

**LAO PEOPLE'S DEMOCRATIC REPUBLIC PEACE INDEPENDENCE  
DEMOCRACY UNITY PROSPERITY**

MINISTRY OF AGRICULTURE AND FORESTRY

# **Environmental Management Plan (EMP)**

## **Updated Draft**

**Additional Financing for Scaling-up Participatory  
Sustainable Forest Management (AF-SUPSFM)**

**AF-SUPSFM Project Implementation Unit**

Vientiane, Lao PDR

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## **1. Introduction to the Environmental Management Plan**

1. The Environmental Management Plan (EMP) aims to provide guidance to the Department of Forestry, Ministry of Agriculture and Forestry, Lao PDR, its staff, agencies involved in planning and implementation, consultants, provincial and district government, and beneficiary communities on the environmental safeguards in the implementation of the Lao PDR Forest Investment Program and specifically the Scaling Up Participatory Sustainable Forest Management Project (SUPSFM, also known as “SUFORD Scaling Up” or “SUFORD-SU”). The original EMP outlines the environmental risks and proposes appropriate mitigation required. The original EMP is derived from the Environment and Social Impact Assessment (ESIA) of SUPSFM, which provides detailed information on the project. This document is a revised EMP for the proposed Additional Financing for SUPSFM (AF-SUPSFM). The ESIA of the parent project, SUPSFM will remain valid for AF-SUPSFM due to the nature of AF-SUPSFM activities and areas remain unchanged.

2. Recognizing the intrinsic interdependence between livelihoods and the natural resource base of land and forest resources social and environmental safeguard instruments have been integrated, and mainstreamed into project design, planning, and implementation. To ensure that all project beneficiaries, without regard to ethnic background, are adequately consulted and meaningfully participate in the project a Community Engagement Framework (CEF) has been created. The CEF addresses both social and environmental issues, and has been prepared as a separate document. The four-stage CEF process, along with the Participatory Land Use Planning (PLUP) process will provide opportunities for identifying social and environmental concerns from the beneficiaries. Key environmental risks related to natural habitats, forests, pest management, and physical cultural resources will also be identified based on community knowledge. The updated CEF will also endorse findings from the ESIA, provide ground-truthing inputs to biodiversity assessments, identification of High Conservation Value Species (HCVF), and fragile highland areas.

### **EMP**

3. Like the parent project, this revised EMP gives specific guidance for environmental screening and implementing environmental management actions required to ensure that Community Action Plans and Forest Management Plans comply with World Bank and Lao PDR environmental policies and regulations.

### **1.1. Forest Investment Program, Lao PDR**

4. Lao PDR is one of the least developed countries in Southeast Asia. The country has considerable natural resources in forests, water resources, and minerals and these are significant for economic and cultural development, and environment protection. Its forests cover about 58% of the country, the highest percentage in Southeast Asia, but the total area of forest has been declining steadily since 2005 when forest cover was about 61%, according to the most recent data and consistent forest definitions.

5. In addition to decline in forest area, there has been a steady fragmentation of forests and a decline in the average growing stock within the residual forest, which have both reduced carbon values and had a negative impact on biodiversity. Annual emissions from deforestation and forest degradation were estimated at 95.3 million tCO<sub>2</sub>e in 1982, declining to 60.6 million tCO<sub>2</sub>e by 2010. For the period from 2012-20, the average annual emission is estimated at 51.1 million tCO<sub>2</sub>e.

6. SUPSFM was designed to support achievement of the current national target to attain a 70% forest cover in Lao PDR, according to the Forestry Sector 2020 strategy, the National Green Growth Strategy 2030 (2019), the Forestry Law (2019), the Nationally Determined Contribution, the emerging REDD+ Strategy, and the 8<sup>th</sup> National Socio-economic Development Plan. AF-SUPSFM continues this support.

7. SUPSFM is also part of the Forest Investment Program (FIP) for Lao PDR which includes themes that have been developed to directly address the drivers of deforestation and forest degradation identified. AF\_SUPSFM does not include financing from the FIP but the core of the project design remains as during SUPSFM. The underlying idea is that grassroots forest managers operating in any and all forest areas will become more active and vigilant in protecting the forests in their areas from the drivers of deforestation and degradation, and will rehabilitate degraded lands using land management systems that will provide them with livelihood benefits, while enhancing carbon stocks. Results from SUPSFM show that the operation has reduced approximately 1.8 million tons of carbon dioxide (CO<sub>2</sub>e) emissions from forests.

8. The Government of Lao PDR (GOL) proposed the Lao Investment Plan to the Forest Investment Program (FIP) of the Climate Investment Funds (CIF) with the core objective of reducing GHG emissions from forests by reducing deforestation and forest degradation, conserving and enhancing carbon stocks, and sustainable management of forests (five GHG emission-reducing activities that together constitute REDD+). The Lao Investment Plan includes components on managing five categories of forest areas, i.e. PSFM in three categories of state forest areas (production/ conservation/protection), village forestry in village-use forests, and smallholder forestry in land allocated to villagers, as well as a component on enabling policy and regulatory mechanisms. The proposal was favorably considered by FIP with funding provided for three projects, namely: (a) Protecting Forests for Ecosystems Services with the Asian Development Bank (ADB) as the designated Multilateral Development Bank (MDB) partner, (b) Smallholder Forestry with the International Finance Corporation (IFC) as the designated MDB partner, and (c) Scaling up PSFM (SUPSFM) with WB as the designated MDB partner.

## **1.2. Additional Financing for Scaling Up Participatory Sustainable Forest Management (AF-SUPSFM)**

8. SUPSFM (also known as SUFORD-SU) became effective on August 30, 2013 and is scheduled to close on March 30, 2020. The original five-year timeframe received a one-year extension (approved May 25, 2018), followed by a second, seven-month extension (approved May 21, 2019) that also restructured the project to reallocate funds across disbursement categories and allow time for preparation of this Additional Financing. Predecessor projects supporting the forest sector include the Forest Management and Conservation Project (FOMACOP, 1995-1999), the Sustainable Forestry for Rural Development Project (SUFORD, 2003-2008), and the SUFORD-Additional Financing Project (SUFORD-AF, 2009-2013).

9. SUPSFM helps improve the management of forest resources in 41 of the country's 51 PFAs in 9 provinces, totaling 2.3 million ha and including 1078 villages. The Project supports inclusive growth by promoting villager participation in participatory SFM and livelihood development in villages in and around the PFAs. The Project also makes a strong contribution to creating a rules-based environment through its support to policy and governance reforms, third-party certification standards, the technical support and international audit systems supplemented by the work to enhance the effectiveness of forest law enforcement in all 18 provinces.

10. Additional Financing for SUPSFM (AF-SUPSFM) and extension will support the Department of Forestry (DOF) under the Ministry of Agriculture and Forestry (MAF) to continue to strategically recalibrate the sector, further advance and enhance project achievements and sustainability, and prepare for a new generation of public and private investment based on recent and on-going policy reforms. The AF and extension would continue to implement existing, modified or scaled up activities that contribute to achievement of the existing operation's PDO and strengthen Project outcomes. The AF and extension will allow reforms supported by SUPSFM to be consolidated and for additional reforms to be added to the project's results. This support will also reduce risks to project outcomes, increase their sustainability, and strengthen the project's contribution to achievement of longer-term objectives related to improved livelihoods; poverty reduction; provision of environmental services including climate risk reduction; and climate change mitigation.

11. The AF and extension would (a) expand the scope of the existing project, and (b) address a cost overrun due to exchange rate loss. By continuing to implement all four existing project components, the AF would allow the Government of Lao PDR (GOL) to maintain and enhance implementation capacity for participatory SFM, forest certification, reforestation, and livelihood development. The AF would also allow the client to implement innovative activities such as chain of custody certification, developing bankable forest landscape investment plans, enable and monitor sustainable private sector participation in the sector (continuing the close cooperation with the International Finance Corporation (IFC) sister project under the Forest Investment Program), strengthen multi-agency forest law enforcement, and institutionalize learning and put existing and new knowledge into use in investment and policy.

## **2. SUPSFM Project Objectives**

12. The objectives of AF-SUPSFM continue to be linked to REDD+ and climate change mitigation leading to CO2 emission reductions and the protection of forest carbon stocks. Its justification is the combating of carbon emissions caused by a decrease in the forest cover. In line with REDD+ objectives, AF-SUPSFM aims to continue and enhance forest landscape management, by promoting the creation of landscape investment plans.

### **2.1. Project Development Objective**

13. AF-SUPSFM PDO is the same as that of SUPSFM, which is to execute REDD+ activities through participatory sustainable forest management in priority areas and to pilot forest landscape management in four provinces.

14. PDO-level results from AF-SUPSFM also remain the same as during SUPSFM and include:

- Forest area brought under management plans
- Forest area brought under forest landscape management
- People in forest and adjacent communities with monetary/non-monetary benefit from the intervention
- Rate of annual forest cover loss in targeted Production Forest Areas (PFAs)
- Enhanced carbon storage from improved forest protection and restoration
- Reduced emissions from deforestation and forest degradation.

### **2.2. Project Components of SUPSFM and AF-SUPSFM**

15. AF-SUPSFM will continue to implement and enhance selected existing activities under all four existing components which are presented below. These activities will allow the client

to (a) achieve stronger project outcomes, and (b) implement new activities that contribute to achievement of the existing operation's PDO, and (c) taking advantage of opportunities to strengthen the outcomes and support the strategic convergence on landscape investment but were not part of the original project. All villages within project PFAs, those adjacent to them, and those located in protection and conservation forest areas from landscape pilot initiatives will benefit from a diversity of expanded livelihood opportunities. Villages located within PFAs that have significant forest stock will receive direct and tangible benefits if the logging ban is lifted and village forestry is authorized on the ground after the provisions included in the 2019 Forest Law. Vulnerable communities, ethnic groups, and women will receive priority in project design and activities through the project's enhanced consultation and participatory processes. The total number of beneficiaries from PSFM provinces include residents of 1078 villages in 41 Production Forest Areas (PFAs). Just under half the beneficiaries are women and many are from ethnic groups (See Environmental and Social Impact Assessment (ESIA) and Community Engagement Framework).

### **Component 1: Strengthening and Expanding PSFM in PFAs**

16. The objective of Component 1 is the same as originally planned, which is to strengthen and expand participatory SFM in PFAs. Under SUPSFM, about 21,300 households have benefited from individual Village Livelihood Development Grants (VLDG) that were distributed in 666 target villages.

17. Summary of changes to Component 1: Completed or on-going activities under Subcomponent 1B (Community Engagement in PSFM and Village Livelihood Development) include delivery of PFA management plans and village forest management plans (VFMP), forest restoration, SFM certification, establishment and monitoring of permanent sample plots (PSP), and implementation of village livelihood development grants (VLDG). These activities have been positively assessed. The set of expanded, enhanced, or modified activities under AF-SUPSFM include support are as follows:

18. Community Engagement in PSFM activities: (a) timber legality assurance system and certification support throughout the value chain;<sup>1</sup> (b) facilitate private investment opportunities by assessing availability of appropriate lands for forest plantations in barren and severely degraded lands in PFAs; (c) support for development village forest management plans and agreements; (d) re-measurement of permanent sample plots to calculate allowable cuts for each PFA; and (e) systematization of knowledge and forest data in a comprehensive management information system.

19. Village Livelihood Development activities: (a) extension and monitoring for VLDG implementation, and demonstration sites for NTFPs and white charcoal, but no new funds would be directed to the village livelihoods development grants; and (b) improve the value chain linkages for selected products with specific producer groups.

20. Dropped activities: The Project would not continue to fund pre-harvest inventories (dropped activity), or sub-component 1A (Developing Partnerships to Increase Implementation Capacity); activities under this sub-component were designed to be carried out during project year one under SUPSFM.

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<sup>1</sup> Includes: (a) expansion of SFM certification from the current 110,000 hectares to meet the government's target of 230,000 hectares (expanded activity); (b) if timber harvesting in the SFM certified areas is allowed on an exceptional basis by the Government, the AF will support information campaigns for Chain of Custody (CoC) certification in the supply and value chain (new activity); (c) Contribute to the Timber Legality Assurance System (TLAS) process by pilot testing the control mechanism for the supply chain in PFAs (new activity).



## **Component 2: Piloting Forest Landscape Management**

21. The objective of component 2 is the same as originally planned, which is to pilot forest landscape management. SUPSFM has worked in four provinces, Bokeo, Luang Namtha, Oudomxay and Xayaboury, to support provincial authorities to determine the forest landscape area and position the provincial REDD+ Task Forces as the coordinating bodies for integrating a forest landscape management framework template into the provincial REDD+ Action Plans.

22. Summary of changes to Component 2: Subcomponent 2A (Developing Methodologies and Frameworks for Forest Landscape, discontinued under AF) introduced the concept of forest landscape management and developed frameworks, but more progress will need to be made to identify and convene investments, and improve inter-sectoral coordination to address competing uses of forest land throughout the forest estate. The AF will therefore build on the existing achievements and support provinces and central authorities, to work across sectors to develop practical, simplified investment plans for selected priority landscapes (based on criteria to be agreed) in selected provinces, involving relevant sectors, other development partners, civil society, and the private sector. Therefore, under subcomponent 2B (Establishing Forest Landscape Pilots) the AF support would allow the client to (a) prepare “bankable” Landscape Investment Plans for priority landscapes in selected provinces (modified activity); (b) prepare assessments to support landscape investment development (modified activity); (c) support dialogue, consultations, and multi-sector platforms on landscapes, land use, and REDD+ (modified activity); (d) develop a monitoring framework (modified activity); and (e) Build institutional and leadership capacity for landscape-level action and management (modified activity).

23. Dropped activities: all activities under Subcomponent 2A will be discontinued as achieved during SUPSFM.

## **Component 3: Enabling Legal and Regulatory Environment**

24. The objective of component 3 is the same as originally planned, which is to improve the legal and regulatory environment for sustainable forest management. SUPSFM has provided the Ministry of Agriculture and Forest (MAF) forestry-related departments with technical assistance (TA) in developing the concept for village forest management, the implementation framework for PSFM, the revision of the forest policy framework, and the development of reference emission levels (REL) for REDD+ (Subcomponent 3A). It has also provided financial and technical support to forest law enforcement and combating illegal trade of timber and wildlife (Subcomponent 3B).

25. Summary of changes to Component 3: Under Subcomponent 3A (Strengthening Legal and Regulatory Frameworks), the AF would (a) continue to support legal, policy and regulatory development in the forest sector including policies to facilitate private investment that is environmentally, socially and financially sustainable (modified activity); (b) develop technical and legal guidelines for private sector engagement in forest plantation management and other economic activities, and enhance government and stakeholders capacity to apply best practices on environmental, social, and financial sustainability (modified activity); and (c) support further development of the legal framework for Timber Legality Assurance System (TLAS) implementation via Department of Forestry’s (DOF) Forest Law Enforcement, Governance and Trade (FLEGT) Standing Office (modified activity).

26. Under subcomponent 3B (Strengthening Forest Law Enforcement and Governance), the AF would (a) continue to support DOFI and other agencies to detect, disrupt, dismantle and prosecute forest and wildlife related crimes at national and provincial levels, with greater focus

placed on strengthening inter-agency cooperation (modified activity); (b) continue building capacity for the DOFI Information Management System (IMS) (continued activity); and (c) build capacity and support for Lao PDR engagement in multi and bi-lateral agreements with regional partners on forest and wildlife law enforcement and compliance with the Convention on International Trade in Endangered Species (CITES) which includes timber species (modified activity).

