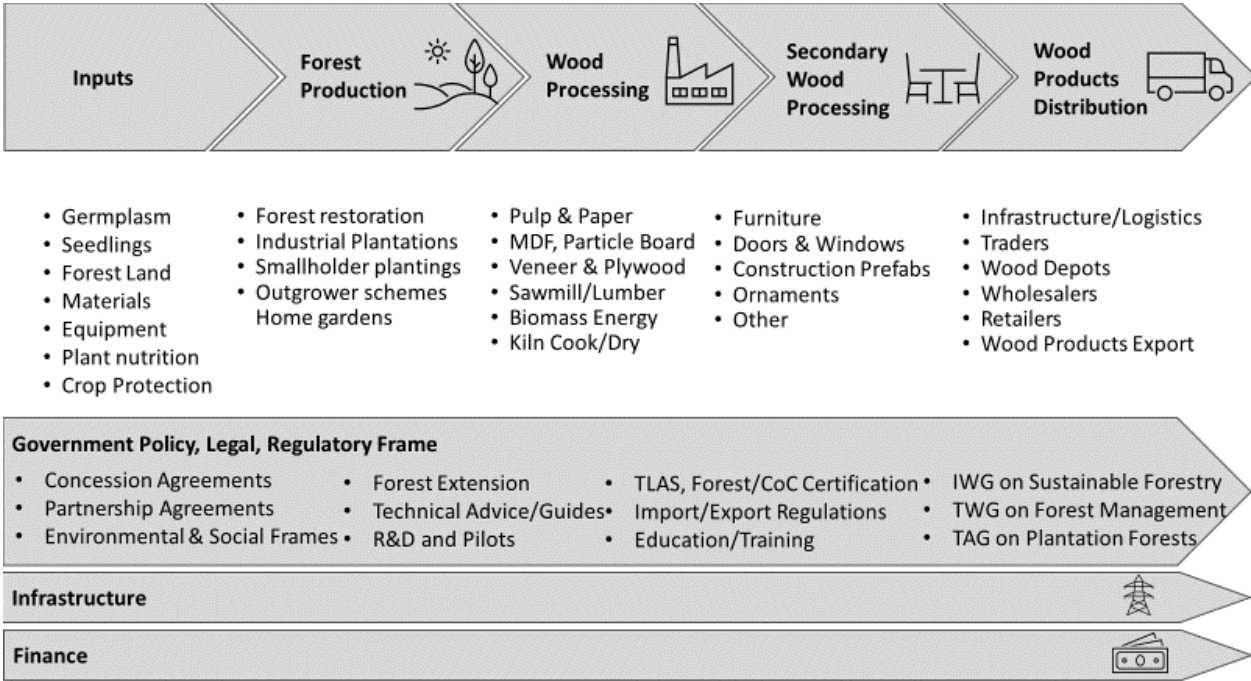
30. Meeting the growing demand for "good wood" could be highly profitable via environmentally and socially sustainable plantation forests and natural forest management. Based on data from current investors, internal rates of return (IRRs) for Lao PDR's main forest production models (smallholder teak plantation forests; industrial fast growing plantation forests; smallholder-private sector outgrower plantations; and participatory SFM) were between 6 and 24 percent, which is an internationally competitive range (World Bank 2019).

31. Multi-national and national companies are mobilizing investors to expand investments in environmentally and socially sustainable plantation forests in barren and degraded forest lands in PFAs to create new jobs in production, wood industries, marketing and trade along the value chain.

32. Lao PDR has the potential to access discerning international forest products markets (Europe, North America and Oceania) that require proof of sustainability and legality. Lao PDR is in advanced preparatory stages of the Timber Legality Assurance System process with the aim to negotiate a Voluntary Partnership Agreement with the European Union for a legal timber licence to import into Europe. Additionally, Lao PDR has introduced both forest management certification and chain of custody certification and has an opportunity to establish their own national certification standard consistent with respected international standards. The changing market demand for "good wood" coincides with a global revolution in wood technology, the use of wood in modern new buildings, as well as increased adoption of green procurement policies that require proof of sustainability and legality. International experience suggests that the highest financial benefits can be achieved and maintained with forest governance that features a timber legality assurance system and certification throughout the value chain. Lao PDR cannot yet reach these standards or access

these international market opportunities. To pursue these features, the GoL has imposed logging and wood export bans and reformed policies committing to and advancing timber legality assurance, pursuing certification, and enhancing governance of state-owned Production Forest Areas (PFAs).

