

**Environmental and Social Impact Assessment
(ESIA) and recommendations for the Environmen-
tal and Social Management Plan (ESMP)**

for the Project

**“Scaling up the implementation of the Lao PDR Emission Reduc-
tions Programme through improved governance and sustaina-
ble forest landscape management (Project 2).”**

Prepared by

GIZ

for Submission to the

Green Climate Fund

Abbreviations and Acronyms

ADB	Asian Development Bank
AE	Accredited Entity
ASEAN	Association of South-East Nations
BMZ	German Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung)
BKO	Province of Bokeo
CBD	Convention on Biological Diversity
CEF	Community Engagement Framework
CF	Carbon Fund
COL	Concessional Ordinary Lending
COP	Conference of Parties
CSO	Civil Society Organization
DAFO	District Agriculture and Forest Office
DALAM	Department of Agricultural Land Management
DCC	Department of Climate Change
DD	Deforestation and Forest Degradation
DOFI	Department of Forest Inspection
DPI	Department of Planning and Investment
EE	Executing Entity
ELTeS	Enhanced Land Tenure Security (GIZ)
EPF	Environmental Protection Fund
ERPA	Emission Reductions Payment Agreement
ERPD	Emission Reductions Programme Document
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan (GCF requirement)
ESMS	Environmental and Social Management System
ESS	Environmental and Social Safeguards
EU	European Union
EUR	Euro
FAO	Food and Agricultural Organisation of the United Nations
FCPF	Forest Carbon Partnership Facility
FLEGT	Forest Law Enforcement Governance and Trade
FLR	Forest and Landscape Restoration
FPIC	Free, Prior, Informed Consent
GCF	Green Climate Fund
GOL	Government of the Lao People's Democratic Republic
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German international cooperation agency)
GRM	Grievance Redress Mechanism
Ha	Hectares
HPN	Province of Houaphan

ICBF	Integrated Conservation of Biodiversity and Forests
IEE	Initial Environmental Examination
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IMF	International Monetary Fund
IP	Indigenous Peoples
IPP	Indigenous Peoples Plan
IPPF	Indigenous Peoples Planning Framework
IRM	Independent Redress Mechanism
JICA	Japan International Cooperation Agency
KfW	Kreditanstalt für Wiederaufbau (German Bank for Reconstruction)
Lao PDR	Lao People's Democratic Republic
LENS 2	Second Lao Environment and Social Project (World Bank Group)
LFA	Land and Forest Allocation
LMDP	Land Management and Decentralized Planning (GIZ)
LFND	Lao Front for National Development
LNT	Province of Luang Namtha
LPB	Province of Luang Prabang
LPRP	Lao People's Revolutionary Party
LULUCF	Land Use, Land Use Change and Forestry
LUP	Land Use Planning
LWU	Lao Women's Union
MAF	Ministry of Agriculture and Forestry
MONRE	Ministry of Natural Resources and Environment
MRV	Measurement, Reporting, Verification
NA	National Assembly
NCAW-MC	National Commission for the Advancement of Women – Mother Child
NDA	National Designated Authority
NDC	Nationally Determined Contribution
NFMS	National Forest Monitoring System
NGO	Non-Government Organization
NPA	National Protected Area
NRS	National REDD+ Strategy
NRTF	National REDD+ Task Force
ODA	Overseas Development Assistance
ODX	Province of Oudomxay
PAFO	Provincial Agriculture and Forestry Office
PFA	Production Forest Area
PLR	Policies, Laws and Regulations
PMU	Programme Management Unit
PPMU	Provincial Programme Management Unit
PONRE	Provincial Office for Natural Resources and Environment
PRAP	Provincial REDD+ Action Plan