#### **Component 4: Project Management, Learning and Investment Development**

27. The objective of component 4 is the same as originally planned, which is to manage and coordinate all project related activities. During SUPSFM the National Project Management Office (NPMO) has coordinated the various activities and implemented an efficient M&E system. It also built capacity for planning and for undertaking analytical work as required to meet overall project objectives and to assess project impact and support learning for sector development. The name of Component 4 has been revised to more accurately reflect the activities on learning and investment development under the Component that go beyond conventional project management.

28. Summary of changes to Component 4: The NPMO will continue to coordinate operational activities but with a greater focus on facilitating and attracting new investment into the forest estate and consolidating learning from project activities. The AF would therefore finance the maintenance of project management services while also enhancing investment development and learning. Activities under the AF include: (a) Continued operating costs of implementation, coordination and supervision; (b) operating costs for engaging in dialogue with stakeholders and sectors on investment prioritization and development; (c) institutionalization of knowledge for investment and policy development; (d) maintain SUPSFM Technical Assistance (TA) team to supplement and build institutional capacity on existing topics and emerging new challenges; and (e) replacement of worn-out pick-up trucks for field supervision used by the Project team.

### **3. Project Coverage and Implementation Arrangements**

#### **3.1. PFAs and Area Covered**

29. The location of the AF-SUPSFM remains the same as the parent project. AF-SUPSFM will provide technical and social support in provinces where the parent project is currently operational in 13 provinces: Bokeo, Luang Namtha, Oudomxay, Xaysomboune, Xayabouly, Vientiane, Attapeu, Bolikhamxai, Khammouane, Savannakhet, Champasack, Salavan, and Xekong (plus wildlife and timber law enforcement in all 18 provinces as during the parent project) and continue to develop a Forest Landscape Management approach covering state managed forests (production, conservation, and protection forests) and village forests in a selection of the existing focus provinces. All these projects areas are home to multi-ethnic groups who are defined as Indigenous People under the Bank policy (OP/BP 4.10). These ethnic groups, particularly those under Mon-Khmer, Hmong Iew Mien and Chine-Tibetan ethno-linguistic families, are often present with collective attachment to the forest land areas, which are the main sources of their livelihoods. Most of these ethnic households are poor and vulnerable to rapid changes in land and forest use patterns and livelihood practices. Special considerations and attention are required to ensure that these affected people and their livelihood will not worsen as result of project implementation. It is anticipated that the operation will continue to have a positive impact on management of Lao PDR's forests and forest resources and forest-dependent people and Ethnic Groups. Besides generating employment and cash income, intact forests are essential to reduce flood and drought risks to

highly vulnerable rural people, as well as to meet the economic needs of a significant number of households in forest areas, who rely on them for food security, fuel, medicine, construction materials and other forest products. Inclusion of female staff on the project design and implementation teams helps ensure that existing rights of local communities, and especially women, to forest resources are taken fully into account and that the benefits from the project are shared equitably.

The Project will continue to provide incremental support for monitoring and implementation of village development and forest management activities in a total of 41 PFAs with an aggregate area of 2.30 million ha. Table 1 lists the 41 PFAs and provides some relevant information about them.

**Table 1: PFAs supported by SUPSFM and AF-SUPSFM**

Province	PFA name	Area (ha)	Management Plan Prepared	Districts (#)	Sub- FMAs (#)	Villages (#)
<b>SUFORD PFAs (2003-08) – continued under SUPSFM</b>						
Champasack	Pathoumphone	27,043	2007	1	4	36
Champasack	Silivangveun	37,590	2007	2	4	43
Khammouane	Dong Phouxi <sup>1</sup>	147,406	2007	3	12	91
Khammouane	Nakathing- Nongkapat <sup>1</sup>	105,416	2007	3	11	71
Salavan	Lao Ngam <sup>2</sup>	74,580	2007	4	10	66
Salavan	Phou Talava <sup>2</sup>	61,772	2007	3	7	27
Savannakhet	Dong Kapho <sup>2</sup>	51,650	2007	3	4	24
Savannakhet	Dong Sithouane <sup>1,2</sup>	150,900	2007	2	13	54
<b>SUFORD-AF PFAs (2009-12) – continued under SUPSFM</b>						
Attapeu	Ban Bengvilay	37,862	2012	1	2	10
Attapeu	Nam Pa Huayvy	75,037	2012	1	3	31

<sup>1</sup> With FSC-certified sub-FMAs, total of 5 sub-FMAs in 3 PFAs located in Khammouane and Savannakhet

<sup>2</sup> With FSC controlled wood certification, total of 25 sub-FMAs located in Salavan and Savannakhet

Bolikhamxai	Phak Beuak	112,756	2012	4	6	22
Bolikhamxai	Phou PasangPunghok	47,657	2012	1	2	20
Vientiane	NongpetNaseng	68,725	2012	4	5	29
Vientiane	Phou Gneuy	100,228	2012	4	10	73
Xaiyabouly	Phou Phadam	95,224	2012	3	10	74
Xekong	Huaypen	89,532	2012	1	4	70
<b>Entering PFAs under SUPSFM (2013-2018)</b>						
Attapeu	Nam Kong	88,559	2015	3	3	19
Bokeo	Phouviengxai	44,894	2015	1	6	26
Bokeo	Sammuang	78,699	2014	2	8	32
Bolikhamxai	Huay SupNamtek	8,590	2015	2	2	2
Bolikhamxai	Phou Tum	12,179	2015	2	2	7
Champasack	Nongtangok	58,000	2014	2	5	16
Luangnamtha	Nam Fa	24,649	2013	1	4	24
Luangnamtha	Phou Led Longmoun	20,150	2014	2	4	10
Oudomxai	Namnga	98,786	2013	3	13	91
Oudomxai	Namphak	52,118	2014	1	4	45
Oudomxai	Saikhong	69,791	2015	3	8	47
Vientiane	Houay Siat	36,479	2014	2	2	13
Vientiane	Phou Phaphiang	36,107	2014	2	2	7
Vientiane	Phou Samliam	44,780	2014	2	4	15
Xaiyabouly	Huay Gnang	36,717	2014	1	2	12
Xaiyabouly	Kengchok-Nam Ngim	114,943	2015	2	2	38
Xaiyabouly	Pha Nang ngoi	29,144	2015	2	7	36

Xaiyabouly	Pha Nangnuane	48,174	2014	1	4	28
Xaiyabouly	Phou Phadeng	16,393	2014	1	1	9
Xekong	Dakchang	38,461	2015	2	2	16
Xekong	Dakmong	5,028	2015	1	2	11
Xekong	Namdee	11,760	2015	2	2	11
Xekong	Phoukateum	21,338	2015	1	2	13
Xekong	Prong	16,990	2015	1	1	9
Xekong	Xienglouang	5,396	2015	1	1	6
<b>12 provinces</b>	<b>41 PFAs</b>	<b>2.30 M</b>	<b>2015</b>	<b>83</b>	<b>200</b>	<b>1,284</b>

58. The project also intends to scale up the concept of FLM by supporting the creation of “bankable” landscape investment plans in selected landscapes across the forest estate. This builds on the ‘forest landscape’ approach to participatory forest management. These investment plans will facilitate a more coordinated approach to landscape management and increase livelihoods opportunities for communities living inside and around all forest areas.

59. Traditional SUPSFM style forestry practices will continue under AF-SUPSFM and implementation of safeguards will be guided, as they have been, by the technical guidelines that have been developed, but with improvements to monitoring and reporting. However, given the changed policy environment with the introduction of PMO 15 and other legislation, timber extraction is not currently being implemented by the project. If and where the timber bans are lifted, AF-SUPSFM will continue village forestry support as planned.

60. For livelihoods enhancement updated CEFs and CAPs will continue to inform the process of forest management planning. Livelihood production groups will continue to be strengthened in project villages with the types of support provided based on criteria related to food security and socio economic status of households; dependence on forest resources; and, willingness to participate in a production group.

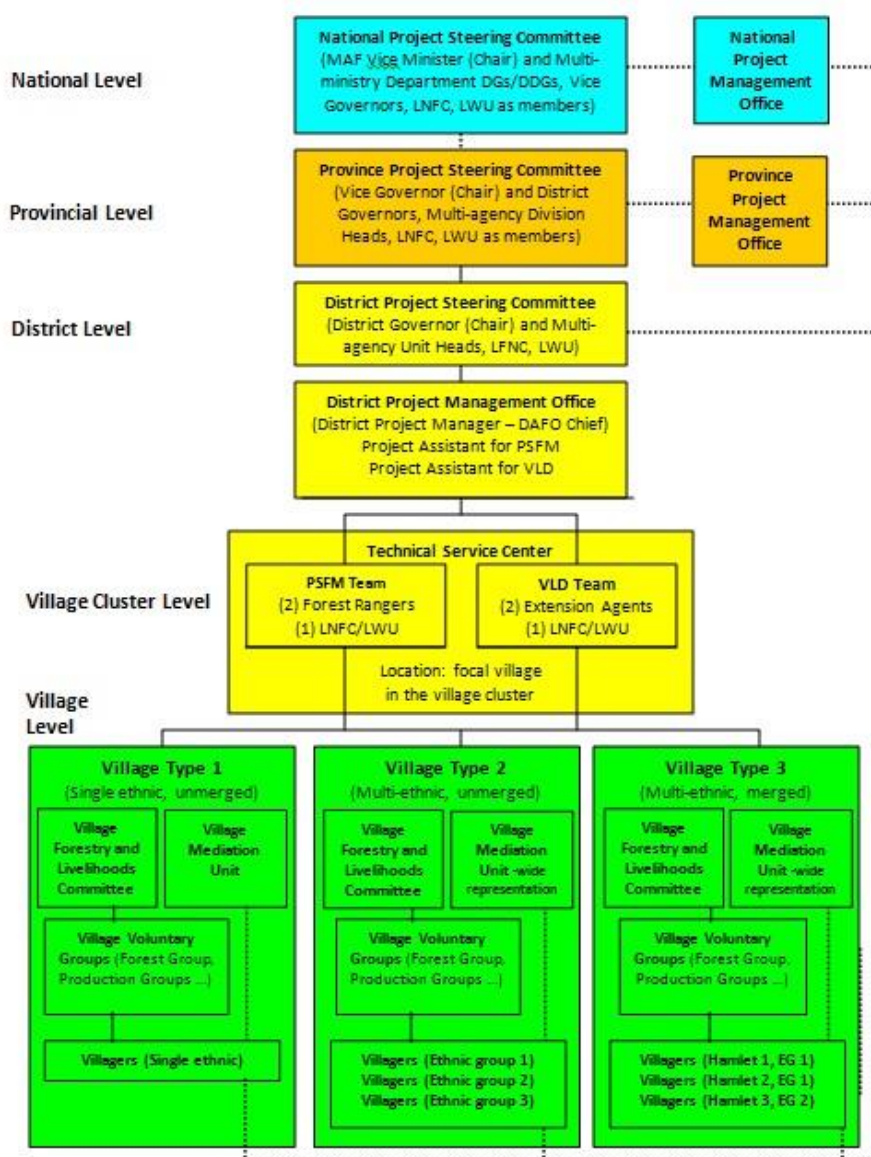
61. Various livelihood options will be implemented. These include smallholder tree farms, agro-forestry, NTFP domestication, restoration and rehabilitation of degraded lands, and village enterprises. AF-SUPSFM will not fund additional VLDGs, but will continue and enhance extension service and technical support to communities implementing SUPSFM grants.

## 3.2. Implementation Arrangements

### 3.2.1 Project Institutional and Implementation Arrangements

63. The Project operates in a multi-level setting (Figure 1). At national level, the project will focus mainly at the National System of Production Forest Areas and their participatory, sustainable management following the PSFM system that has been applied over a period of 9 years in 16 PFAs and has been expanded to cover 41 PFAs under SUPSFM. Other

developments, such as notably REDD+ and village livelihoods, which extend beyond the confines of the PFA, will be addressed by enhancements of PSFM following a landscape approach that encompasses other categories of state and village forest areas.



**Figure 1: SUPSFM Organizational Structure continued under AF-SUPSFM**

64. At sub-national level, the project will focus on PFA partitions for PSFM purposes, but will include partitions of other categories of forest areas for forest landscape purposes. Provincial project management will continue to be concerned mainly with the PFAs and associated landscapes that are located in the province. District project management will be concerned with the FMAs of different categories of state and village forest areas that are located in the district, e.g. FMAs and their sub-FMAs in the case of PFAs. At grassroots level, the project operates in villages although state forest areas will generally be defined to comprise a cluster of villages, rather than single villages, to keep the total number of FMAs at a manageable number.

65. The SUPSFM organizational structure, shown in Figure 1, illustrates the project institutional framework at three administrative levels (National, Provincial and District). The overall structure will be maintained under AF-SUPSFM. This figure illustrates the multi-level setting under which the project operates and the participating institutions that will oversee,

perform their roles and functions, and implement the related project components and activities to attain the Project Development Objective.

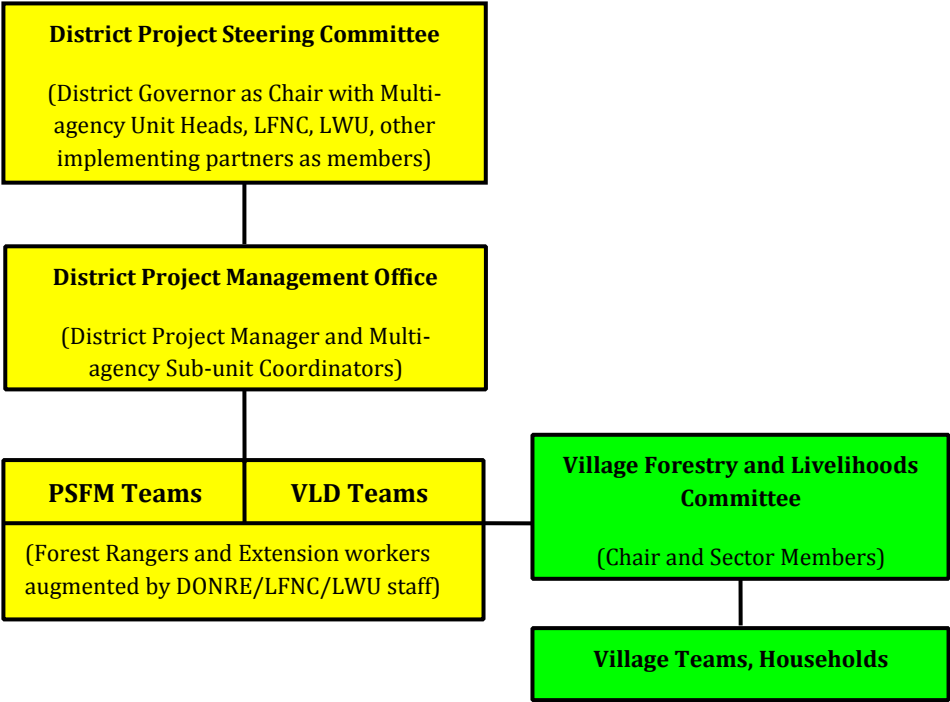
66. Project oversight will continue to be provided by the Project Steering Committees that have been established at each of the three levels. This is to ensure that policy guidance is provided in a timely manner to the participating institutions in the performance of their roles and functions. The initial and most important policy decision of the Project Steering Committees will be to review and endorse the five-year and annual work plans at their level. Project oversight will be applied in conformity with project design and consistent with recent Politburo guidance (Resolution 03/PM/2012), which provides for the formulation of provinces as strategic units, districts as comprehensively strong units, and villages as development units.