**Figure 1: Components of the Forestry Sector Value Chain**



### Creating Opportunities for Private Investment

#### MFD in the LLL Project

33. The private sector actors in the Lao forestry sector include small and medium sized national enterprises; micro-enterprises, families, smallholders, farmers and outgrowers; and multi-national companies that all invest in various niches and scales with unique needs in the restoration, reforestation, afforestation and production in PFAs, and in wood processing, marketing and trade of wood, fibre, fuel and NWFPs. In some instances, private companies also invest in the provision of ecosystem services (carbon sequestration and storage, water quality and control, fisheries, recreation and nature-based tourism, etc.).

34. MFD in the LLL project recognizes that:

- Current governance and institutional constraints may not be well suited to integrated cross-sectoral collaboration and coordination required to address the interdependence of sectors and economic activities.
- Private sector investment has the capacity and capability to focus on those cross-sectoral linkages that they are actively involved with, and identify and respond quickly to, unforeseen problems or risks that threaten their returns on investment.
- Local supply chains cannot currently meet international quality standards or maintain sustainable volumes that forest products processors, traders and markets demand and reply upon so TLAS and internationally acceptable certification (forest management and chain of custody) and standards are required across the value chain.
- There remains a constant plea from the private sector that we create a level playing field where we see consistent application of the rules!

#### MFD Key Actions

35. The LLL project addresses a menu of MFD actions that include:

- Supporting reform of the legal, regulatory, policy and institutional frameworks to be more conducive to private sector investment.
- Clarifying the roles of the GoL, private sector, communities and individuals/families and the agreements, technical guidelines, tools and techniques to reduce risks and improved the quality of work and forest products and services.
- Clarifying understanding and consistent application of laws, regulations and policies in all jurisdiction within and between relevant Ministries (horizontal integration) and between Central-Provincial-District-Village jurisdictions (vertical integration).
- Facilitating multi-stakeholder collaboration and partnerships between public and private organisations, through multi-ministerial or multi-sector platforms, workshops, roundtables, conferences, consultations, dialogues, field studies and other information exchange fora.

36. Strengthening the enabling legal, regulatory, policy, planning and institutional environment will provide opportunities for the private sector to invest in forest production, wood processing, forest products and services markets, reduce transaction costs, manage risks and form new modes of collaboration with firms active in other parts of the supply chain, development agencies and government.

37. Out of an estimated 11.2 million hectares (ha) of degraded or understocked forest land in Lao PDR, an estimated 650,000 ha of degraded and barren PFA lands (<6 percent) could potentially be allocated to private sector industrial plantation forest investment. Internationally reputable multi-national companies with proven performance are now investing in environmentally and socially sustainable, certified, rapidly growing, industrial plantations, each based on a hub of 50,000–60,000 ha, with technical support to create a further 10,000–20,000 ha of satellite smallholder outgrower plantations. By 2030, an industrial plantation forest resource of 300,000 ha could account for 1.2 percent of Lao PDR's land area of 23.7 million ha, attract in-country investment of US\$5 billion, create 100,000 or more new jobs from forest production and expanded downstream wood processing, earn up to US\$1.5-2 billion per year in export earnings, reduce rural poverty and contribute to climate action and disaster risk reduction. As a commitment to corporate social and environmental responsibility, some companies have proposed to restore natural forests in up to 30 percent of their concessions.

38. Regionally and in Lao PDR, smallholders are assuming a larger responsibility for the supply of commercial wood. However, the role of plantation forests in farmer livelihoods in Lao PDR has been poorly understood and policies and incentives have not promoted good management for quality wood production. Previous modest experiences with outgrower partnerships between companies and smallholders failed to spark interest in scaling up these schemes, largely because of immature and unreliable markets. Similarly, previous policies encouraged farmers to plant trees, but farmers' insufficient technical knowledge, limited access to finance, and poor germplasm affected the areas planted and quality of wood produced, limiting market potential and financial returns. Overly complex and inhibitive regulations, procedures and interventions in smallholder plantation investments, management, harvesting and marketing have created perverse disincentives for smallholder investment in plantation forests while deterring good plantation management. Global experience shows that successful smallholder engagement requires clear and unequivocal land-use rights, ownership of trees by smallholders, reliable access to markets, enabling policies, and a robust technical package.