PRO	Provincial REDD+ Office
PRTF	Provincial REDD+ Task Force
PS	Performance Standards (IFC safeguards)
PSFM	Participatory Sustainable Forest Management
REL	Reference Emissions Level
RV	Regenerating Vegetation
SESA	Social and Environmental Safeguards Assessment
SFM	Sustainable Forest Management
SRIWM	Sustainable Rural Infrastructure and Watershed Management Project
SUFORD-SU	Scaling-Up Participatory Sustainable Forest Management
TAP	Technical Advisory Panel
tCO ₂ eq	tons of carbon dioxide equivalent
TWG	Technical Working Group
UNDP	United Nations Development Programme
UNDRIP	United Nations Declaration on the Rights of Indigenous People
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar
VDF	Village Development Fund
VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests
VMU	Village Mediation Unit
XBY	Province of Sayabouri

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EXECUTIVE SUMMARY

The project being proposed for funding in part by the Green Climate Fund (GCF) represents an opportunity to support a paradigm shift in the forest and land-use sector of the Lao PDR. It is called *“Scaling up the implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest land management (Project 2)”*. As the name indicates, Project 2 is the successor of another project. Both are part of the overarching GCF programme called *“Implementation of the Lao PDR Emission Reductions Programme through improved governance and sustainable forest landscape management”* (FP117).

The programme area constitutes approximately 35% of the national territory and 32% of the country’s forest cover. Around 40% of total national deforestation and degradation (in area terms) takes place within the selected six provinces, which are also among the most vulnerable provinces to climate change in Lao PDR (see Chapter 5.3 below). Each of the six provinces has developed Provincial REDD+ Action Plans (PRAPs), which analyse key drivers of deforestation and forest degradation, major barriers and proposed actions and measures to reduce emissions from deforestation and forest degradation.

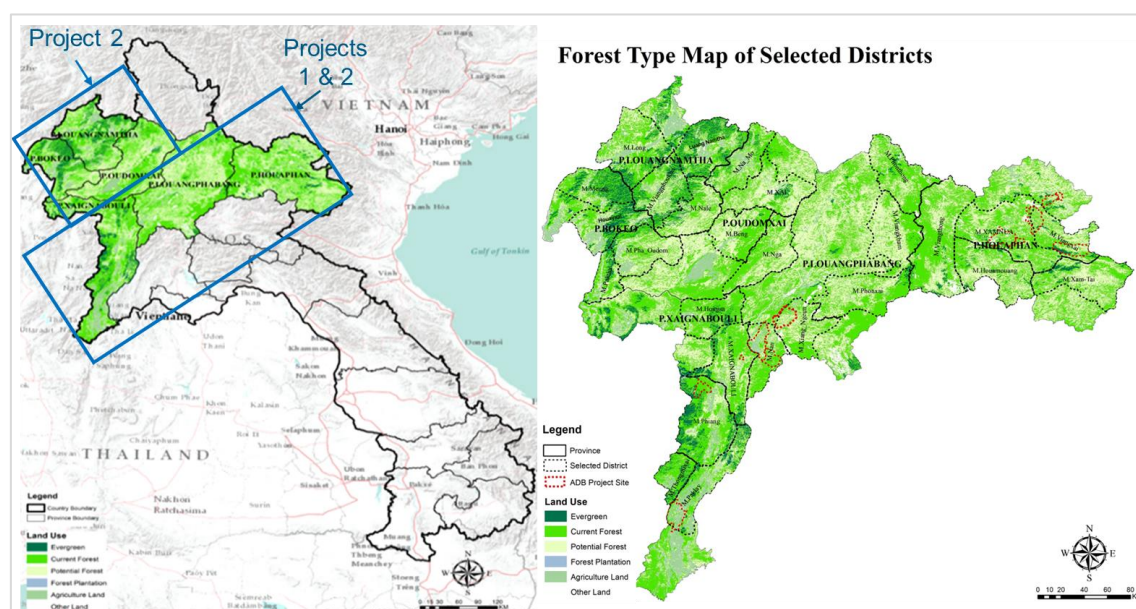


Figure 1: a) Programme/Project Area in Lao PDR, and b) forest type map of selected districts¹

The AE, with approval of the NDA, submitted a Concept Note outlining this programme² in June of 2018, and subsequently developed a funding proposal package for the programme. The Programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management” (FP117) was approved by the GCF

¹ Each target province shares an international border with one of the surrounding countries of Thailand, Myanmar, China and Viet Nam. The northern region of Laos is characterised by hilly topography, remote accessibility and limited public and industrial infrastructure, unique ethnic communities, and a persistent prevalence of poverty.