67. Participating institutions at each level appoint Project Coordinators who take responsibility in organizing their institution’s program and activities to implement the policy decisions of the respective Project Steering Committee. The Project Manager, acting as the Secretary of the Project Steering Committee at each level is responsible for informing the Project Coordinators, who will then initiate the organizing of teams to undertake the related activities to implement the policy decisions. The Project Manager at each level ensures that resources needed to undertake project activities are provided to the different teams, ensuring through project monitoring that the use of those resources are able to generate the intended outputs.

68. Subsequent sub-sections present the institutions involved at three levels: grassroots, provincial, and national, and how they are organized and linked for project implementation.

3.2.2 Implementation Arrangement at District and Village Levels

69. The grassroots level comprises the district and village levels where PSFM is actually implemented in parts of the PFA and other forest categories that overlap with the district and the villages in the district. Figure 2 illustrates the institutional framework linking the project participants including government and village institutions, and mass organizations for grassroots operations.



**Figure 2: Institutional framework at grassroots level**

70. SUPSFM operations at district and village levels are related mainly to Component 1: Strengthening and expanding PSFM in PFAs and Component 2: Developing Forest Landscape Management and to a lesser extent to the other project components. Component 1 specifically has two main concerns: PSFM, to put the 41 target PFAs under participatory, sustainable management, and Village Livelihoods Development (VLD), to support the participating villages in developing livelihoods. Both PSFM and VLD will continue to require project engagement with participating village communities.

71. Mainly the District Agriculture and Forestry Office (DAFO) will continue to undertake project implementation at grassroots level by government institutions. SUPSFM will establish a Project Management Office (PMO) in DAFO of each target district, where the project field teams will be based.

72. DAFO foresters assigned as Forest Rangers will continue to be formed into and operate as PSFM Teams to provide training and technical support to villages in putting sub-FMAs and village-use forests under participatory, sustainable management. DAFO extension agents will be VLD Teams to provide training and technical support to villages in sustainable livelihoods development. Representatives of the Lao Women's Union and Lao National Front for Development will be included in the teams.

73. Staff from the Provincial and District Forest Inspection Offices will work with villagers in the implementation of forest law enforcement at the provincial and district levels.

74. As for the SUPSFM, project implementation at grassroots level by village institutions will be undertaken mainly by village communities and households under the leadership of the Village Forestry and Livelihood Committee (VFLC). The VFLC will be headed by the Village Head as the Chairperson and will include a Deputy Chairperson, a Secretary, a Treasurer, and representatives of women, elders, youth, and other village sub-sectors as members. The VFLC will be the contact points of the PSFM and VLD Teams in village work and the action points in the conduct of PSFM and VLD activities, such as in selecting village forestry teams and organizing self-help groups.

75. Project operations at provincial level are formulated and presented in 5-year and annual work plans that are submitted to the Provincial Project Steering Committee (PPSC) for approval. To take responsibility in implementing the project work plans and coordinate with district offices, a Provincial Project Management Office (PPMO) established at each project province is headed by a Provincial Project Manager who is a head of the Forestry Division under the Provincial Agriculture and Forestry Office (PAFO). A provincial financial management staff and a project assistant are assigned in each PPMO. Project operations at provincial level will provide the needed support to grassroots level operations. These include:

- Looking after project operations at provincial level, preparation and/or implementation of PFA management plans jointly with the DOF Forest Inventory and Planning Division, review and transmittal of sub-FMA plans to DOF, approval of action plans and annual operations plans prepared at grassroots level. Note: Given the logging ban in effect, the following activities that were originally envisioned under SUPSFM are not envisioned to take place during AF-SUPSFM: preparation of proposals for logging quotas for sub-FMAs in the province, undertaking timber sales with the Provincial Department of Industry and Commerce, contracting and supervising logging operations, timber revenue sharing, and transfer of revenue shares to stakeholders. AF-SUPSFM will no longer fund Pre-harvest Inventories given the current logging ban. Also no logging is going to be undertaken under AF due to logging ban and PMO 15 still in place. If regulations change, then the project can re-engage.



- Organizing training of PSFM and VLD Teams, including additional team members from LFNC, and LWU. The Technical Assistance (TA) Team and Non-Profit Associations (NPA) undertake training with proficiency in community engagement.
- Acting as conduit of financing needed in grassroots operations. A sub-account is established at each project province to take care of office management expenditures and operations costs of project officers and staff. However, to ensure that funds are available for community engagement of the PSFM and VLD Teams immediately after training in the province, funds for field operations are made available to the province directly by the National Project Management Office.
- Providing support to the TA Team and development partners when conducting field operations, such as those concerning Components 2 and 3, and coordinating with the districts to provide support to the visiting teams.
- Providing oversight and guidance to grassroots operations through the Provincial Project Steering Committee (PPSC) and the Provincial Project Manager. This Project utilizes existing high level Provincial Project Steering Committees revising their ToR and membership as appropriate. PPSC will be headed by the Deputy Provincial Governor and have District Vice-Governors as vice-chairs; provincial heads of relevant line agencies, and representatives of LNFC and LWU will be included as members. As with DPSCs, the project will develop a proposal to coordinate REDD+ project oversight and reporting through the Provincial Project Steering Committees.
- Monitoring and Evaluation, both of projects inputs, outputs, outcomes, and impacts where relevant.

76. Figure 3 illustrates the institutional framework at provincial level and its link to the district level

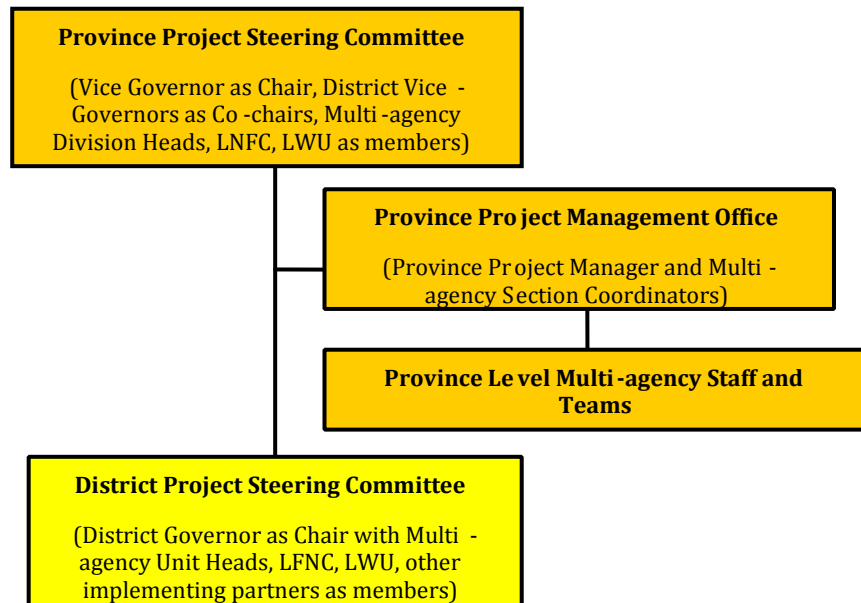


Figure 3: Institutional framework at provincial level

## 4. SUPSFM and AF-SUPSFM Environmental Safeguards

### 4.1. World Bank Classification of Project

77. The environmental and social policies and procedures of the World Bank are widely regarded as international standards for the environmental and social management of development projects.

78. The World Bank undertakes environmental screening of each of its proposed projects. The Bank classifies each project into one of four categories depending on its type, location, sensitivity and the nature and magnitude of impacts on communities and the environment.

79. While the AF-SUPSFM is modifying and scaling up activities, the aim is to strengthen completed activities under the parent project, there will be no new villages, districts, provinces or PFAs will be financed, and therefore, the proposed AF is not expected to have adverse environmental impacts. However, since the AF-SUPSFM will maintain its parent project's component, the assigned Category "A" will remain valid as several bank safeguard policies remain triggered. **No new policies have been triggered.** Refer to Table 2 and Table 3. This is a precautionary measure to ensure that all safeguards policies are given proper attention, and to help the AF-SUPSFM preparation team identify ways to enhance the expected positive impacts. For a Category A projects the borrower, in this case the Government of Lao PDR, is responsible for preparing an ESIA. As there will be no change to the project activities and its locations, ESIA for the parent project will be valid for the proposed AF-SUPSFM, an ESIA Executive Summary will be updated, and this EMP is revised to cover all identified impacts under the parent project as well as the AF-SUPSFM.

Table 2: World Bank Project Classification

<p><b>Category A:</b> A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. EA for a Category A project examines the</p>
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project's potential negative and positive environmental impacts, compares them with those of feasible alternatives (including the "without project" situation), and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance. For a Category A project, the borrower is responsible for preparing a report, normally an EIA.

**Category B:** A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas--including wetlands, forests, grasslands, and other natural habitats--are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigation measures can be designed more readily than for Category A projects. The scope of EA for a Category B project may vary from project to project, but it is narrower than that of Category A EA. Like Category A EA, it examines the project's potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance.

## 4.2. Environmental Safeguards policies triggered

80. **No new policies are triggered under AF-SUPSFM compared to the parent project, SUPSFM.** The AF-SUPSFM will continue to strengthen its parent project outcome which is intended to improve overall forest management capability and increase forest cover in Lao PDR. There is a risk that some sub-project activities such as extension support for livelihoods, may cause localized small-scale negative impacts. As such the EMP will be compliant with World Bank Safeguard Policies: Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Forest Strategy (OP 4.36), Pest Management (OP.4.09) Physical Cultural Resources (OP 4.11). This EMP addresses only possible environmental aspects of the project.

81. Social impacts and relevant safeguard triggers discussions for Involuntary Resettlement (OP 4.12) and Ethnic Minorities (OP 4.10) are considered in detail in the CEF. Table 3 provides an overview of environmental and social safeguard policies that are triggered.

**Table 3: Environmental and Social Safeguards Triggered**

<b>Safeguard Policies</b>	<b>Triggered?</b>	<b>Explanation (Optional)</b>
Environmental Assessment OP/BP 4.01	<b>Yes</b>	An Environmental and Social Impact Assessment has been conducted for the parent project and will remain valid for the AF as there will be no change in activities and area, and an Environmental Management Plan (EMP) has been updated by the implementing agency. Environmental safeguard issues will be identified in the Community Engagement Framework (CEF), participatory land use planning (PLUP) and forest management planning processes and integrated into community action plans (CAPs). Guidance on OP/BP 4.01 implementation has been provided in the EMP. The existing SUPSFM Operations Manual will be reviewed and revised to provide additional guidance.

Natural Habitats OP/BP 4.04	<b>Yes</b>	<p>Project areas include state designated forests in Production Forests as well as smaller community managed village use forests outside of designated categories.</p> <p>Identification and mapping of sloping lands, riparian zones, and High Conservation Value Forest (HCVF) and appropriate management and protection activities in project areas have been identified during the forest management planning process of parent project. This revised EMP will continue to provide operational guidance for AF-SUPSFM activities.</p>
Forests OP/BP 4.36	<b>Yes</b>	<p>Bank-supported projects in Lao PDR have contributed to the development of the legal and regulatory frameworks, financial incentives and capacity to undertake sustainable forest management planning at national, provincial and local levels. The achievement and renewal of Forest Stewardship Council certification for a growing area of production forest in Lao PDR indicates sustained progress. Forest management plans were prepared and successfully implemented during the parent project implementation phase following national guidelines. Increasing the area of managed forest in Lao PDR and strengthening Forest Law Enforcement and Governance (FLEG) are expected to diminish the scope for unplanned, unsustainable logging. This effort will continue to be strengthened under the AF-SUPSFM.</p>
Pest Management OP 4.09	<b>Yes</b>	<p>Pesticide use during project implementation in connection with forest restoration and alternative livelihoods activities is anticipated. Mitigation steps and guidelines have been provided in the this revised EMP including a Negative Checklist and Project Screening Procedures. Pesticides use will be minimized and alternatives, including integrated pest management, will be explored.</p>

Physical Cultural Resources OP/BP 4.11	<b>Yes</b>	<p>Chance Find Procedures and Project Screening procedures have been developed and will be continued to apply in the revised EMP. Evaluation of cultural and archaeological significance has been undertaken as part of PLUP process and a PCRMP, and will continue under AF if needed.</p>
Indigenous Peoples OP/BP 4.10	<b>Yes</b>	<p>Many project beneficiaries are known in Lao PDR as ethnic groups. The project has developed and implemented a Community Engagement Framework (CEF) that incorporates an IPPF (referred to locally as EGPF) to address OP 4.10 requirements. The CEF is based on the process of free, prior and informed consultation with the goal of establishing broad community support and involvement in the project. The CEF is being revised to ensure that Ethnic Groups will continue to receive benefits that are culturally appropriate and gender- and intergenerationally inclusive under proposed AF.</p> <p>Potential risks or adverse effects on communities will continue to be identified, managed, and mitigated by means of Community Action Plans. CAPs will include requirements of and serve as an EGP. CAPs are developed and implemented during the implementation of parent project with the participation of communities that opt to be included in the project. This aim is consistent with GoL national policies that promote a multi-ethnic society, and seek to ensure the full participation of ethnic groups in the country's development. The CAP has been developed to ensure that neighboring communities, or sub-groups, that do want to participate, will not be adversely affected, including in terms of access to land and natural resources they currently have access to or can make customary claims to.</p>

Involuntary Resettlement OP/BP 4.12	<b>Yes</b>	The parent project experienced no land acquisition, however, in such cases an Abbreviated Resettlement Plan will be prepared as described in the RPF Annex. Local people affected by the project will benefit from more sustainable access to forest and other natural resources as well as project supported actions for improved livelihoods. Nonetheless, short-term loss in livelihood may be unavoidable since the development of alternative resource allocation and livelihoods are longer-term processes. Some project activities may also include restrictions of access to natural resources in connection with protected areas. In line with OP 4.12, any loss from changes in livelihoods will be mitigated in participation with project-affected communities.
Safety of Dams OP/BP 4.37	<b>No</b>	
Projects on International Waterways OP/BP 7.50	<b>No</b>	
Projects in Disputed Areas OP/BP 7.60	<b>No</b>	

#### **4.3. Safeguards Implementation**

82. This revised Environmental Management Plan (EMP) aims to provide the national, provincial and district government, the AF-SUPFSM team, consultants, village officials, private and public sector agencies and beneficiary community members with adequate guidance for effectively addressing environmental safeguard issues.

83. The process will be implemented as part of the project cycle as experienced with the parent project and the activities will continue to be fully integrated into the selection, approval, implementation, and monitoring and evaluation process. The EMP is revised based on the implementation experience of the SUPFSM project and the scope of activities to be carried out under the AF-SUPFSM.

84. Like for the parent project, the revised EMP describes a safeguard screening and review process and safeguard actions, including monitoring and supervision, to be carried out and it will be applied to all activities financed by the AF-SUPFSM project.