39. Village forestry can play a substantive role in the new green forest economy. Since rural communities depend on forests for their livelihoods, they have a strong vested interest to manage them well. The current form of participatory SFM engages more with local villagers in all planning and implementation activities compared to earlier models and has led to pilot Village Forest Management Plans that are ready for scaling up. There is potential for villages to partner with the government and plantation investors in the production, conservation, and protection of village forests. Support by district authorities in participatory planning, practices and benefits in village forests for the production of wood and non-wood forest products for customary, household and public benefit uses has been inconsistent due to weak policies. Regulations regarding the rights to, and uses of, village forests and village land for household, customary use and commercial production, including wood harvesting and plantation establishment,

have been unclear and therefore open to misinterpretation or abuse, with negative environmental and social consequences. Given the rights and opportunity to participate in planning, implementation and benefit sharing, village forest committees can generate revenues for both communities and government.

### **Strengthening the Public Sector Role for MFD**

40. Through the WBG technical support, including the SFM ASA, REDD+ and SUFORD-SU and SUFORD-AF projects, in close collaboration with the GoL, with key private sector actors (Burapha Agroforestry Company; Mekong Timber Plantations; Stora Enso; Khamseng Agriculture and Forestry Company; Sun Paper Holdings Laos; and the Lao Planted Forest Products Group) and other key plantation sector stakeholder groups (Interlaken Group, ACIAR, ECCL, EFI, FAO, FLEGT, GIZ) conducted extensive field visitations, dialogues and validation workshops that resulted in a plan to redesign and review the public support frameworks to target and guide private sector investments into more efficient use of resources for the sustainable and legal management of forests and the production of forest products and ecosystem services.

41. The main role of the public sector together with the LLL project, partners and other stakeholders, will be to continue the dialogue and decision making to elaborate on and strengthen the legal, regulatory, policy and planning frameworks and identifying and resolving the issues that deter private sector investment in the production, processing, marketing and trade of forest products.

42. The key public sector actions to reinforce MFD that are supported by the LLL project are detailed below:

#### ***Support GoL to promote good partnerships for good investments create good jobs from good wood:***

43. Support the GoL to implement a long-term vision, and develop and promote clear and consistent public policies, laws, regulations and plans to attract credible domestic and international private investors, smallholders and villages to partner in participatory SFM for both planted and natural forests to encourage sustainable wood products production, processing and trade, to create jobs and stimulate economic activity in rural areas.

44. Support the GoL to adopt and implement a Lao Timber Legality Assurance System (TLAS), and Lao national standard for an internationally reputable Forest Management and Chain-of-Custody Certification system to access international markets from sustainably and legally managed forests and forest products trade.

45. Support the GoL to clarify approaches to identify degraded forest lands within PFAs, including definitions and demarcation to avoid and mitigate adverse environmental and social impacts.

46. Support the GoL to clarify the process for, and promote transparency of, land allocation for private sector investors in PFAs, as part of a GoL-led process to ensure that responsible investors with proven environmental and social safeguards and technical and economic expertise are allocated areas for private investment only in environmentally and socially sustainable plantation forest development.

47. Support the GoL to enhance the current IEE and ESIA procedures to simplify, clarify and streamline requirements more suited to the unique nature of plantation forest investments and PFA management.

#### ***Support GoL efforts to ensure villagers are partners in production and receive economic benefits:***

48. Support efforts to enforce the GoL's currently clear tree tenure policy (legally, villagers own any tree they grow on their own land), harvesting by villages, access to reliable markets and a robust technical package, access to quality germplasm and the provision of extension services help revitalize smallholder plantation development, diversify land use, improve socio-economic conditions and increase environmental benefits.

49. Support the GoL to remove onerous and unnecessary procedural and regulatory requirements and inappropriate bureaucratic obstacles.
50. Support the GoL to encourage Public-Private-People Partnerships (PPPPs) to assist villages to participate in production forestry via direct employment, production and outgrower schemes.