² Originally, the programme was elaborated as a project, and reframed into a programme during the elaboration of the feasibility study and funding proposal.

Board in 2019 at B.24.³ The overarching programme contributes substantially to the successful implementation of the Lao PDR Emissions Reduction Program (ER-Program) under the Forest Carbon Partnership Facility (FCPF) in six provinces of Northern Lao PDR: Houaphan, Luang Prabang, Sayabouri, Luang Namtha, Bokeo and Oudomxay (see Figure 1).

The programme plans to mitigate approx. 11.7 million tons of carbon dioxide equivalent (tCO₂eq) in 7 years and hopes to benefit around 723,382 people (361,691 directly), most of whom belong to various ethnic groups. This programme will assist the Government of the Lao PDR (GOL) to implement its Emission Reductions Programme as outlined in the Emission Reductions Programme Document (ERPD)⁴ so that results-based payments may be made by the Forest Carbon Partnership Facility's (FCPF) Carbon Fund (CF), based on the conditions as stipulated in an Emission Reductions Payment Agreement (ERPA)⁵.

The main focal area of the programme is the sustainable management of forests, landscapes and agricultural resources at scale in six Northern provinces of Lao PDR. An additional programme focus is the provision of support to establish an enabling environment for REDD+, including land and forest governance, enforcement, behavioural change, and sustainable sector financing. Initially, FP117 was conceptualized as a pure mitigation single project which had to be reframed as a programme, with 3 Sub-Projects due to limited GCF funding available. GCF Funding Proposal 117⁶ explicitly outlined a programmatic approach with Project 1⁷ covering 3 out of 6 provinces of the Lao ER-Program (Houaphan, Luang Prabang and Sayabouri), and the subsequent Sub-Projects 2 and 3 (hereafter Project 2) to expand the programme intervention area to all 6 provinces covered by the ER-Program to fully reach the envisioned transformational change of forest and land management in the uplands of the Lao PDR.⁸

For Project 2, GIZ with its head office in Germany will serve as the Accredited Entity (AE), as to Project 1. The GIZ project in Lao PDR will continue to fulfil the role of an Executing Entity (EE) for Project 2, together with the Government of Lao PDR (represented by MAF and MoNRE) where the EPF will be responsible for execution. The Climate Change Funding Window under the EPF, already established and operationalised under Project 1, will also be utilised as a financial delivery mechanism for Project 2. Detailed information is available in the Climate Change Funding Window Operations Manual (FP Annex 21).

ESIA Process & standards: This ESIA has been adapted and updated from the original ESIA, as prepared for FP117 (Project 1). Therefore, this ESIA was revised to focus on Project 2, which does not include some activities conducted under project 1 but includes some new activities.

³ "The programme consists of 3 projects: Project 1 (mid-2020 to mid-2024) addresses the three provinces of Houaphan, Sayabouri and Luang Prabang, which contain the highest rates of deforestation and forest degradation within the programme area; Project 2 (mid-2024 to end-2029) scales-up the number of participating communities in the same geographical area; and Project 3 (2022 to end-2029) extends the geographical reach of the programme to the 3 additional provinces of Luang Namtha, Bokeo and Oudomxay." (GCF FP 117, page 3).