85. Project staff at central and local levels will be responsible for implementation of the EMP and ensuring full compliance, including keeping proper documentation in the project file for possible review by the World Bank.

86. This document is considered a living document and can be modified and changed in line with the changing situation or scope of the activities. Close consultation with the World Bank and clearance of the revised EMP will be necessary.

#### *Government of Lao PDR environmental commitments*

87. Beside the World Bank Safeguard Policies, the existing environmental management policy of Lao PDR is important and has been analyzed before the environmental safeguard compliance framework designed for SUPSFM (parent project). The World Bank safeguard policies place emphasis on using, applying and strengthening the country systems related to environmental management. Appendix 4 describes the policies related to environmental management in Lao PDR, including institutional arrangements and responsibilities, as well as the regulatory framework of laws and policies.

88. Different ministries are concerned with environmental issues and environmental management in the context of private and public investment. With regards to AF-SUPSFM they primarily include the Ministry of Agriculture and Forestry (MAF), and the Ministry of Environment and Natural Resources (MoNRE).

89. Legislative and other requirements relevant to AF-SUPSFM include: local, provincial and national laws and regulations, operating licenses, permits and approvals, international standards and conventions and legal obligations to which the GOL is a party. In addition, an Environmental Impact Assessment (EIA) Decree adopted by GOL in January 2019 will be applied if relevant. Appendix 4 provides a summary of these key documents relevant to AF-SUPSFM.

#### **4.4. Baseline assessment procedures for biodiversity values**

90. As the AF-SUPSFM is continuing activities in the same area of parent project (SUFORD and SUPSFM), there will be no additional biodiversity baseline, the one for parent project remain valid and no change to the text in this section.

91. PFAs are a landscape comprising both forest and agricultural zones. The SUFORD project has been using the High Conservation Value (HCV) methodology to assist PFA management planning, to minimize conflict between functions. This procedure will continue to be used under SUPSFM.

92. Six types of HCV exist and a forest area meeting any of the criteria for any of them becomes a High Conservation Value Forest (HCVF). The six criteria encompass human culture (e.g. sites of traditional spiritual import), utilitarian value (e.g. soil protection) and 'pure' biodiversity. Three HCV categories are related to 'pure' biodiversity. The presence of a HCV does not necessarily mean that a strict conservation or protection management regime needs to be applied. Many HCV values can be maintained or enhanced through implementation of the current environmental regulations adopted in forest management and through simple conservation guidelines and regulations for specific HCV values. The biggest threats to habitats arise from forest conversion, illegal logging and encroachment, rather than direct effects of PSFM logging itself, which is low impact, and due to the logging ban will not be undertaken during AF-SUPSFM.

93. Most of the components of biodiversity within Lao PDR, with the exception of a few large mammal species and birds, are largely unknown. Information about the status even of many large mammal species remains inadequate. This information can only be gathered through extensive field surveys. In recognition of this a precautionary approach has been adopted in the latter stages of SUFORD to assess HCV conservation values. A pragmatic methodology for determining high conservation values, i.e. those of regional (HCV1-3) or local importance (HCV4-6) has been adopted, and a revised toolkit for HCV assessment in Production Forest Areas (SUFORD, 2010b) has been utilized. Refer to SUFORD (2010b). Forest Resource Assessment and Planning Manual. Volumes 1-4. (High Conservation Value Forest; NTFP; Village Regulations), Department of Forestry, Lao PDR. Under SUPSFM baseline assessments of biodiversity and wildlife values were planned to be undertaken in new project PFAs as part of the PLUP process, so that CAPs can take into account results of the assessments.

## **5. Environmental impacts and mitigation**

93. The ESIA identified environmental impacts and EMP recommends appropriate mitigation measures under the parent project. The proposed AF will extend mainly the activities of SUPSFM. The AF-SUPSFM will build and expand on the SUPSFM project and will continue to undertake an effort on pilot forest landscape management in four northern provinces. The project will also support private sector stakeholder's future investment by dialogue with the government for capacity building and strengthen the new policies that shape the operating environment. A safeguard assessment was carried out to review the environmental management performance of the SUPSFM. Overall, the audit did not find major non-compliance issues or significant negative impacts on the environment. The SUFORD-style low impact logging and management would not cause significant long term or irreversible detriment to wildlife, biodiversity and sustainable forestry of PFAs, but because of the PMO 13 banning logging in PFAs is still in force, there will be no impacts from timber harvesting. The review was also confirmed that logging-related activities will not be financed under the AF-SUPSFM. The project will however continue with all four parent project's components.

94. The proposed AF-SUPSFM will continue to address challenging environmental management issues that are summarized here.

### **5.1. Pesticide Use**

95. Pesticide and fertilizer use is an emerging issue in Lao PDR's agricultural sector which is increasingly influenced by market based drivers, such as the need for increased yield. The AF-SUPSFM project activities will continue to strengthen activities that widespread across many provinces, with variable environmental conditions. Although pesticide use in the project will be discouraged where alternative natural biological solutions can be practically applied, total avoidance is unlikely. To determine if pesticides are necessary for livelihoods activities supported by SUPSFM and AF-SUPSFM, such as assisted rehabilitation and NTFP development, activities are filtered through the Negative Check List and Project Screening Process.

#### Objective

96. The objective will be to minimize use and reliance on non-biological controls of pests. The primary aim of pest management should be not to eradicate all organisms, but to manage particular pests and diseases that may negatively affect forest, land and water resources so that



these resources remain at a level that is below an economically and environmentally damaging threshold. Contamination with pesticides may also lead to habitat alteration.

**Table 4: Pesticide Management - Safeguard Response Summary**

Issue	World Bank trigger(s)	Safeguard Response Summary
Improper use of pesticides and fertilizers that may cause harm to humans, biodiversity and the environment from SUPSFM related activities.	Pest Management (OP.4.09)	<p>Avoid pesticide use where ever and whenever possible.</p> <p>Identify through PLUP high-risk villages and forest landscapes.</p> <p>Apply Negative Checklist and Project Screening Procedures for all sub component projects.</p> <p>Develop Integrated Pest Management Plans where pesticides are required.</p> <p>Provide village training and safety equipment for sub-projects that require pesticide and fertilizer use</p> <p>Poison and contamination testing.</p>

#### Mitigation

Like SUPSFM, the AF will continue to follow the SUPSFM practice to avoid and manage the use of pesticides. During the past projects (FOMACOP, SUFORD, SUFORD AF, and SUPSFM) implementation no significant incidents related to pesticides were recorded, and or reported. Recent policy and legal reforms provide an updated legal framework upon which the AF-SUPSFM will base its approach. These policies and laws include: (A) Law on Chemicals, No. 07/NA dated 10 November 2016, (B) Decree No. 202/President dated 12 November 2016, and (C) Law on Plant Protection and Quarantine, No. 13/NA dated 15 November 2016, and (D) Decree No. 197/President dated 28 November 2016, and (D) legal provisions and procedures for regulating pesticides, including licensing businesses involved in import, formulation, sale and distribution of pesticides through by (i) Prime Minister's Decree No. 258/PM on Pesticide Management, dated 24 August 2017 and (ii) Ministerial Decision 238/MAF on Control of Pesticides Businesses, dated 14 February 2019.

97. Pesticides should be managed to avoid their migration into off-site land or water environments avoid degradation of soil and water quality by establishing their use as part of an Integrated Pest Management Plan, which would include a description of cultural practices, biological control, and resilient genetic strains.

98. Where feasible, the following alternatives to pesticides should be considered:

- Provide those responsible for deciding on pesticides application with training in pest identification, weed identification, and field scouting;
- Rotate crops to reduce presence of pests and weeds in the soil ecosystem;
- Introduction of crop and tree inter-planting;
- Use of pest-resistant crop varieties;
- Use of mechanical weed control and / or thermal weeding;
- Support and use of beneficial organisms, such as insects, birds, mites, and microbial agents, to perform biological control of pests;

- Protect natural enemies of pests by providing a favorable habitat, such as bushes for nesting sites and other original vegetation that can house pest predators;
- Use animals to graze areas and manage plant coverage;
- Use mechanical controls such as traps, barriers, light, and sound to kill, relocate, or repel pests.

99. If pesticide application is warranted the following precautions to reduce the likelihood of environmental impacts should be used:

- Train personnel to apply pesticides and ensure that personnel have received applicable certifications or equivalent training where such certifications are required;
- Review the manufacturer's directions on maximum recommended dosage or treatment as well as published reports on using the reduced rate of pesticide application without loss of effect, and apply the minimum effective dose;
- Apply pesticides based on criteria such as field observations, weather data, time of treatment, and dosage, and maintain a pesticide logbook to record such information;
- Avoid the use of pesticides that fall under the World Health Organization Recommended Classification of Pesticides by Hazard Classes 1a and 1b.
- Avoid the use of pesticides that fall under the World Health Organization Recommended Classification of Pesticides by Hazard Class II
- Avoid the use of pesticides listed in Annexes A and B of the Stockholm Convention, except under the conditions noted in the Convention
- Use only pesticides that are manufactured under license and registered and approved by the appropriate authority and in accordance with the Food and Agriculture Organization's (FAO's) International Code of Conduct on the Distribution and Use of Pesticides
- Use only pesticides that are labeled in accordance with international standards and norms, such as the FAO's Revised Guidelines for Good Labeling Practice for Pesticides;
- Select application technologies and practices designed to reduce unintentional drift or runoff only as indicated in an IPM program, and under controlled conditions;
- Maintain and calibrate pesticide application equipment in accordance with manufacturer's recommendations;
- Establish untreated buffer zones or strips along water sources, rivers, streams, ponds, lakes, and ditches to help protect water resources;
- Avoid use of pesticides that have been linked to localized environmental problems and threats.

100. To prevent, reduce, or control the potential contamination of soils, groundwater, or surface water resources, which may result from accidental spills during transfer, mixing, and storage, pesticides should be stored and handled in accordance with the recommendations for hazardous materials management in the FAO Guidelines.

101. Recommendations include the following:

- Store pesticides in their original packaging, in a dedicated, dry, cool, frost-free, and well aerated location that can be locked and properly identified with signs, with access limited to authorized people. No human or animal food may be stored in this location. The store-room should also be designed with spill containment measures and sited in consideration of potential for contamination of soil and water resources;
- Trained personnel in ventilated and well-lit areas should undertake mixing and transfer of pesticides, using containers designed and dedicated for this purpose.

- Containers should not be used for any other purpose (e.g. drinking water). Collect rinse water from equipment cleaning for reuse (such as for the dilution of identical pesticides to concentrations used for application);
- Contaminated containers should be handled as hazardous waste, and should be treated accordingly. Disposal of containers contaminated with pesticides should be done in a manner consistent with FAO guidelines and with manufacturer's directions; Purchase and store no more pesticide than needed and rotate stock using a “first-in, first-out” principle so that pesticides do not become obsolete. Additionally, the use of obsolete pesticides should be avoided under all circumstances;
- An IPMP that includes measures for the containment, storage and ultimate destruction of all obsolete stocks should be prepared in accordance to guidelines by FAO and consistent with country commitments under the Stockholm, Rotterdam and Basel Conventions.
- Ensure that protective clothing worn during pesticide application is either cleaned or disposed of in an environmentally responsible manner
- Implement groundwater supply wellhead setbacks for pesticide application and storage.
- Maintain records of pesticide use and effectiveness.

### Monitoring

- Under FIP PLUP specific enquiry is given for village use of pesticides and fertilizers. This includes an assessment of the knowledge base of those villages that work within local commercial crop plantations.
- Under FIP PLUP specific enquiry is given regarding the local cropping industries' use of chemicals and fertilizer products.
- Under FIP PLUP specific enquiry is given to evaluating what villages perceive to be locations of possible land and water contaminations, causes and effects.
- Under FIP PLUP local signboards are erected spelling out the risks of potential chemical poisoning and contamination – can be industry based.

103. The village based monitoring group may require basic training to respond to reports of adverse events related to pesticides within a reasonable period of time. The community based approach will ensure the most effective mechanism for surveillance and providing immediate health care. It will also be the appropriate venue for instituting policy changes regarding pesticide use within the khumban.

104. Proof of illness or adverse event, proof of exposure and their temporal relationship should be obtained as quickly as possible. A detailed description of the incident or adverse event should also be obtained. The standard demographic data should not be forgotten, such as name, age, sex, etc. If possible information on the occurrence of similar incidents within the khumban or village should be sought. A simple structured questionnaire should be used whenever practicable so as not to miss important information.

105. Where specific incidences occur the monitoring group will:
- Seek testimonial evidence – direct and indirect. For examples through hospital treatment or medical professional diagnosis of plausible causes.
  - Record physical evidence – actual presence of victims, pesticide labels or containers, photographs, video or audiotapes, etc.
  - Record brands of known fertilizers and pesticide used within the agribusiness. Village workers should be also able to describe the methods and timing of their application.

- iv. Documentary evidence – signed statements, local records, notes from MAF, Agribusiness representative etc
- v. Record the geographic locations and take into account if there is consistency with other victims or contaminations
- vi. Where possible obtain laboratory evidence.

106. The WHO classification measures mammalian acute toxicity, that is, the risk to health of single or multiple exposures over a relatively short period of time. Acute toxicity is measured through LD50 tests on mammals. Tests are carried out only on individual active ingredients, not on the final pesticide products: the toxicity of the product may vary, depending on the formulation. Some countries have their own system of hazard classification for products, e.g. the US EPA.

107. The Food and Agriculture Organization recommends in its Pesticide Code of Conduct that WHO Ia and Ib pesticides should not be used in developing countries, and if possible class II should also be avoided. In recent years, several private voluntary standards in the food retail sector, including Fair Trade and Rainforest Alliance, have decided to prohibit or phase out the use of WHO Class 1 pesticides. Some supermarket companies have also included WHO acute toxicity rank as one of their criteria for prohibiting or restricting the use of particular hazardous pesticides by growers in their supply chains.

**Table 5: WHO Pesticide Classification**

Class	Class LD50 for the rat (mg/kg body weight)			
	Solids (Oral)	Liquids (Oral)	Solids (Dermal)	Liquids (Dermal)
Ia Extremely hazardous	5 or less	20 or less	10 or less	40 or less
Ib Highly hazardous	5-50	20-200	10-100	40-400
II Moderately hazardous	50-500	200-2000	100-1000	400-4000
Slightly Hazardous	500-2000	2000-3000	1000-4000	4000-6000
U	U Over 2000	Over 3000	Over 4000	Over 6000
O	Active ingredients believed to be obsolete or discontinued for use as pesticides			
The terms ‘solid’ and ‘liquids’ refer to the physical state of the active ingredient. The LD50 value is a statistical estimate of the number of mg of toxicant per kg of bodyweight required to kill 50% of a large population of test animals.				

## 5.2. Physical cultural resources

108. Project activities cover diverse ethnicities, cultures, and spiritual practices that have the potential to impact on Physical Cultural Resources (PCR). PCR are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. PCR resources are listed in the CEF checklist and confirmed during PLUP planning which identifies areas that have physical cultural resources. In addition Chance Find Procedures have been developed to mitigate against damage or loss to PCRs.

### Objective

109. Assist in preserving Physical Cultural Resources (PCR) and in avoiding their destruction or damage. PCR includes resources of archeological, paleontological, historical, architectural, religious, including graveyards and burial sites, aesthetic, or other cultural significance.