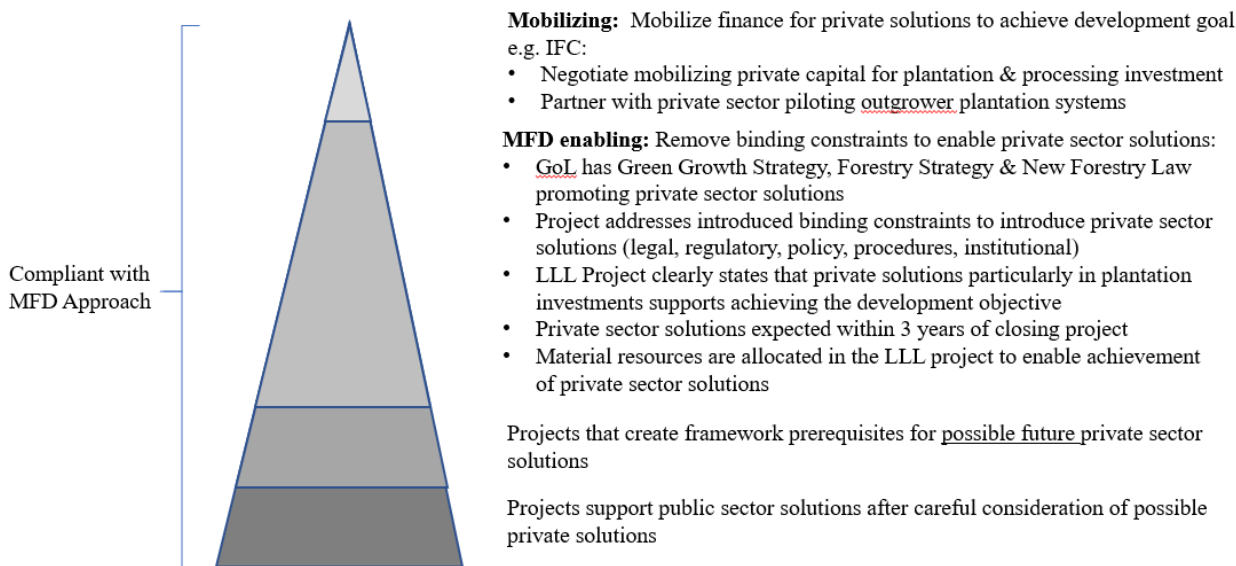
**Support GoL efforts to calibrate policy and incentives**

51. Support GoL to assess the performance of the wood harvesting and export bans for PFAs, and if and when possible, test timber harvesting initially in pilot locations where forest management certification linked to chain of custody certification and auction platforms are in place.
52. Support GoL to assess fiscal policies and technical measures to support future forest management such as royalties, fees, fines and taxes to enable SFM and protect natural capital.
53. Support GoL to invest in forest research and extension to disseminate knowledge and technologies necessary for SFM in sustainable management and production from natural forests and environmentally and socially sustainable plantation forests.
54. Support GoL to continuously build regulatory capacity at central, provincial and local levels to maintain, enhance, and effectively enforce regulatory capacity include environmental and social impact assessment, forest law enforcement and concession and revenue management.
55. As a government-led, long-term, large-scale investment program to manage the full forest estate, LLL would integrate natural resources sectors, stakeholders and partners, leverage diverse financing sources, and enhance information, institutions, and incentives.

**LLL Project Compliance with MFD Approach**

56. The following figure illustrates the levels of the MFD approach adopted in the LLL project.

**Figure 2: LLL Project Compliance with the MFD Approach**



## MFD Preparation and Validation

57. The LLL Project activities in production forestry emerged from a WBG (World Bank and IFC teams) process in support to Sustainable Forest Management (SFM ASA); SUFORD, SUFORD-SU and SUFORD-AF in Participatory Sustainable Forest Management; Reducing GHG Emissions from Deforestation and Forest Degradation (REDD+), the Green Growth DPO in support of Policy Track 3.2 on Improving Forest Resources Management and the IFC Diagnostic Assessment of Outgrower Schemes and Demonstration Pilots. The WBG is working in close collaboration with on-going initiatives supporting the MFD approach in mobilizing and enabling private sector investment in environmentally and socially sustainable plantation forests that include:

- Technical Consultation Workshops on Plantation Investments in Production Forest Areas to identify urgent improvements and implementation actions needed to streamline plantation forest investments, coordinated by MAF/DOF, from November 2019.
- Joint Action and Collaboration for the Promotion of Responsible Tree Plantation Investments in National Production Forest Areas coordinated by the Interlaken Group, from November, 2019.
- Analysis and preparation of a White Paper on investment opportunities in Lao PDR, including the plantation forest sector coordinated by the European Chamber of Commerce in Lao PDR (ECCL), in process.
- Task Force on the Development of a Sustainable Forest Plantation Sector in Lao PDR to identify urgent actions with regards to environmentally and socially sustainable plantation forest investments for improvement and implementation, supported by SwedFund, in process.
- Technical support and analyses to improve policies for environmentally and socially sustainable plantation forests, industry development and supply/value chain processes to build better linkages between commercial investments and smallholder production, supported by the Australian Centre for International Agricultural Research (ACIAR), in process.
- Promoting Industrial Tree Plantations in Degraded Production Forest Areas (PFAs), Study Tour to Phu Nheuy PFA, Vientiane Province, coordinated by FAO and DOF and technical support to the policy, legal and regulatory frame, from November 2019.
- Timber Legality Assurance System and Voluntary Partnership Agreement preparation within the Forest Law Enforcement, Governance and Trade (FLEGT) process supported by GIZ and EFI, in process.
- Timber Legality Definition Process for Plantations, under the Timber Legality Assurance System engaged the key public and private sector stakeholders to define the principles, criteria, indicators, verifiers and legal references for plantation forest actions and forest products through the value chain, February 2020.
- Piloting of Plantation Forest Registration and Certificates for plantation forest actions and forest products through the value chain in 6 Provinces, DOF and IFC, completed, 2020.
- Coordination between DOF/MAF and the Investment Promotion Department, Ministry of Planning and Investment to grant Burapha Agroforestry Company a Plantation Development Agreement for a 2000 ha Forest Concession and a memorandum of understanding to survey 60,000 ha of degraded PFA for environmental, social and economic suitability for plantation forest investment, August, 2020.
- Collaboration between DOF/MAF and Department of Land, Ministry of Natural Resources and Environment on the responsibilities and procedures for certifying the status of land ownership, (including state lands for concession agreements), maintaining land concession maps and environmental and social impact assessments, on-going.

58. During these projects and the preparatory phase of the LLL project individual and collective meetings, validation workshops, project evaluations and field visitations were held with the GoL, private sector, NGOs, international agencies and other stakeholders to identify constraints and enablers. The MFD enabling recommendations and the lessons learned from these projects and dialogues were incorporated into the design of the LLL project, production forestry related components.

59. The LLL project has been MFD-tagged. The WB and IFC had critical roles to support a stronger enabling environment for large-scale, sustainable private investments. The cooperation between the GoL-WB-IFC in preparing the PAD that built upon a strong recent history of jointly coordinated ASAs and investment dialogues under the global Forest Investment Program were acknowledged.



## **MFD Actions Adopted**

60. The project concept, design and components demonstrate a well-researched and effective strategy to enable private sector solutions through review of the legal, regulatory, policy, planning and institutional framework and the mapping of a strategy for Public-Private Partnerships (PPP) and furthermore, Public-Private-People Partnerships (PPPP). The project is aimed to address the constraints identified in the SFM ASA, the SUFORD-SU and SUFORD-AF Projects and the project preparatory team promoted public and private sector dialogues within individual and collective meetings and validation workshops with key stakeholders to prioritize constraints and actions reflected in the SFM ASA recommended actions and incorporated into the SUFORD-AF and LLL Project designs. The actions agreed upon included:

- Key bottlenecks and private solutions were identified.
- A call made for the consistent application of regulations
- Realistic timeline for private sector solutions were elaborated.
- GoL policy and planning matrix was prepared to articulate credible plans to introduce private sector solutions.
- The outputs of the validation workshops and stakeholder meetings for private sector solutions were incorporated into the LLL PAD.
- The LLL project addressed key bottlenecks to private sector solutions as agreed between the WBG and the client country.
- MFD enabling was made a material part of the LLL project.
- The proposed private sector solutions were designed to realize the potential for sufficient scale and sustainability of restoration and reforestation in production forest areas to increase the contribution of forests and forestry to sustainable landscapes and livelihoods. Support is also planned to improve the sustainability and legality of forest products processing, marketing and trade along the value chain and to the provision of ecosystem services.
- The public sector contributions to realize the potential for private sector solutions includes the strengthening of the legal, regulatory, policy and institutional frameworks, the formulation of a policy and planning advisory group; the provision of best practices guidelines and streamlining of technical, social and environmental procedures.