⁴ Available online at: <https://www.forestcarbonpartnership.org/lao-people%E2%80%99s-democratic-republic>

⁵ Available online : https://www.forestcarbonpartnership.org/system/files/documents/FCPF%20Carbon%20Fund_ERPA_Trache%20A_B%20Lao%20PDR%20Final%20Signed%20Dec%2030%202020.pdf

⁶ <https://www.greenclimate.fund/project/fp117>.

⁷ Project 1 which was approved under FP 117 reached effectiveness on 19th May 2020. Since then, the Project has made significant progress. More details on the specific progress can be found under the Annual Performance Report (APR) in Annex 18.

⁸ FP 117 A.21.1 Programme Executive Summary: "This Funding Proposal presents a stand-alone GCF project (Project 1) for Board approval. Two subsequent stand-alone projects, embedded in the same programmatic context and theory of change as this project, will be submitted at a future date for Board approval. Board approval for the project presented in this Funding Proposal is wholly separate from, and does not pre-judge, Board approval for future related projects."

Next to expanding the intervention area to 3 more provinces, Project 2 will continue to support 240 villages, who are currently supported under Project 1 and will also include adaptation measures to enable the transition to sustainable and climate-resilient forest and land management in the uplands of Northern Lao PDR (see section 2 “Overview of Project 2 Design” for further information). The baseline was updated, the risk assessment revised, and recommendations have been adapted to fit the purpose of Project 2. The revised ESIA has been developed as part of the proposal process for Project 2 and submitted to GCF with a risk assessment according to GCF’s Environmental and Social Policy, and those of the GIZ. For further information see the section “Phased approach of the GCF Programme” in the Introduction.

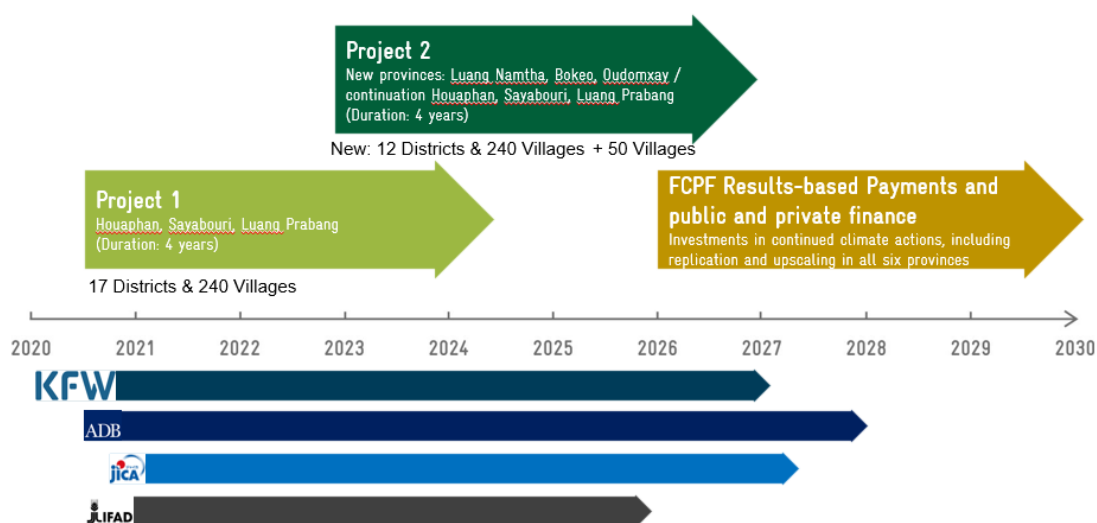


Figure 2: Phased approach to implement the Lao PDR Emission Reductions Programme

Medium and high-risk programmes / projects disclose the ESIA and ESMP to the public to enable effective stakeholder participation, ensuring access to project information in an accessible and culturally appropriate manner. It further enables stakeholder to provide feedback, raise concerns, or file grievances, as necessary.