**Table 6: Physical Cultural Resources - Safeguard Response Summary**

Issue	World Bank trigger(s)	Safeguard Response Summary
Loss, damage, theft, of physical cultural resources from project related activities	Physical Cultural Resources (OP.4.11)	Negative Checklist and Project Screening Procedures for all sub-component projects.  Evaluations of cultural and archaeological significance to be undertaken as part of PLUP and PLUP processes undertaken  Chance Find Procedures developed and included in this EMP.

### Mitigation

110. The general approach regarding physical cultural property is to develop management and mitigation measures to assist in their preservation, and to avoid their elimination. In some cases this may require that project features or activities are redesigned in order that sites, objects and structures can be preserved, studied, and restored intact in situ. In other cases, structures may need to be relocated, preserved, studied, and restored on alternate sites. In other cases, scientific study, selective salvage, and museum preservation before destruction may be necessary in the detection, reporting of, and the prevention of disturbance and damage to objects and sites of physical and cultural significance.

111. To minimize impacts to artifacts Chance Find Procedures have been developed. The objectives of the Chance Find procedures are:

- Minimize impacts to resources from all project related activities
- Ensure that artifacts uncovered are appropriately recorded, documented and reported to appropriate agencies.

112. To identify and manage any chance finds and comply with the relevant regulations, the following actions will need to be employed by the project:

### **Box 1: Chance Find Procedures**

A suspected PCR find should not be moved or interfered with.
A suspected PCR find should be reported immediately to the Village Chief and DAFO representative.
All work potentially impacting on the find should be suspended whilst these parties assess the find.
The DAFO and Village Chief will immediately mark the location of the find and take necessary precautions to protect the site from further disturbance, including limiting access to the site.
If the find contains suspected human remains the DAFO and Village Chief will be required to notify the relevant District Administration immediately and take instructions from the District Administration.

The DAFO and Village Chief will need to record the depth of the artifact and document and photograph the artifact in situ.
The DAFO rep and Village Chief will need to prepare a Chance Find Report
The Chance Find Report must be submitted to the Provincial Ministry of Information and Culture, and PAFO within 48 hours.

113. The DAFO and Village Chief may remove the PCR to a secure location. If the artifact is large and cannot be easily removed, or is one of a number of objects, then the Ministry of Information and Culture must be informed as soon as possible to allow them to investigate the find in situ.

114. Should a chance find or investigation interfere with forestry operations or livelihood enhancement activities, or affect the planned location of facilities etc, then the DAFO and Village Chief will need to liaise with the Ministry of Information and Culture to determine the best course of action.

115. The DAFO and Village Chief should advise any contractors of any changes to PCR procedures or forestry operations as a result of the chance find. For disputed PCR artifacts, the Ministry of Information and Culture of Lao PDR will determine ownership.

116. The Project Screening Process and the Chance Find Procedures will assist local project implementers to determine if PCR will be affected and the action required for conservation.

### 5.3. Illegal wildlife trade

117. Significant overharvesting of wild vertebrates typifies all areas of PFAs with repeated major violations of wildlife protection and trading laws were observed (MAF, 2010). In terms of catalysts for wildlife hunting, roads are among the most damaging changes to an area. Uncontrolled use of roads in sensitive areas may also lead to erosion and soil degradation and degradation of water quality in downstream waterways. Under AF-SUPFSM, there will be no new investment in roads, but the expansion and use of existing roads will be monitored under the proposed AF. Of particular importance are areas that are likely to contain HCVs, typically features such as dense natural forest, wetlands, floodplain forests, caves, saltlicks etc. In addition, situational monitoring of PFA villages for hunting activities and reporting outcomes to DOFI and other line agencies should be institutionalized.

#### Objective

118. To reduce the opportunity for illegal wildlife trade within AF-SUPFSM project areas and as consequence of project ground activities outside PFAs in the greater khumban.

**Table 7: Illegal Wildlife Trade - Safeguard Response Summary**

Issue	World Bank trigger(s)	Safeguard Response Summary
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Illegal Wildlife Trade	Natural Habitats (4.04)  Forests (4.36)  Environmental Assessment (4.01)	No new road developments and road/track upgrades.  Monitor and control the use of road network built in or near key landscape features identified as HCV1-6.  Monitor the quality of road network in erosion-prone areas.  Mitigation through various GOL laws and regulations relating to forestry development  Village situation monitoring and results shared with law enforcement agencies and line departments.
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#### Mitigation

1. Avoid unnecessary access facilitation to new areas.
2. Log extraction utilizes existing village roads wherever possible and lightly slashed, lightly used temporary "skid" trails.
3. Limit road network developments, road upgrades and track construction to a minimum for forestry and livelihood development activities.
4. Comply with the Negative Checklist and Project Screening Procedures where new roads and upgrades will be required outside PFAs.
5. Full compliance with road and track construction requirements within SFMA and FMA management plans.
6. Full compliance with road and track construction requirements in *MAF, 2006. Guideline on Forest Harvesting in Production Forest, Lao PDR*
7. Full compliance with road and track construction requirements in *MAF, 2004. Guidelines and Procedures for access road clearing, NAFRE, Vientiane Lao.*
8. Full compliance with road and track construction requirements in *MAF, 2002. Monitoring guideline for production forest harvesting implementation, Vientiane Lao.*
9. After review of the proposed biodiversity assessments, full compliance to agreed recommendations, which may include restriction to proposed key landscape features

119. as for the parent projects, Table 8 is a list of key landscape features identified as warranting special consideration for conservation/protection in SUFORD AF PFA. (Refer to MAF, 2010). The biodiversity assessment conducted for SUPSFM was reviewed and will apply if any AF-SUPSFM's activities will potentially have an impact on the identified landscape features.

**Table 8: Key Landscape Features (developed from MAF, 2010)**

<b>Feature</b>	<b>Zonation response</b>	<b>Priority</b>
Mineral licks	No roads, road upgrades, tracks or track upgrades, no felling, log storage, or logger camps within 1 km of any lick	Acute
Permanent natural pools and swamps	No roads, road upgrades, tracks or track upgrades, no felling, log storage, or logger camps within 1 km of any pool (wet-season extent)	Acute
Seasonal natural pools and swamps	No roads, road upgrades, tracks or track upgrades, no felling, log storage, or logger camps within ½ km of any pool (wet-season extent)	High
Swamp-forests and swampbush lands (permanently or seasonally inundated)	No roads, road upgrades, tracks or track upgrades, no felling, log storage, or logger camps within 1 km of any swamp-forest or swamp-bush land (wet-season extent)	Acute
Seasonally inundated grassland	No roads, road upgrades, tracks or track upgrades, no felling, log storage, or logger camps within ½ km of any grassland (wet-season extent)	Acute
Caves	No roads, road upgrades, tracks or track upgrades to caves, no visits to caves by logging crews; no material to go into caves as a result of logging activities; no alteration of entrances	Mid
Small karsts far from any large karsts	No roads, road upgrades, tracks or track upgrades, no felling, log storage, or logger camps within ¼ km of any small karst. No quarrying whatsoever.	High
Large water bird nest trees	No felling, log storage, or logger camps within ¼ km of any regularly used nest-tree. No harvest of adults or nestlings or eggs by logging crews.	Mid
Large karsts	No roads, road upgrades, tracks or track upgrades, no felling on the karst or a 200-m skirt around its base. Restrict quarrying to larger blocks.	Mid
Level lowland forest (4+ km <sup>2</sup> contiguous)	No roads, road upgrades, tracks or track upgrades, no felling, access roads or log storage within such forest.	Acute
Areas with large parts (25 km <sup>2</sup> +), more than half-a-day's travel from any village, road or navigable river	No new access roads into the area or its ½-day travel buffer. All timber extraction from such areas by means other than roads.	Acute
Conservation and protection areas	No access or tracks to intersect conservation or protection status land areas of any description	Acute



## Monitoring

120. In case of access road and track monitoring impacts on wildlife, there are three types of requirements. Validation monitoring: monitoring road impacts to ensure that the impacts are as predicted and to verify the accuracy of the SFMA plans, and Risk Matrix assessment and results. Effectiveness monitoring: monitoring the effectiveness of the environmental management safeguards to ensure the desired objectives are being achieved. Investigation monitoring: to determine the occurrence, nature and extent of possible impacts following from illegal access roads and or tracks.

121. The PIU's safeguards team, led by the Project Coordinator, has the primary responsibility for supervising monitoring compliance. Local safeguards teams monitor regular compliance, especially as regards road erosion.

122. Situational monitoring of wildlife collection and trade and use of this information are important tools in arresting loss in the PFAs. The role of SUPSFM is not to police village activities but to collect information about the likely biodiversity and wildlife values so that its activities do not precipitate additional risk. In circumstances where unique species are identified or that particular high conservation landscapes within project areas are being exploited, information sharing with enforcement agencies will contribute to appropriate steps.

123. The management of illegal wildlife trade within and adjacent to PFAs requires significant management to facilitate the necessary reduction in hunting to preserve species, which can only plausibly be achieved through resource-intensive enforcement of national wildlife hunting and trading laws.

124. Given the shortage of resources nationally for such law enforcement, unless there be strong specific reasons to the contrary, they should be directed to areas of highest importance for wildlife conservation, in general the NPAs. Situational reports by villages help that endeavor, and results should be shared amongst enforcement agencies and line departments. Sightings of high profile species (tigers, elephants etc) with accompanying proof, photos etc, should be directed towards the site manager, Village Chief, DAFO and Safeguards Manager.

## **5.4. Illegal logging**

125. **The fact that PFA forest cover is stabilizing in most cases indicates that protection of forests is more effective inside the PFAs than outside, and that current project mechanisms are effective.** The most significant threat to biodiversity and sustainable forestry is from illegal logging. Overall the rate of deforestation declined in old SUFORD PFAs since active project implementation, largely due to the protection offered by the legal status and project presence. Well-documented cases of illegal logging within PFAs has triggered several responses by GOL in an effort to curb the practice. SUFORD initiated forest cover assessments using analysis of satellite imagery and ground truthing, providing this information to DOFI, and enhanced patrols to monitor changes. These and other actions to address illegal logging will be continued under AF-SUPSFM.

## Objective

126. Reduce risks associated with illegal logging from PFAs and village khumbans.

**Table 9: Illegal Logging - Safeguard Response Summary**

Issue	World Bank trigger(s)	Safeguard Response Summary
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Illegal logging is a threat to sustainable forest management.	Natural Habitats (4.04) Forests (4.36)	Using satellite imagery select PFAs for annual review of logging activities/forest cover assessment and report findings to line agencies, especially DOFI to facilitate their response.  Liaise with relevant line authorities regarding annual review of PFA logging history and forestry cover monitoring.  Form and maintain relationships with line agencies and collaborate on matters relating to PFA management.
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#### Mitigation

1. Annually assess one or several PFAs using satellite imagery to evaluate forest cover loss, followed by ground truthing. Report results to relevant authorities, including DOFI and the newly established interagency panel on plantation concessions.
2. To enhance broader adoption of sustainable local forestry, 'PFA demarcation' and 'forest usage' signs that promote permissible activities should be established

### **5.5. Concession granting**

127. As a multiple-use landscape, a PFA is able to accommodate legitimate and well-planned complementary development activities, including, as per the 2019 Forest Law, commercial plantations on degraded PFA land. However, due to unclear jurisdictional concession granting mandates, particularly between province and central tiers, and weak monitoring and compliance enforcement, project-supported PFAs have experienced considerable difficulties in meeting sustainability objectives in some areas because of incompatible concession granting. Improvements to monitoring and reporting, strengthening governance and interagency coordination, enforcement and legal frameworks will continue to be used as mitigation approaches for AF-SUPSM.

#### Objective

128. The objective is to reduce the likelihood and consequence of incompatible concession grants impacting on the work activities, timeframes, deliverables and targets of the project.

**Table 10: Concession Grants - Safeguard Response Summary**

Issue	World Bank trigger(s)	Safeguard Response Summary
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Incompatible concession granting over PFA areas	Natural Habitats (4.04) Forests (4.36) Environmental Assessment (4.01) Pest Management (OP.4.09)	Negative Checklist and Project Screening Procedures for all sub component projects. Strengthening government institutions and policies. Periodic meetings with relevant line agencies to identify concession grant arrangements (location, scale use, proponent etc). Signage for PFA areas, and khumban related livelihood development project areas.
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### Mitigation

129. AF-SUPFSM will focus on strengthening GOL on regulating and monitoring commercial forest planation investment, contributing to social and environmental sustainability. As per government legal and administrative position, several requirements are needed for the legal granting of concessions over state land. These include, but are not limited, to the following:

- Completion of a land survey to identify existing land use types
- Preparation of a land map that presents the resources of the concession area along with the proposed development, and
- Preparation of a land use plan that defines the existing land use arrangements, and the proposed impacts and mitigations.

Detailed procedures are currently under development by the GOL in line with the 2019 Forest Law and 2019 Land Law. It is recommended, as part of the AF-SUPFSM planning processes, that this information is obtained and the risk potential from concession granting in SUPFSM areas be evaluated and well documented.

130. Other recommendations include:

- Utilize the concession area database that has been developed with support from CDE.
- Obtain copies of all concession management plans, approved or planned, and assess related biomass management documentation.
- PAFO retain a database of all concession requests and this be updated biannually.

131. Demarcation of PFAs has proven to be an effective tool against concession granting. The demarcation sign or marking stone provides tangible physical evidence of a PFA that assists local managers and villagers to negotiate alternative land use with stronger developer interests. This practice should be continued, and include signage etc of areas where activities are planned or completed in the greater khumban for livelihood developments.

## **5.6. Fire control**

132. SUFORD studies have shown that villages have a high dependency on deciduous dipterocarp forests for household income. These forest types are fire-prone ecosystems, however current fire frequencies are believed to exceed natural levels. From a wildlife habitat perspective it was observed that fire at current levels in some SUFORD PFAs could reduce habitat suitability for some species. Information on fire events has been integrated in the CEF, and community-based fire management has been introduced. PLUP will be used to identify

high risk villages and PFAs with appropriate fire management plans provided under the AF-SUPFSM.

#### Objective

133. Reduce fire events inside deciduous forests and deciduous dipterocarp forest in AF-SUPFSM financed PFAs and khumbans.

**Table 11: Fire Control - Safeguard Response Summary**

Issue	World Bank trigger(s)	Safeguard Response Summary
Increased fire anthropogenic frequency in deciduous dipterocarp	Natural Habitats (4.04)  Forests (4.36)	Document and share experience of successful fire management from southern PFAs  Develop emergency fire response and management plan at district level involving DAPF and high-risk villages in the area

#### Mitigation

- i. Document fire and management practices in Ban Konglu Noi, Ban Savannakhet and Ban Nong Tae, Salavan, which have demonstrated sustainable fire management practices. Disseminate this information to northern province project villages and resource managers.
- ii. Development of emergency fire response and management plans at district level in collaboration with DAFO and high-risk villages in the area.
- iii. Full compliance with fire management conditions as described in the Department of Forestry's 'Guideline on Forest Harvesting in Production Forest' (MAF, 2006.)

134. Continue to discuss fire management with local high-risk villages through situational analysis. This helps build an appreciation of the need for restricting practices inside forested areas, as well as providing insight to the habit and frequency of fire use.