### ***Mobilizing Private Sector Capital***

61. The LLL project builds upon long-term WBG efforts to create the enabling environment and transparency for scaling-up private sector investment in SFM, mainly to strengthen land classification clarity, timber asset legality, including standards and certification for export and strengthen GoL implementation capacity. Related support also included: (i) social-community linkages; (ii) EIA, ESIA, land survey, related fees, and other implementing details for private sector players to clearly and transparently secure licenses to invest and operate properly; and (iii) seeing whole value chain of forestry, from primary plantation, processing of intermediates and potential final-products, and the harvesting, transportation and exporting of a whole range of such products.

62. The stakeholder processes undertaken as preparation for the LLL Project identified specific collaboration opportunities to mobilize private sector capital in the MFD approach in the production forestry sector as summarized below.

### ***Mobilizing Village and Smallholder Capital***

63. National micro, smallholder, family or farmer investments at the village engagement level in plantation forests (indigenous or introduced species) with support from the Public Sector (land-use rights and allocation, certification of land-use, provision of technical support services; provision of nursery stock, access to harvest, market and trade of forest products).

64. National micro, smallholder, family or farmer investments at the village level (provide access to land, labour) in fast growing industrial plantation forest outgrower arrangements with support from the Private Sector (provide seedlings, materials, technical advice and access to markets).

65. National micro, smallholder, family or farmer activities in integrated agroforestry, livelihoods activities and part-time employment associated with plantation forest investments in collaboration with the Private Sector investors.

66. National micro, smallholder, family or farmer investments at the village level collaborate with DOF and other authorities for registration and issuance of certificates for plantation forests and forest products through the value chain.
67. National micro, smallholder, family or farmer collaboration with DOF and provincial and district authorities on the dissemination of information on the technical, procedural and costs of plantation forest investments (short rotation, fast growing and longer rotation, higher value trees), harvest, transport, wood processing and trade.
68. National micro, smallholder family or farmer contractors at the village level working with the Private Sector to gain the experience and the skillsets to provide contract services for national forest restoration and industrial plantation forest investments (seed collection, nurseries, site preparation, planting, weeding, tending, silviculture, harvesting, transport, marketing, trade);
69. Public, Private Sector and village collaboration in the investment and construction of green infrastructure including small-scale irrigation systems, local roads and bridges and local water supplies and reservoirs in target villages.
70. Public, Private Sector and village collaboration on training, construction, piloting and up-scaling of green technologies for watershed management and disaster risk reduction (riparian buffer management, assisted natural regeneration) in target villages.

### ***Mobilizing Private Enterprise Capital***

71. Multi-national private sector investments in natural forest restoration and fast-growing industrial plantation forests in PFAs under concession agreements with the GoL (GoL provides land concession agreements with social and environmental safeguards, shares risks and benefits and monitors compliance with agreements, laws, regulations, policies, guidelines).
72. National Small-Medium Enterprise (SME) investment in natural forest restoration and fast-growing industrial plantations in PFAs under agreements or approvals with the GoL (GoL provides agreements with social and environmental safeguards, shares risks and benefits and monitors compliance with laws, regulations, policies, guidelines).
73. National Small-Medium Enterprises (SMEs) in plantation, wood processing and export of plantation wood products seek alternative sources of funding from national and international development banks and funding agencies to raise collateral from plantings to fund further plantation forest, forest products industries and livelihood development activities.
74. Public and Private Sector collaboration on the further training, piloting and up-scaling of international and national standards and independently assessed Forest Management and Chain of Custody (CoC) Certification in natural and plantation forests in PFAs, Other Forest Areas and in forest products processing facilities to meet international sustainability and legality standards required of discerning international forest products markets.
75. Public and Private Sector collaboration to clarify the legal and regulatory definitions and procedures to permit logging and transport of plantation forest wood products from PFAs.
76. Public and Private Sector collaboration with the FLEGT team in strengthening the legal and regulatory frame, piloting and elaboration of implementation arrangements to mobilize the FLEGT Voluntary Partnership Agreement, Timber Legality Assurance System and EU Timber Licence to access European and other forest products markets.
77. Public and Private Sector collaboration in establishing an Advisory Technical Working Group on Production Forest Management and a Sustainable Forest Plantations Technical Expert Advisory Group to advise the GoL, investors and other key stakeholders on policy, technical and capacity building issues regarding SFM in production forests that can work in close collaboration with the Lao Planted Forest Products Group established by the private sector.