The GCF uses an interim Environmental and Social Policy based on the Performance Standards of the International Finance Cooperation (IFC) Performance Standards, which are compatible with GIZ’s Safeguards, and its Gender Management System (S+G). The Performance Standards (PS) which apply to the project are:

- PS1: Assessment and management of environmental and social risks and impacts
- PS2: Labor and working conditions
- PS3: Resource efficiency and pollution prevention
- PS4: Community health, safety and security
- PS5: Land acquisition and involuntary resettlement
- PS6: Biodiversity conservation and sustainable management of living natural resources
- PS7: Indigenous Peoples
- PS8: Cultural heritage

The project triggers PS1-8.⁹

For the development of the initial environmental and social assessment, GIZ tasked an independent consultant with reviewing the draft project documents, background studies and data, and consulting the GIZ project preparation team. The consultant has identified and assessed potential unintended negative impacts of the project and formulated recommendations and relevant observations for subsequent assessments and plans in this report. GIZ will produce a separate Gender Assessment and Gender Action Plan, as well as an Environmental and Social Management Plan (ESMP). The ESMP includes mitigation hierarchies to manage and mitigate risks (as per Performance Standard 1 and the Indigenous Peoples Policy), and detailed mitigation and/or compensation measures, which are necessary to make the project compliant with the GIZ's and GCF's E&S Policies including the GCF's Indigenous Peoples Policy.

The ESIA and ESMP have been updated in late 2021/ early 2022 to reflect adjustments under project 2- The update is based on literature review, stakeholder consultations at national level (governmental institutions, CSOs, private sector), as well as local consultations in the provinces and more detailed field investigations in selected village clusters.

Risk category: The project is categorized as “Category B” or “medium” in terms of E&S risks. The project will have a positive environmental and social impact on the beneficiaries in Northern Lao PDR by promoting sustainable land-use in forests and agriculture and thereby contributing to improving livelihoods, while at the same time having a positive impact on the environment and biodiversity by contributing to protecting ecosystems and improving the environmental management capacity of relevant organizations. Potential adverse environmental and social impacts of the project will mostly be site-specific, not irreversible or complex in nature, and readily addressed through mitigation or compensation measures. The project area represents a highly diverse set of socio-economic, cultural and environmental conditions. Thus, neither a “one size fits all” set of activities, nor an overly generalized safeguards approach will be appropriate. The activities proposed for financing from GCF are oriented around Free, Prior, and Informed Consent (FPIC), positively helping small-scale farmers with a focus on ethnic groups in remote places. However, it is possible that the project itself may lead to land-use restrictions, thus negatively impacting on livelihoods. Therefore, it is important for the project to establish, implement and monitor the project's ESMP (Annex 6b to the Funding Proposal, FP), while also ensuring effective ongoing multi-stakeholder participation at all levels throughout project implementation (through the Stakeholder Engagement Plan, included in Annex 7 to the FP).

Context: Due to ongoing and planned development programmes in the GCF project area that are not related to this project, external risks for local livelihoods and ecosystems are to be taken into account; especially in case of hydropower development, road and railway construction and associated relocations. The report that follows outlines a number of external risks to project area livelihoods, land and forests, which the project will need to monitor and take into account

⁹ For details see: www.ifc.org/performancestandards and Section 5 below.

at all stages, even if they cannot be influenced or directly mitigated by the project. If not monitored closely, the project could unknowingly exacerbate externally caused trends toward denial of customary land use, including forms of shifting cultivation among ethnic groups.

ESMP & adaptive management: The socio-economic context for the implementation of the project will certainly depend on local situations, which are also likely to fluctuate over time. The high percentage of non-Lao-Tai ethnic groups in project area requires a certain type of ES risk management as per the GCF IPP. Given the vulnerability of local ethnic communities' livelihoods, the project needs to design, disclose, implement and monitor site-specific environmental and social management plans for the proposed activities carefully and with high attention to local ethnic communities, taking the GCF Indigenous Peoples Policy fully into consideration to mitigate any potential negative impact that might occur. Such considerations have been included within the Project's Ethnic Group Development Plan (Annex 6d to the Funding Proposal).