### **5.7. Shifting cultivation**

135. Shifting cultivation involves cutting down vegetation, burning it in situ and then planting crops on the cleared land. Once crops are harvested, the land is left 'fallow' for natural vegetation to re-grow. This agricultural system has traditionally been widely practiced in many parts of Lao, but most prominently in the north. Shifting cultivation (rotational) practices have been developed to account for these conditions, however conversion of land for concessions and other forms of development (mining, hydropower etc) is making even less land available for farming and food production. This is having a two-fold affect. The first is that it is forcing villages to reduce the fallow periods. A shorter fallow period produces lower yield rates than longer fallow. The second response is that to make up for the short fall in food availability, shifting cultivation is now expanding more rapidly into new forest areas, vis. pioneer shifting cultivation. In addition, lands that had been rehabilitated in an effort to produce harvestable timber have also been converted to shifting cultivation. The dilemma that will be faced by the project is that should it pursue stronger enforcement to protect forest resources, it may have the very negative consequence of reducing people's food resources. Land use planning will continue under AF-SUPFSM (PLUP and PLUP) where necessary to ensure that adequate lands, both quality and quantity, are retained for the purposes of food security including shifting cultivation.

Development of livelihoods may also lead to habitat alteration if not properly managed. Some livelihood activities involve non-native species that could escape into the surrounding nature and become invasive species crowding out the indigenous species.

#### Objective

136. Reduce incidence of forest conversion by curtailing expansion of shifting cultivation practices, while simultaneously ensuring adequate areas and suitable land resources are provided to local communities to maintain food security. Prevent the introduction of invasive species in natural environments.

**Table 12: Shifting Cultivation - Safeguard Response Summary**

Issue	World Bank trigger(s)	Safeguard Response Summary
Shifting cultivation is driver of forest cover reduction, and contributor to GHG.  Livelihood development may enable invasive species to spread	Natural Habitats (4.04)  Forests (4.36)	PES opportunities for villages to change reliance on shifting cultivation practices.  PLUP and PLUP to ensure adequate lands are available for food production.  Village development grants targeted towards having livelihoods less reliant on shifting cultivation;  Develop appropriate guidelines to contain the risk of releasing invasive species in the natural environments;

#### Mitigation

- PES is one option that can be used as a catalyst to improve forest management practices and reduce dependency on shifting cultivation. Offering reliable incomes to villages in return for protecting forest resources (as well as harvestable timber in later years) may provide win-win situations. However, there is current lack of institutional arrangements to establish such a system – although one is being piloted under SUFORD and SUPSFM.
- Land use planning under AF-SUPSFM (PLUP and PLUP) will need to ensure that adequate lands, both quality and quantity, are retained for the purpose of food security including shifting cultivation. This includes regulating land use in restored and regenerated forests.
- Grant allocations will be used to build the capacity and infrastructure requirements of villagers to expand livelihood opportunities as a means to off set dependency on shifting cultivation, but this approach needs to be taken with caution. The experience from SUFORD and SUPSFM suggested that village development grants do take pressure off forests in the short term but later the old system of forest use continues. Tying village development grants to a PES systems for water catchment protection or carbon credits etc - may alleviate this problem and bring a reliable income stream to villagers, and less reliance on forest resources.
- Development of livelihoods should rely mainly on non-invasive species. In cases, where potentially invasive species are used, precautions must be taken to prevent their release or escape into natural environment.

## 5.8. Health and Safety

Local villagers are often hired to undertake forest management activities such as natural regeneration of forest. To minimize the risk for work-related accidents, SUPSFM incorporated developed provisions on the PSFM Operations Manual concerned with the health and safety of workers in the conduct of PSFM operations in PFAs. The guiding principle in addressing the health and safety concerns of workers is that “Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families”. This guiding principle is consistent with the provisions of the Labor Law of Lao PDR No.43/NA/24 December 2013 and the ILO Convention of which Lao PDR is a signatory, as well as with Principle 4 on “Community Relations and Worker’s Rights” of the Forest Stewardship Council, specifically Criterion 4.2 of Principle 4. The provisions in the PSFM Operations Manual apply to the District Forestry Unit (DFU) when involving staff and villagers in PSFM operations in PFAs under its direction, as well as to logging contractors when involving forest workers in their logging operations in PFAs based on their contract with the Provincial Logging Unit (PLU).

### Objective

136. Reduce incidence of work-related accidents in forest management operations by implementing applicable health and safety procedures.

**Table 12: Shifting Cultivation - Safeguard Response Summary**

Issue	World Bank trigger(s)	Safeguard Response Summary
Forest work involves risks to workers health and safety	Forests (4.36)	<p>Apply the existing provisions in the PSFM Operations Manual</p> <p>Expand the provisions of the PSFM Operations Manual to cover transportation of workers between their residence and work sites</p>

### Mitigation

- The District Forestry Unit shall implement a program of worker safety, such as but not limited to training of participating villagers in the proper conduct of PSFM operations, to avoid or reduce the risk of accident and to respond properly and expediently to accident, if it occurs.
- The Provincial Logging Unit shall include contract provisions with logging contractors on the implementation of a program of forest worker safety, such as but not limited to training of their forest workers on safety practices in logging operations.
- Health and safety measures involving villagers in PSFM operations and forest workers of logging contractors shall comply with national minimum requirements with respect to safety standards of machinery and equipment, availability of safety kits, use of protective equipment, protection of children, use of addictive substances or drinks, coverage of accident-related costs.
- AF-SUPSFM staff shall expand the health and safety guidelines in the PSFM Operations Manual to include provisions related to transportation of workers between their residence and work sites

- The District Forestry Unit and logging contractors shall ensure equal treatment of villagers, such as in terms of hiring and remuneration, who are employed in PSFM operations in the PFA.
- The DFU shall keep records of accidents and raise awareness of health and safety standards

## **6. Safeguards management, monitoring and data management**

### **6.1. Safeguards management**

137. The National Project Manager (NPM) is responsible for overall Safeguards management and supervision at the national level. The Provincial Project Manager, and the District Project Manager will be responsible for Safeguards at the province and district level. The Bank TA staff will provide technical inputs to support the NPM. This will include mainstreaming of safeguards aspects into project design, project guidelines, all capacity building and training activities, and implementation. Supervision of Safeguards will be done by the Monitoring and Evaluation Adviser. Recruitment will give consideration to professionals who have experience of Bank Safeguards requirements, and this will be added to the ToR of staff. Field supervision of Safeguards will be undertaken by DAFO staff under the guidance of National and International TA staff. Ongoing review of PLUP, CEF and CAPs will be undertaken to ensure Bank Safeguards requirements are being complied with.

### **6.2. Monitoring and evaluation**

138. Mechanisms to monitor implementation of environmental safeguard measures were not adequate, and gaps were often left unaddressed. Safeguard assessments should build on stronger links with line agencies, especially DOFI. This is mutually beneficial because as skills in DOFI continue to be developed simultaneously investments in the forestry sector become more secure. In addition, overall strengthening of DOFI will lead to sustainable timber harvests and increased revenue generations for the GOL in the medium and long term.

139. The safeguard assessment also found that SUFORD project learned from lessons during implementation and took steps to address many issues, such as the introduction of forest cover assessments in the later part of SUFORD AF. Under SUPSFM has further strengthened and integrated using mechanisms such as the Negative Checklist and Project Screening processes contained in this EMP. The AF-SUPSFM will build on SUPSFM's experience addressing issue emerging during project implementation and strengthen documentation.

140. The details of the various monitoring activities along delegated responsibilities will be further finalized during AF implementation, when the structure of Social and Environmental Management Team and or safeguards manager is known.

141. Situational monitoring and sharing of results amongst line agencies and partners of what villagers do in relation to wildlife collection, fire management, pesticide use, logging etc is a fundamental tool in arresting loss or destruction of PFAs resources.

142. In addition the following guidelines are recommended to ensure compliance with environmental safeguards:

1. Provide clear guidelines on integrating safeguard measures into PLUP and PLUP planning and implementation process

2. Increase awareness and knowledge of Provincial and District DOF and DOFI, village leaders and committees, as well as SUPSFM facilitators to enhance understanding of potential negative impacts of SUPSFM related activities
3. As a component of PLUP and PLUP determine appropriate training and skills development for safeguards management
4. Present and seek adoption of safeguards with MONRE and other development partners where cross agency integration is required
5. Develop indicators for safeguards monitoring and include a section on environmental safeguard performance in project progress

## **6.3. Data management**

### **6.3.1 Environmental data**

143. Environmental baseline datasets collected are listed below. Additional surveys will not be required for proposed AF but will be strengthened and maintained in project's provinces and PFAs.

1. Biodiversity and wildlife assessments
2. HCV identifications and mapping
3. Concession and lease areas – current and proposed
4. Situational wildlife sightings and assessments from village surveys
5. Situational wildlife trade assessments from village surveys
6. Situational small-scale timber collection/logging activities
7. Physical Cultural Resources assessment
11. Pesticide management assessment.

144. These and other studies should be compiled and maintained in a database/library that remains after project closure in perpetuity to inform future investment and policy.

### **6.3.2 GIS datasets**

145. The following GIS datasets are required to be updated for baseline knowledge and effective monitoring:

- Aerial photographs and or satellite imagery covering all new PFAs
- Village land use maps
- Current location of villages, administrative boundaries
- Current concession area allocations
- Location of existing and proposed infrastructure developments
- Vegetation cover inventory
- High resolution elevation and slope class data - HCV localities in PFAs.

### **6.3.3 Harvesting planning and operation procedures**

146. Various technical guidelines and procedures have been developed over the SUFORD project cycle for the management of timber resources and environments within PFAs. These include:

1. Monitoring the implementation of Code of Logging Practice
2. Guidelines of forest harvesting in PFAs



3. Procedures for access road clearance
4. Pre-harvest inventory for annual operational plans
5. Guidelines for control of timber production
6. Guidelines for the forest land use zonation
7. Guidelines for monitoring PFA harvesting implementation
8. Guidelines for ensuring forest workers' health and safety

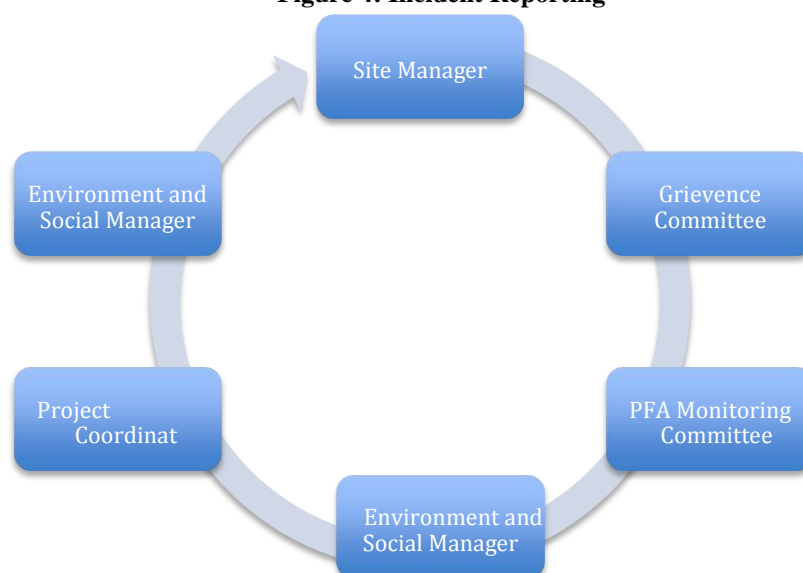
147. These will continue to be used as the principle technical documents for forest timber harvesting. However, no harvesting was carried out during SUPSFM and no harvesting is anticipated during AF-SUPSFM due to the logging ban unless it were to be lifted.

#### **6.3.4 Incident reporting**

148. All environmental incidents should be reported as soon as practicable to the designated person, and the village grievance committee. An environmental incident is defined as any incident that impacts on, or may potentially impact on the environment or community, or any activity result in regulatory non-compliance or breach of safeguard guidelines, GOL policies, standards or commitments. All incidents are to be reported, regardless of their perceived or actual seriousness.

149. The Project Environmental and Social Manager will formulate a monitoring committee for each of the PFAs made of representations from DAFO, PAFO and other key line agencies. The monitoring committee will meet quarterly to discuss project activities and progress, and address issues of grievance and illegal activities that have been passed through Grievance Committees.

**Figure 4: Incident Reporting**



#### **6.3.5 Communication of EMP**

150. The content of the EMP will continue to be communicated to project staff, PAFO/DAFO staff, contractors and consultants, communities, and all other institutions involved in project activities via an induction program. Multiple copies of the EMP should be made available to all DAFO and PAFO offices, with key components provided in appropriate language.

### **6.3.6 Safeguards Collaboration with MDBs and Development Partners**

151. This EMP only governs AF-SUPSFM.

### **6.3.7 Audit and Review**

152. The EMP includes a requirement to undergo regular internal and external audit that will assess:

- Appropriateness of the EMP to the current forest practices and conditions
- Awareness of PAFO, DAFO and villagers of the EMP and all associated plans and safeguard procedures
- Village grievance committee records as they relate to environmental safeguards issues and compliance
- Performance of managers, contractors and PAFO/DAFO staff in implementing and maintaining the EMP strategies and safeguards; and
- Availability of adequate resources and expertise for implementation of the EMP.

153. The findings of audit reports and recommendations will be presented to MAF and DOF in the Annual Report. Corrective actions will be incorporated into the EMP and CEF as required.

**Table 13: EMP Maintenance and Reporting Requirements**

<b>Target</b>	<b>Action</b>	<b>Responsibility</b>	<b>Schedule</b>
Maintain an up-to date EMP	Review and update EMP, and submit revisions to DOF for approval	Environmental and Social Manager	Annual
Communication structures between Project and GOL in place	DOF to develop procedures and schedule for coordination and reporting	Environmental and Social Manager	Prior to implementation
Meet reporting requirements	Prepare quarterly reports	Environmental and Social Manager	Bi-annual
	Prepare ad-hoc reports	Environmental and Social Manager	As required

### **6.3.8 Budget for environmental management and monitoring**

Preliminary cost estimates for environmental mitigations and monitoring are provided in **Table 17**. A final detailed budget will be determined as part of the consultation process with GOL.

**Table 14: Key Activities Relating to SUPSFM Planning**

<b>Activity</b>				
<b>Organizing and Forest Landscape Planning</b>	<b>Negative Impacts</b>	<b>Positive Impact</b>	<b>Comment</b>	<b>Environmental Safeguards</b>
DAFO staff re-orientation and organizing for FLM		X	No risk or risk manageable	Not required
Forestry extension, prior and informed consent		X	No risk or risk manageable	Not required
Village organizing for Landscape Forest Management		X	No risk or risk manageable	Not required
Boundary demarcation: khumban and FMUs		X	No risk or risk manageable	Not required
Resources assessment (forest inventory, HCVF)		X	No risk or risk manageable	SUFORD  Technical guidelines
Participatory land-use planning (PLUP)		X	No risk or risk manageable – Environmental and Social Safeguards processes introduced and integrated into PLUP	
Forest management planning (state FMUs)		X	No risk or risk manageable -Environmental and Social Safeguards processes	
			introduced and integrated into PLUP	

Forest management planning (village forests)		X	No risk or risk manageable: Environmental and Social Safeguards processes introduced and integrated into PLUP	
Formalizing village rules for forest use		X	No risk or risk manageable: Environmental and Social Safeguards processes introduced and integrated into PLUP	
Integration into the khumban/PFA management plan		X	No risk or risk manageable: Environmental and Social Safeguards processes to be introduced and integrated into PLUP	SUFORD Technical guidelines.