78. Public and Private Sector collaboration on research and development investments related to natural forest restoration and plantation forest investments to improve regeneration and germplasm, survival and productivity, mitigating biological risk, forest inventory, yields, protection, socio-economic surveys, forest products processing and ecosystem services.

## Production Forestry Value Chain Diagnostic

### *Production Forestry Value Chain Institutional Mapping*

79. Value chain institutional mapping of the LLL Project synthesizes by organization, their roles in research and development, forest production, timber harvesting and haulage, forest products processing and forest products harvesting, distribution and trade. The following table provides the key organizations involved in the value chain for production forestry in the LLL project.

**Table 1: Production Forestry Value Chain Institutional Mapping**

Entity	R&D	Input/Supply	Produce	Process	Harvest/Trade/ Distribute
Ministry of Agriculture & Forests with stakeholder inputs	Provides legal, regulatory & policy frame & strategies for R&D	Provides approval of production policy, legal, regulatory frames, strategies, standards, PPP agreements, monitoring, reporting	Provides the production legal, regulatory & policy frames & strategies & monitoring of compliance systems incl. private sector	Provides the wood processing industries legal, regulatory & policy frames & strategies & monitoring systems, incl. private sector	Provides forest products harvest, market & trade legal, regulatory & policy frames & strategies & monitoring of compliance systems, incl. private
Department of Forestry (central), PAFOs (provincial), DAFOs (district) levels with stakeholder inputs	Provide financial & technical support to implement R&D policies & strategies, extension services and monitors and enforces compliance	Provide approval of land-use & management plans, PPP agreements, nursery seedlings, technical & ESIA guidelines, extension, training, monitoring, reporting	Provide technical support to implement production policies & strategies, technical training, extension and monitor and enforce compliance, incl. private sector	Provides technical support to implement wood processing policies & strategies, technical training, extension and monitor and enforce compliance, incl. private sector	Provides technical support to implement harvest, market & trade policies & strategies, technical training, extension and monitor and enforce compliance, incl. private sector
Department of Forest Inspection (DOFI)		Provides monitoring & enforcement of compliance with laws, regulations policies across value chain	Monitors & enforces compliance with laws, regulations policies across value chain	Monitors & enforces compliance with laws, regulations policies across value chain	Monitors & enforces compliance with laws, regulations policies across value chain
Inter-ministerial Board	Provides policy & strategic planning in	Provides policy & strategic planning for	Policy & strategic planning for PFAs &	Policy & strategic planning for	Policy and strategic planning for harvest, market and trade

	production forestry	production forestry	plantation forests, incl. private	wood industries, incl. private	of forest products, incl. private
Technical Advisory Group on Production and Protection Forest Management	Provides technical advice on production & protection forest R&D, incl. private	Disseminates technical advice and monitoring	Provides technical advice on production & protection forest management, incl. private	Provides technical advice on wood industries production management, incl. private	Provides technical advice on forest products harvest, market and trade from production forests, incl. private
Technical Working Group on Sustainable Plantation Forests	R&D technical priorities, incl. private	Disseminate knowledge & technology, incl. private	Disseminate knowledge & technology, incl. private	Disseminate knowledge & technology, incl. private	Disseminate knowledge & technology, incl. private
Department of Agriculture (DOA)	Provides policy & strategic planning in agriculture incl. livelihoods activities	Provides support in land-use planning & livelihoods support	Provides tech. & extension support in land-use planning and livelihoods	Provides technical support & extension in crop processing	Provides technical support & extension in harvest, distribute and trade in agric products
Ministry of Natural Resources and Environment (MONRE)	Provides environmental & social impact monitoring	Provides technical guidelines for environmental & social frame	Monitors compliance with environmental & social impact & mitigation standards	Monitors compliance with environmental & social impact & mitigation standards	Monitors compliance with environmental & social impact & mitigation standards
Ministry of Finance	Provides legal, regulatory & policy frame & finances for R&D	Provides the schedule of financial taxes and fees across the value chain	Monitors compliance with financial taxes & fees	Monitors compliance with financial taxes & fees	Monitors compliance with financial taxes & fees
Ministry of Planning and Investment (MPI)		Provides legal, regulatory, policy & procedures related to investment & PPP support	Facilitates investment & monitoring of private investment	Facilitates investment & monitoring of private investment	Facilitates investment & monitoring of private investment
Ministry of Industry and Commerce	Provides legal, regulatory & policy frame in wood processing & trade R&D	Provides technical standards for forest products in the value chain	Monitors & reports technical standards in the forest products value chain	Monitors & reports technical standards in the forest products value chain	Monitors & reports technical standards in the forest products value chain
Ministry of Public Works & Transport		Provides legal, regulatory & policy frame on infrastructure, transport rigs &	Monitors & reports on infrastructure, rigs, & road use standards compliance in	Monitors & reports on infrastructure, rigs, & road use standards compliance in	Monitors & reports on infrastructure, rigs, & road use standards compliance in