Need for continued consultations: The overarching programme's stakeholder engagement plan has been updated, reflecting consultations conducted during the development of Project 2, demonstrating how stakeholder feedback on the project has been reflected in the design of Project 2 and how stakeholder engagement will be maintained throughout implementation.

Synchronization: Some activities have to rely on successful completion of other activities in order to avoid unintended negative impacts. The project for example assumes that land titling and registration will occur, (supported by other partner organizations) giving local communities higher tenure security than before. It may happen that these processes will continue at a slow pace and that uncoordinated government procedures may lead to local people being allocated too little land for secure livelihoods. Legislation is not yet available that sufficiently recognizes land use plans or village forest management plans. The project intends to address this issue in Component 1, but if not synchronized with land-use planning and law enforcement, it may cause unintended negative impacts for local communities who participate with the project in good faith if the plans are not respected. Such plans, could get approval by District Governors, which may provide more standing than other legal documents. Incentives for villagers to participate in sustainable forest management in the long-term need to be clearly communicated including through the FPIC process before the project starts site-specific activities in order to not risk emission reductions goals and even villagers' livelihoods if they lose access to too much of their bush fallows.

1 INTRODUCTION

Lao PDR is a landlocked Least Developed Country (LLDC) with an area of 23.68 million ha, has a population of 6.9 million¹⁰ and an average per capita income of USD 2,490.¹¹ The country has a human development index (HDI)¹² of 0.613, ranking it 137th (out of 189) globally.¹³ While urban elites have been prospering, the lower-income populations, especially in the rural countryside, have experienced increasing inequality in terms of wealth and income within the country. In 2019, it was estimated that 80% of the population still lives on less than 2.50 USD per day.¹⁴

The country's economy is dependent on natural resources, especially forestry, agriculture, electricity generation (especially hydropower) and mining. Agriculture, forestry and fisheries account for 16% of GDP and employ 64% of the Lao workforce.¹⁵ Forests are among the economically most important sectors, providing income for the rural population and, in particular, the rural poor and providing a source of nutrition and livelihoods. Approximately 80% of the population are heavily reliant on forests for timber, food, fuel, shelter, medicines, and spiritual protection¹⁶. Laos' forests are at the heart of the globally recognised Biodiversity Hotspot Indo-Burma.¹⁷

Lao PDR has one of the highest forest coverage rates in Asia. Nonetheless, it has suffered extensive deforestation and forest degradation (DD) in many parts of the country during the past few decades. As a nation rich in natural resources, Lao PDR has embraced REDD+ to address its main source of greenhouse gas (GHG) emissions from the agricultural and forest sectors. It has introduced policies, targets and reforms in order to achieve an ambitious forestry target of 70% forest cover up from 58% as measured in 2015, as part of its Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC). To these ends, Lao PDR introduced a timber export ban, and has recently developed a National REDD+ Strategy (NRS, published in April 2021), and has updated the Forest Law (2019), taking REDD+ into account.¹⁸ Recently, the revisions of sub-sequent regulations and policies such as the Decree on Protected Areas and the Forestry Strategy 2021-2030 have been adopted, also receiving inputs from Project 1. In 2016, Lao PDR was the first ASEAN country to ratify the Paris Agreement,

¹⁰ Lao Statistical Bureau. 2015. *Results of Population and Housing Census*.

¹¹ World Bank: <https://data.worldbank.org/country/lao-pdr?view=chart>.

¹² HDI takes into account three dimensions to assess the level of development of a country: a long and healthy life (life expectancy at birth), knowledge (expected years of schooling, mean years of schooling), and a decent standard of living (GNI per capita). Additional information can be found at: <http://hdr.undp.org/en/content/human-development-index-hdi>.