**Table 15: Key Activities Relating to SUPSFM Implementation**

Activity				
Forestry Management	Negative Impacts	Positive Impact	Comment	Environmental Safeguards
Annual operations planning (all FMUs)		X	Risk manageable under existing SUFORD	SUFORD

			technical guidelines	Technical guidelines
Pre-harvest inventory (sub-FMAs only) (Discontinued under AF-SUPSFM)		X	Risk manageable under existing SUFORD technical guidelines but activity is discontinued under AF-SUPSFM due to the logging ban.	
Sustainable harvest planning (sub-FMAs only) (Discontinued under AF-SUPSFM)		X	Risk manageable under existing SUFORD technical guidelines but activity is discontinued under AF-SUPSFM due to the logging ban.	
Approval of harvesting plan and quota (sub-FMAs) (Discontinued under AF-SUPSFM)		X	Risk manageable under existing SUFORD technical guidelines but activity is discontinued under AF-SUPSFM due to the logging ban.	
Sustainable harvesting operations (sub-FMAs) (Discontinued under AF-SUPSFM)	X		Risk manageable under full compliance to existing SUFORD technical guidelines but activity is discontinued under AF-SUPSFM due to the logging ban..	
Post-harvest assessment (sub-FMAs) (Discontinued under AF-SUPSFM)		X	Risk manageable under SUFORD technical guidelines but activity is discontinued under AF-SUPSFM due to the logging ban.	
Forest regeneration and protection (all FMUs)	X		Some risk of pesticide use but project can be screened through Negative Check List and questionnaires for areas outside PFAs. PFAs HCV to comply with existing SUFORD technical guidelines.	
Maintenance of HCVs (all FMUs)		X	No risk, or risk manageable under SUFORD technical guidelines. Refer also to ESIA and EMP sections on biodiversity evaluations within PFAs and khumbans,	
Implementation of village rules for use of forest		X	Refer to reporting requirements outlined in EMP for environmental safeguard compliance.	

Internal monitoring and reporting (all FMUs)		X	No risk or risk manageable	
Organizing for forest protection and restoration		X	No risk, or risk manageable	
Establishing law enforcement links with DOFI		X	No risk or risk manageable	Not required.
Preparing forest protection action plan (in AOP)		X	No risk or risk manageable	SUFORD Technical guidelines
Implementing the forest protection action plan	X		Risks types variable depending on activities	
Mapping proposed restoration/regeneration areas		X	No risk or risk manageable	No risk or risk manageable
Planning and proposal preparation for Village Livelihood Development Fund financing		X	No risk or risk manageable	Village Livelihood Development Fund needs to acknowledge EMP recommendations.
Implementation of funded proposals	X		Risks types variable depending on activities	SUFORD Technical guidelines
Registration of restored/regenerated areas		X	No risk or risk manageable	No risk or risk manageable

**Table 16: Activities Relating to SUPSFM Livelihood Development**

<b>ACTIVITY</b>				
<b>Livelihood development</b>	<b>Potential Negative Impacts</b>	<b>Potential Positive Impact</b>	<b>Comment</b>	<b>Environmental Safeguards</b>
Land allocation for livelihoods	X		Resource access restrictions not expected under SUPSFM funded activities.	SUFORD Technical guidelines
Securing tenure over land for livelihoods (Not a specific activity in AF-SUPSFM)	X		Resource access restrictions not expected under SUPSFM funded activities.	CEF
Survey of suitable deforested areas in state forests		X	Risks manageable. Refer also to ESIA and EMP sections on biodiversity evaluations within PFAs and khumbans. Commercial plantations are allowed on designated degraded land under the new Forest Law (2019).	SUFORD Technical guidelines
Exploring livelihood and enterprise options		X	Risk manageable.	CEF
Building capacity in Technical Service Centers		X	Risk manageable.	
Extension work in villages		X	Risk manageable.	
Selection by the village of livelihood options		X	Risk manageable.	

Preparation of livelihood/enterprise proposals		X	Risk manageable.	
Appraisal and approval of funding of proposals		X	Risk manageable.	
Capacity building in villages		X	Risk manageable.	
Implementation of approved livelihood proposals	X		Environmental risks exist but can be managed under Safeguards.	
Monitoring and reporting of progress		X	Risk manageable.	Section 6
Adjustments based on monitoring results		X	Risk manageable.	





## References

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**Table 17: Environmental Safeguard Budget (US\$ 000)**

			Year				
Issue	Safeguards activity	Comment	2013	2014	2015	2016	2017
<b>Illegal Wildlife Trade</b>							
	Limit new road developments and road/track upgrades.	On-going consultations, PLUP and PLUP.	No specific budget required				
	Avoid road network development of any kind in or near key landscape features identified as HCV1-6.	On-going consultations, PLUP.					
	Negative Checklist and Project Screening Procedures	On-going consultations, PLUP.					
	Compliance with various GOL laws and regulations relating to forestry developments.	On-going consultations, PLUP.					
	Village situational monitoring with results shared with law enforcement agencies and line departments.	On-going consultations, PLUP.					
	Share monitoring results with law enforcement agencies and line departments.	On-going consultations, PLUP.					
	Biodiversity Assessment - PFAs and khumbans	2x provinces in year1, 1x province in year2	60				
	Environmental Safeguards Manager: Monitoring and evaluations specialist.	Project environmental safeguard manager / TA	100	100	100	100	100
	Satellite images	multi agency cooperation		21		21	21
	Satellite image analysis and reporting	multi agency cooperation		9		9	9
<b>Pesticide Management</b>							

	PLUP specific enquiry is given regarding the village use of chemicals, and sub project requirements	On-going consultations, PLUP.	No specific budget required
	Personal and village safety equipment and training	Funding part of subcomponent	

			Year				
Issue	Safeguards activity	Comment	2013	2014	2015	2016	2017
	requirements	project budget.					
	Pesticide use warning signboards in high risk villages	Funding part of subcomponent project budget.					
	Chemical incidence committees established in high-risk villages, includes training. Equipment is to be purchased under subcomponent project funding	Can be existing Grievance Committees using PLUP process to inform on the expansion of their activities to include pesticide monitoring and reporting.	15	15	15	15	15
	Poison or contaminations testing	Funds to be used where contaminations have occurred as a result of SUPSFM activities	3	3	3	3	3
	Monitoring and Evaluation	See also request for SUPSFM Safeguards Manager in Illegal Wildlife Trade budget.	No specific budget required				
Physical Cultural Resources							
	Cultural Heritage and Archaeological surveys	On-going consultations, PLUP.	No specific budget required				

	Detailed cultural heritage and Archaeological surveys to identify PCR at risk from sub component project activities	Funding part of subcomponent project budget.	
	Monitoring and Evaluation	See also request for SUPSFM Safeguards Manager in Illegal Wildlife Trade budget.	
<b>Concession Granting</b>			
	Strengthening government institutions and policies.	Funding for this forms part of other SUPSFM project objectives.	No specific budget required
	Periodic meetings with relevant line agencies to identify concession grant arrangements (location, scale use, proponent etc).	Meetings between government and WB counterparts are part of the overall project design and project budget.	

			Year				
Issue	Safeguards activity	Comment	2013	2014	2015	2016	2017
	Signage for PFA and khumban livelihood development areas.	Funding part of subcomponent project budget. Use of negative checklist and project screening processes will assist project proponent in determining concession risk level.					
	Monitoring and Evaluation	See also request for SUPSFM Safeguards Manager in Illegal Wildlife Trade budget.					
<b>Fire control</b>							

	Document fire and management practices in Ban Konglu Noi, Ban Savannakhet and Ban Nong Tae, Salavan	Stand-alone project. Dissemination of material is through standard extension avenues such as PLUP.	No specific budget required
	Identify extensive stands of deciduous forests in northern PFAs that are productive and document the fire regimes for replication in other forest areas.	Stand-alone project. Dissemination of material is through standard extension avenues such as PLUP.	
	Discuss fire management with local villages through situational analysis.	On-going consultations, PLUP.	
	Monitoring and Evaluation	See also request for SUPSFM Safeguards Manager in Illegal Wildlife Trade budget.	

#### Illegal Logging

	Annually assess one or several PFAs using satellite imagery to evaluate forest cover loss.	Integrate with DOFI enforcement. Suggest establish a specific program for new PFA areas.	20	20	20	20	
	Hold quarterly multijurisdictional workshop or meetings with the various responsible agencies	No specific budget required but meeting outcomes may precipitate extra activities and projects that require funding. Budget is a contingency only	20	20	20	20	

			Year				
Issue	Safeguards activity	Comment	2013	2014	2015	2016	2017

	Forest signage and PFA demarcation	Signage can be funded through village development grants or other project specific grants mechanism.	No specific budget required				
	Implement concession-clearing code of practice	Outside SUPSFM responsibility.					
	Village livelihood grants to be assessed in terms of logging impacts	Use Project Screening and Negative Checklist in EMP.					
	Undertake a stand-alone assessment of small scale timber usage in new PFA villages	Initiate study only if PLUP results are not insightful to the issue.		30			
	FMA's / PLUP to include smallscale timber quotas in allocated areas - zoning	Standard Safeguards administration, PLUP.	No specific budget required				
Manage forest encroachment from shifting cultivation							
	PES opportunities for villages to change reliance on shifting cultivation practices.	PES assessments for new PFAs will require additional funding but be considered after PLUP is completed	Finalize budget after PLUP				
	PLUP and PLUP are to ensure adequate lands are available for food production.	Standard Safeguards administration, and PLUP	No specific budget required				
	Village development grants targeted towards having livelihoods less reliant on shifting cultivations	Refer to SIA frameworks for areas to be targeted for Village Livelihood development grants					
	Safeguards Monitoring / Evaluation		40	40	40	40	40
	Safeguards Training	All SUPSFM implementers various requirements	30	30	30	30	30

		<b>Total in year x \$1000</b>	<b>\$288</b>	<b>\$288</b>	<b>\$228</b>	<b>\$258</b>	<b>\$218</b>
		Year	2013	2014	2015	2016	2017
		<b>Environmental Safeguards – 5-year period x \$1000</b>					<b>\$1280</b>



## Appendix 1

### Integrated environmental safeguards screening process: how to use

A proponent wishes to undertake an activity or project under FIP. The proponent submits an application (project proposal) to the relevant steering committee for evaluation in the hope of obtaining support – financial and or technical. In the proposal is a plan of activities to be done to reach the objectives, including a list of mitigations against possible social and environmental impacts. A monitoring plan also needs to be included.

The assessment committee uses the Integrated Environmental Safeguards Screening processes to evaluate the proposal against relevant legal requirements. Importantly, all projects must be GOL and World Bank Safeguard compliant, so this must be demonstrated in every proposal. The inclusion in the proposal of mitigations for probable impacts will assist the process.

The first pass screening is to assess the project against prohibited activities listed in the Negative Check List. Any project that triggers one or more of these items will be rejected. This can include a rejection that requires project revision of methods, and then resubmission. Once a project passes the Negative Checklist its risk is weighted against the criteria in the Risk Matrix.

The matrix uses broad definitions as indications of the extent of possible impacts. The term *Likelihood* refers to the level of probability, in a scale between ‘not at all’ to ‘certain’. The term *Consequence* refers to the severity of an impact a proposal may precipitate, within range of between ‘not significant’ to ‘catastrophic’. If the potential exists for a catastrophic consequence the project will be rejected. Activities that cause a catastrophic event could include environmental poisoning, excessive fire, or introduction of noxious weeds and pests.

From the matrix the proposal is then assigned a *risk level*: A1, A2 or A3. Each risk level requires additional levels of safeguard interventions. The risk levels in the matrix correspond to the various conditions, forms and questionnaires. (Refer to Appendix 3) that is required to be completed for all projects funded under FIP that do not sit within traditional SUFORD style operations.

To simplify use of the screening process simple guidelines will be created and included in the CEP training manuals, along with examples. The screening process will also be pre tested and adapted as appropriate given the context of culture, and language.

**Table 18: Consequences and Likelihood Risk Matrix**

	CONSEQUENCE (Impact)			
LIKELIHOOD	Insignificant	Moderate	Major	Catastrophic

<b>Almost certain/certain</b>	A1	A3	A3	Negative checklist
<b>Possible</b>	A1	A2	A3	Negative checklist
<b>Unlikely or not at all</b>	A1	A2	A3	Negative checklist
	<b>CONSEQUENCE (Impact)</b>			

#### Definitions

<b>LIKELIHOOD</b>	
The probability that the identified consequence will occur.	
<b>Almost certain</b>	The most likely and expected result. Has happened before under SUFORD or FOMACOP
<b>Possible</b>	Has happened but was unusual. Possibly a result of unmanaged sequence, or a coincidence.
<b>Unlikely or not at all</b>	Has not happened but a minor risk exists (cannot be zero). Usually this impact can be anticipated, and can be managed by the application of guidelines and best practice standards relevant to the project.

<b>CONSEQUENCE</b>	
significance of the environmental impact.	
<b>1. Catastrophic</b>	Widespread irreversible environmental harm. Can result in the permanent loss of current and future management options. System collapse.
<b>2. Major</b>	A critical event whose impacts will be widespread, or serious environmental harm locally. Impacts are unlikely to be permanent but will require major interventions and rehabilitations.
<b>3. Moderate</b>	Consequences can be readily absorbed but management effort is still required to minimize impacts.

<b>4. Insignificant</b>	Full recovery is expected, and or no harm is done. Not worth taking actions over however, as a minimum, possible impacts need to be acknowledged.
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## Appendix 2

### Negative Checklist

#### Step 1: Negative Checklist Screening

Environmental assessment and review is an important process of the environmental safeguard compliance process and beside this a part of the overall sub-project approval/ appraisal process. An initial assessment of FIP activities is screened through a negative checklist. The appraisal is undertaken to evaluate (early) if an investment is likely to be in breach one or more of a core set of World Bank Safeguard prohibited activities. The sub-project only needs to be non-compliant to one of the Negative Checklist items for it become illegible for funding. Rejection or revision will be required.

**Table 19: FIP Negative Checklist - Prohibited Activities**

<b>FIP SUPSFM Negative Checklist</b>	
<b>1</b>	New settlements or expansion of existing settlements inside natural forest habitats and existing or proposed protected areas.
<b>2</b>	New roads, road rehabilitation, road surfacing, or track upgrading of any kind inside natural habitats and existing or proposed protected areas.
<b>3</b>	Purchase of gasoline or diesel generators and pumps; guns; chain saws and dangerous chemicals; asbestos and other investments detrimental to the environment.
<b>4</b>	Forestry operations, including logging, harvesting or processing of timber products that are not accompanied by an approved relevant plan of management.
<b>5</b>	Introduction of non-native species, unless these are already present in the vicinity or known from similar settings to be non-invasive, and introduction of genetically modified plant varieties into a designated project area.
<b>6</b>	Significant conversion or degradation of natural habitat or where the conservation and/or environmental gains do not clearly outweigh any potential losses from forestry activities.
<b>7</b>	Large-scale construction or small/medium scale construction expected to lead to significant negative environmental impacts.
<b>8</b>	Forestry operations, including logging, harvesting or processing of timber products in or from land that is known critical habitat for endangered plant or animal species.
<b>9</b>	WHO recommended Classification of Pesticides by Hazard Classes (including extremely, highly or moderately hazardous).