		road-use standards	forest products value chain	forest products value chain	forest products value chain
Multi-national companies (BAFCO, Stora Enso, MTP, New Forests, Sun Paper Holdings, Khamseng Agriculture and Forestry Company, Lao Planted Forest Products Group and others)	Provide or contract R&D for plantation forest investments	Financial resources, germplasm, knowledge & technology, access to markets across the value chain	Provide private investment, proven expertise, knowledge & technologies	Provide private investment, proven, expertise, knowledge & technologies	Provide private investment, proven expertise, knowledge & technologies
National micro-small-medium enterprises (MSMEs)		MSME investments across the value chain	Provide local private investment & locally adapted knowledge & technologies	Provide local private investment & locally adapted knowledge & technologies	Provide local private investment & locally adapted knowledge & technologies
Lao Front for National Cooperation (LFNC)		Inputs to VFM planning, implementation & monitoring	Assists villages to implement & manage VFM		
Lao Women's Union (LWU)		Inputs to VFM planning, implementation & monitoring	Assists villages to implement & manage VFM with a focus on gender issues		
NAFRI	Provides forest R&D	Disseminates knowledge & technology	Provides ST Training to foresters incl. private	Provides ST training to forest industries, incl. private	
NUOL	Provides forest education, R&D	Disseminates knowledge	Provides production education to foresters incl. private	Provides processing education to forest industries incl. private	Provides harvest, market & trade education to forest industries, incl. private
International Universities	Provides socio-economic surveys/analyses	Disseminates knowledge, technology	Provides, independent papers, incl. to private sector	Provides independent papers, incl. to private sector	Provides independent papers, incl. to private sector
ACIAR	Provides forestry & agricultural R&D	Disseminates knowledge, technology	Provides results on plantation production, incl. to private sector	Provides results on value chains, wood industries, incl. private sector	Provides results on value chains, wood harvest, marketing, trade, incl. private sector

EFI	Provides forestry R&D	Disseminates knowledge, technology	Provides support to FLEGT, TLAS, VPA in production, incl. to private	Provides support to FLEGT, TLAS, VPA processing, incl. to private	Support to FLEGT, TLAS, VPA value chain incl. to private
NGOs (Interlaken Group, Forest Trends, WWF, Chatham House, IUFRO,)	Provide forestry & forest industries & trade studies	Disseminate knowledge	Provides studies on sustainability & legality of production, incl. to private	Provides studies on sustainability & legality of wood industries, incl. to private	Provides studies on sustainability & legality of forest products harvest & trade, incl. private

### ***Production Forestry Value Chain Activities Summary***

80. The table below summarizes the key value chain functions, actors and current and potential private sector opportunities included within the LLL project PAD.

**Table 2: Production Forestry Value Chain Activities Summary**

Value Chain Functions & Activities	Actors	Private Sector	
		Involvement	Comment
Research and Development • Restoration of natural forests  • Plantation forests Technical  • Plantation forests social & economic dimensions	NAFRI, NUOL  NAFRI, NUOL  NAFRI, NUOL, Int. Universities	Limited, could increase if incentivized Yes, New Forests, BAFCO, Stora Enso, MTP Yes, but scope to increase	No incentive  Potential, share results  Potential, further share results
Inputs • Advisory Board • Technical Working Groups • Policy, Legal, Regs • Land-use/Crop Rights • Technical Guidelines • Extension Support • Technical Training	Inter-ministerial Technical specialists MAF/DOF/MONRE/MOIC MAF/MONRE MAF/DOF DOF/DOA/PAFO/DAFO DOF/DOA/PAFO/DAFO	Yes, dialogue Yes, representation Yes, dialogue No, public Yes, own expertise Yes, own expertise Yes, own expertise	Maintain public function Joint public, private Maintain public function Maintain public function Maintain public function Joint public and private Joint public and private