¹³ UNDP (2018), HUMAN DEVELOPMENT INDICES AND INDICATORS: 2018 STATISTICAL UPDATE: [HTTP://WWW.HDR.UNDP.ORG/SITES/DEFAULT/FILES/2018_HUMAN_DEVELOPMENT_STATISTICAL_UPDATE.PDF](http://www.hdr.undp.org/sites/default/files/2018_human_development_statistical_update.pdf).

¹⁴ Report of the Special Rapporteur on extreme poverty and human Rights A/HRC/41/39/Add2, 2019: <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G19/177/01/PDF/G1917701.pdf?OpenElement>

¹⁵ World Bank: <https://data.worldbank.org/country/lao-pdr?view=chart>.

¹⁶ NAFRI (2006), *Improving Livelihoods in the Uplands of Lao PDR – A Sourcebook*.

¹⁷ see <https://www.cepf.net/our-work/biodiversity-hotspots/indo-burma> and MAF (2010): Fourth National Report to the Convention on Biological Diversity.

¹⁸ The amended Forest Law has been approved in 2019. The revised law also allows for participation of local communities in forest management, officially recognizes village forests in state-managed forests, and enables village forest management planning which includes commercial logging in village forests. For further information see <https://www.jica.go.jp/project/english/laos/018/news/general/190613.html>.

which was adopted at the 21st UNFCCC Conference of the Parties (COP) in 2015. Its latest Nationally Determined Contribution (NDC)¹⁹ to the United Nations Framework Convention on Climate Change (UNFCCC) further highlights the countries commitment to strengthen synergies between REDD+ and climate change adaptation.

1.1 Green Climate Fund (GCF) Programme

The overarching GCF programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management” (FP117) will assist the Government of the Lao PDR (GOL). The aim of the Programme is support GOL to implement its Emission Reductions Programme as outlined in the Emission Reductions Programme Document (ERPD) so that results-based payments may be made under an Emission Reductions Payment Agreement (ERPA) with the Forest Carbon Partnership Facility’s (FCPF) Carbon Fund (CF). The main focal area of the programme is the sustainable management of forests, landscapes and agricultural resources at scale in six Northern provinces of Lao PDR. An additional programme focus is support for an enabling environment including land and forest governance, forest law enforcement, behavioral change, and sustainable sector financing. The National Designated Authority (NDA) for the GCF in Lao PDR is the Ministry of Natural Resources and Environment (MONRE)/Department of Climate Change (DCC). GIZ’s AE Unit at GIZ Headquarters will serve as the programme’s Accredited Entity (AE). The Government of Lao PDR, represented by the Ministry of Agriculture and Forestry (MAF) and the Ministry of Natural Resources and Environment (MoNRE), and GIZ Lao PDR will serve as executing entities (EE).

The programme concept and components are related to that of the ERPD.²⁰ The programme area is the same as that described in the ERPD, comprising selected areas of the contiguous provinces of Houaphan (HPN), Luang Prabang (LPB), Oudomxay (ODX), Luang Namtha (LNT), Bokeo (BKO) and Sayabouri (XBY). All of the provinces have Provincial REDD+ Action Plans (PRAPs) including extensive analyses of direct and underlying drivers of deforestation and forest degradation. PRAPs were developed based on multi-stakeholder consultations at the national, provincial, district (50 districts) and village cluster level (one cluster per district, each with some five to eight villages).²¹ The district selection for the GCF programme comprising some 28 districts has been made largely according to where “deforestation hotspots” are found or where remaining forested areas are still high.

1.2 Phased approach of the GCF Programme

The Programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management” (FP117) was approved by the GCF Board in 2019 at B.24. Initially, FP117 was conceptualized as a pure mitigation single project which had to be reframed as a programme, with 3 Sub-Projects due to limited GCF fund-

¹⁹ Available online: <https://www4.unfccc.int/sites/NDCStaging/pages/Party.aspx?party=LAO>

²⁰ Please see the ERPD (May 2018) available at the [Forest Carbon Programme Fund \(FCPF\) website](#).