<b>10</b>	Forestry operations, including logging, harvesting or processing of timber products on land or in watersheds in a manner is likely to contribute to a villages increased vulnerability to natural disasters.
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## Step 2: Identification of safeguard issues and preparation of mitigations measures.

If the assessment panel is satisfied that Negative Checklist items have not been triggered then the proposal is moved to the second screen processes: *Identification of safeguard issues and preparation of mitigation measures*. This level borrows from the ESIA report that has identified possible impacts to the environments and local communities, as well as mitigations. Some examples are provided below in Table 20: **Examples of Safeguard Issues and Actions**<sup>20</sup>.

**Table 20: Examples of Safeguard Issues and Actions**

<b>Potential Negative Impact</b>	<b>Required Mitigation Actions</b>	<b>Comments</b>
Land use conversion: degraded forest to agro forest plot	Preparation of an Agroforestry management Plan that includes:  The area of land and its location;  Local land use;  A description of the local environment including waterways;  Soil type and condition;  Land slope;  Forestry, implementation plan (what is intended);  Maintenance program, grievance procedures	Prior consultation with Safeguards Manager, DAFO and with affected villages.
Civil Works -roads, tracks, facilities, temporary camps (not part of forestry operations but may be part of livelihood developments)	Preparation of a forestry operation plan that includes:  The area of land and its location,  Local land use,  A description of the local environment including waterways,  Soil type and condition,  Land slope,  Outline of civil works to be conducted  Maintenance program, grievance procedures	Prior consultation with Safeguards Manager, DAFO with affected villages.

Use of pesticides as part of agro-forestry preparation, or NTFP development.	Prepare an Integrated Pest Management Plan that includes;  List potential risks to humans and non target species;	Prior consultation with Safeguards Manager, DAFO and villages. Must be compliant with WHO
	List non chemical treatment alternatives;  Considerations given to biological control mechanisms (crop varieties etc.);  Handling, application, storage and disposal methods  Necessary training	requirements

### Step 3: Safeguard documentation and information disclosure

Documentation: potential negative impacts and the proposed mitigation measures will be identified and the results of the safeguard screening will be recorded on approved forms.

**Form A1: No impact project.** Used when a proposal is unlikely to involve any civil works, land use change, or cause negative impacts on the environment, natural habitats, or physical cultural resources.

**Form A2: Low impact project.** Used if the proposal will involve small civil works, small land acquisition minor land uses change; affect physical cultural resources, or natural habitats. Form A2 is accompanied by a Screening Questionnaire and the proponent may be required to also provide more detailed information, at the request of the assessment panel or Environmental Manager.

**Form A3 High Impact project.** Used if the proposal involves significant land acquisition or changes, or may create significant impacts on ethnic groups, physical cultural resources, natural habitats, or other environmental or social aspects. Form A3 is accompanied by a detailed Screening Questionnaire and may also involve the provision of more detailed information, at the request of the assessment panel or Safeguards Manager.

Information disclosure: Information related to the approved sub-grants and the mitigation of social or environmental impacts, including the mitigation plans, will be made available for local public access.

### Step 4: Safeguard clearances and implementation

Results of Step 2, with appropriate documentation (Step 3), will be reviewed by the Safeguards Manager and or assessment panel before submission to the FIP DOF Manager for final approval. The assessment panel may seek involvement from other agencies as required, including World Bank, MONRE etc. After review the FIP DOF Manager and Safeguards Manager will issue a ‘No Objection Letter’ as appropriate. The screening results and or mitigation measures will be included as part of the proposal review process. If denied clearance the proposal will be rejected. All the safeguard documentations (screening and other documents) will be kept in the projects files for possible later review. The assessment panel and or Safeguards Manager will ensure that agreed actions are included in the sub-project conditions and that the applicant(s) understand and commit to implement the mitigations measures.

**Step 5: Supervision, monitoring and reporting**

The assessment panel and or Safeguards Manager will periodically supervise and monitor the safeguard implementation performance and include the progress/results in the project progress report.

## Appendix 3

### Performa’s and Project Environmental Impact Evaluation Checklists

**Sub-Project Environmental Safeguards Screening:** For proposal that will not cause negative impacts on ethnic groups, natural habitats, or physical cultural resources.

**Sub-Project Environmental Safeguards Screening:** For proposal that will involve moderate and localized social or/and environmental impacts. These could be land type conversions, negative impacts on physical cultural resources, and natural habitat conversions. Screening questions for minor environmental impacts also requires completion, and additional information may be required.

**Sub-Project Environmental Screening:** For proposal that involve significant habitat conversion, affects natural habitats, or has major potential environmental impacts. Screening questions for minor environmental impacts also requires completion, and additional information may be required.

### FORM A1

LAO PEOPLE’S DEMOCRATIC REPUBLIC

Peace Independence Democracy Unity Prosperity

Ministry of Agriculture and Forests - Scaling Up Participatory Sustainable Forest Management  
Project

***FIP Sub-grant application and  
declaration form***

FIP Number .....



**Sub-Project Environmental Screening**

For proposal that will not cause negative impacts on ethnic groups, natural habitats, or physical cultural resources.

<b>Applicant Name</b>	<b>Project Name</b>	
<b>Project Location (Village and PFA)</b>	<b>Total Project Cost</b>	<b>Total Requested</b>

DECLARATION

I.....certify that this sub-grant does not involve any of the activities included in the Negative Checklist provided in Step 1 of the ESF. The sub-grant will also not cause any adverse social or environmental impacts, or negatively effect ethnic groups and therefore does not require preparation and clearance of safeguard mitigation measures.

Screened by.....

Below briefly describe objective and list all activities:

**FORM A2**

**LAO PEOPLE'S DEMOCRATIC REPUBLIC**

**Peace Independence Democracy Unity Prosperity**

**Ministry of Agriculture and Forests - Scaling Up Participatory Sustainable Forest Management Project**

***FIP Sub-grant applications and  
declaration form***

FIP Number.....

**Sub-Project Environmental Screening**

For proposal that will involve moderate and localized social or/and environmental impacts. These could be land type conversions, negative impacts on indigenous populations, physical cultural resources, and natural habitats. (Complete also Screening Questions for Minor environmental Impacts – below.)

Consequences can be readily absorbed but management effort is still required to minimize impacts

Likelihood: Has happened but was unusual. Possibly a result of unmanaged sequence, or a coincidence.

<b>Applicant Name</b>	<b>Project Name</b>	
<b>Project Location (Village and PFA)</b>	<b>Total Project Cost</b>	<b>Total Requested</b>

**DECLARATION**

I.....certify that this sub-grant does not involve any of the activities included in the Negative Checklist provided in Step 1 of the EMP. The sub-grant will also not cause any adverse social or environmental impacts, or negatively effect ethnic groups. If the sub-grant involves small scale land acquisition or resource restriction then an abbreviated Resettlement Action Plan (RAP) is required. If minor social and environmental impacts are likely then the good engineering and current best practice management have been incorporated into the project design to minimize and mitigate them. These details of the possible impacts and mitigations responses are listed below.

I have also rigorously reviewed and completed the attached Screening Questions in relation to this application.

Screened by .....

**Screening Questions: Environmental**

Related World Bank Environmental Safeguards that may be triggered under SUPSFM:  
 Environmental Assessment OP4.01, Natural Habitats OP4.04, Pest Management OP4.09, Physical Cultural Resources (PCR) (OP4.11) and Forest OP4.36

Table 21: Screening Questions for MINOR Potential Impacts

Screening	No	Unknown	Yes	Describe proposed mitigation questions for Minor impacts
• Loss or damage to physical cultural	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	resources

• Localized stream sedimentation ☐ ☐ ☐

• Localized soil erosion ☐ ☐ ☐

• Localized habitat loss ☐ ☐ ☐

• Localized vegetation fragmentation ☐ ☐ ☐

• Hydrocarbon contamination ☐ ☐ ☐

Elevated wildlife trafficking potential ☐ ☐ ☐

Localized use of pesticides ☐ ☐ ☐

Other ☐ ☐ ☐

	Yes	No	Conditional	
RECOMMEND	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Detail additional information requested

SIGNING OFF:	Environmental and Social Safeguard Coordinator
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PROPONENT

NAME.....	NAME.....
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POSITION:.....	POSITION.....
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DATE.....

DATE .....

**FORM A3**

**LAO PEOPLE'S DEMOCRATIC REPUBLIC**

**Peace Independence Democracy Unity Prosperity**

**Ministry of Agriculture and Forests - Scaling Up Participatory Sustainable Forest Management  
Project**

***FIP Sub-grant application and  
declaration form***

FIP Number .....

**Sub-Grant Environmental and Social Safeguards Screening**

For proposal that involve significant habitat conversion, affect natural habitats, or have major potential environmental impacts. (Complete also Screening Questions for Major impacts – below).

Applicant Name	Project Name

Project Location (Village and PFA)	Total Project Cost	Total Requested

DECLARATION

I.....certify that this sub-grant does not involve any of the activities identified in the negative checklist in Step 1 of the ESSF.

Screened by .....

Recommendations for proposal improvement before submitting to Peer Review or Evaluation Committee:

Prepared with the following community members / Partner Organizations:

Remarks:

Table 22: Screening Question for MAJOR Potential Impacts

Screening major impacts	No	Unknown	Yes	Describe proposed mitigation questions for
• Loss or damage to significant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

physical cultural resources

- Wide scale

sedimentation of streams      ☐      ☐      ☐

- Wide scale/long

term soil erosion      ☐      ☐      ☐

- Wide scale

habitat loss      ☐      ☐      ☐

- Wide scale

vegetation fragmentation      ☐      ☐      ☐

- Hydrocarbon

contamination -      ☐      ☐      ☐ water

- Hydrocarbon

contamination -      ☐      ☐      ☐ water

- Elevated fire risk

☐      ☐      ☐

- Elevated wide scale wildlife trafficking potential

☐      ☐      ☐

- Broad scale application of pesticides

☐      ☐      ☐



Other

☐ ☐ ☐

RECOMMEND **Yes** **No**

**Conditional** Detail additional information requested

☐ ☐ ☐

**SIGNING OFF:**

**Environmental Safeguard Coordinator**

**PROPONENT**

**NAME**.....

**NAME**.....

**POSITION:**.....

**POSITION**.....

..... **DATE**.....

**DATE**

## **Appendix 4**

### **FIP Environmental Impact Legal Obligation Setting**

#### **Summary of key Lao PDR laws relating to forestry resources sector**

Within Lao PDR, both land and forest are owned by the State, but the State can issue user rights and rights of inheritance to individuals and communities who have interest in the resource. In exchange for these rights users are expected to maintain the land in good condition and pay taxes on the land to the government. Key legislation on ownership of land and forests is briefly summarized below.

**The Land Law (2019)** describes the system of all land tenure, with all lands being the property of the nation, and remaining under control of the Government of Lao. However, the law recognizes and protects private land use rights. These rights can be transferred, granted by the state, or inherited, provided taxes payable on the land have been paid. Land is categorized in accordance with the form of use, and various principles are outlined in the legislation in regard to each type of land. This law provides an important framework for any land compensation, as despite the lack of title ownership, land use rights are a tradable commodity. The land classification administration is also important for determining the various categories of land use within a project area. The Land Law, 1997 was amended in 2003, and 2019 to set out the main institutional responsibilities for land management and administration in Lao PDR and stipulates that the overall responsibility for land administration belongs to the National Land Management Authority.

**The Forestry Law (2019)** outlines principles and responsibilities relating to all forest resources, including soil, flora, fauna, water, living and non-living resources. All forestland is owned by the State, which has the ability to give user rights to communities in return for - sustainable management of the resource. The Law outlines a nationwide forest classification system, under the Ministry of Agriculture and Forestry, which demarcates land to reflect its values for preservation and development. Forests in Lao PDR are classified into three primary categories: Protection Forest, Conservation Forest, and Production Forest.

#### **Forestry and Land Law Revision**

The National Assembly assigned the Ministry of Natural Resources and Environment (MONRE) to revise the Forestry Law. MONRE allocated the task of leading the working group to the Department of Forest Resource Management (DFRM) within MONRE. An inter-ministerial (MONRE & MAF) steering committee led by the Vice Minister of MONRE guides the process. A draft amended forestry law was approved by the National Assembly Session in June 2019.

The forestry law was revised concurrently with the Land Law, and both these laws are based on and follow through from the finalized and approved Land Policy and Land Use Master Plan. The National Assembly has also required the drafting of or revision of other land and natural resource laws (Agriculture Law, Water Resource Law, Environmental Protection law, Forest Resource Inspection law, Industrial Processing Law) in the same time period to create a consistent and coordinated legal framework in the natural resource sector.



**Table 23: Main Legal Policy Components for Environmental/ Forest Management****Selected Decrees**

Decree on the management and protection of Wild Animals, Fisheries and on Hunting and Fishing.	1989
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*Decree on the Establishment of National Forest Reserves	1993
--	------

Decree on the Preservation of Cultural, Historical and Natural Heritage	1997
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Decree on the Implementation of the Water and Water Resources Law	2001
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Implementing Decree for the Environment Protection Law	2001
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Decree on the Establishment of the National Regulatory Authority (NRA) for the UXO program in Lao PDR	2004
---	------

Decree on Compensation and Resettlement of People Affected by Development Projects	2005
--	------

Decree on the Organization and Activities of the Nam Theun 2 Catchments Management Project Authority	2005
--	------

Decree on State Land Lease or Concession	2009
--	------

Decree on Environmental Impact Assessment	2010
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Decree on Environmental Impact Assessment	2019
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**Selected Laws**

Water and Water Resources Law	1996
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Law on Water and Water Resources	2017
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Law on Agriculture	1998
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Environment Protection Law	1999
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Road Law	1999
----------	------

Law on Property	2002
-----------------	------

Land Law	2019
----------	------

Law on constitution of Lao PDR	2003
--------------------------------	------

Law on National Heritage	2005
--------------------------	------

Law on Labor	2006
--------------	------

Wildlife and Aquatic Animals Law	2007
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Forestry Law	2019
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Electricity Law	2008
-----------------	------

Fisheries Law	2009
---------------	------

<b>Selected Regulations</b>
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Regulation on the Management of the National Biodiversity Conservation Areas, Aquatic and Wild Animals	2001
--	------

Regulations for Implementing Decree of the Prime Minister Compensation and Resettlement of People Affected by Development Projects No. 192/PM	2005
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<b>Selected Guidelines, Policies and Standards</b>
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Regulation on the Management of National Protection Areas, Wildlife and Aquatic Animals	2003
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Resolutions of the Lao PDR Government on National Strategic Plan for the UXO Programme in the Lao People's Democratic Republic 2003 – 2013 “The Safe Path Forward”	2004
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Agreement on National Ambient Environmental Standards	2009
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Public Involvement Guidelines	2009
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Lao PDR National UXO / Mine Action Standards	2009
--	------

Technical Guidelines for Resettlement and Compensation	2010
--	------

Environmental Guidelines for Biomass Removal from Hydropower Reservoirs in Lao PDR	2010
--	------

Politburo Resolution #3: Formulation of Provinces as Strategic Units, Districts as Comprehensively Strong Units and Villages as Development Units	2012
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