²¹ Village clusters in Lao PDR are called *kumban*. They are not, however, an official administrative unit although district staff may be posted to a *kumban* center, normally the largest village in the cluster.

ing available. GCF Funding Proposal 117 explicitly outlined a programmatic approach with Project 1 covering 3 out of 6 provinces of the Lao Emission Reductions Program (ER-Program) under the Forest Carbon Partnership Facility (FCPF) and the subsequent Sub-Projects 2 and 3 (hereafter Project 2) to expand the programme intervention area to the remaining 3 provinces (approx. 240 villages) covered by the ER-Program, as well as 50 additional villages (totalling the number of the villages to 530 at programme level) in the current project location to fully reach the envisioned transformational change of forest and land management in the uplands of the Lao PDR.

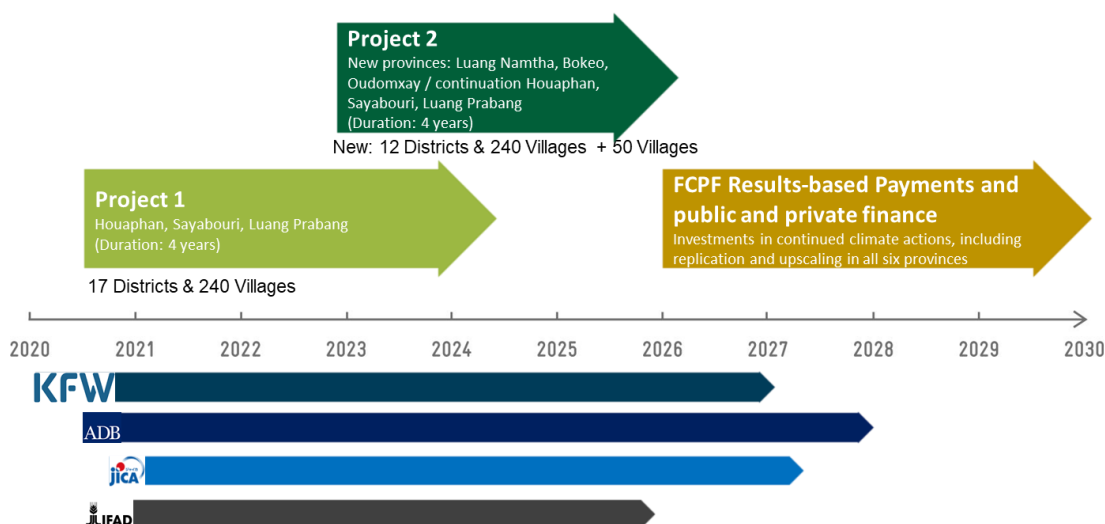


Figure 3: Phased approach to implement the Lao PDR Emission Reductions Programme

This ESIA refers to Project 2 of the GCF Programme, which provides a strategic opportunity to fully achieve the paradigm shift towards a low-emissions and climate resilient forest and land-use sector in Lao PDR already initiated with Project 1. Project 2 will expand the programme area to three further Provinces but will also continue to support 240 villages who are currently supported under Project 1 and will also include adaptation measures to enable the transition to sustainable and climate-resilient forest and land management. For a more detailed description of Project 2, please see chapter 2 “Overview of Project 2 design”.

1.3 ESIA Approach

An Environmental and Social Impact Assessment (ESIA) has been prepared for the GCF programme. For Project 2 an updated ESIA is prepared as part of the proposal process and submitted to GCF with a risk assessment according to GCF’s Environmental and Social Safeguards (ESS) and those of the accredited entity (AE) – The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Medium and high-risk programmes/ projects disclose the ESIA and the ESMP to the public to enable effective and culturally appropriate engagement and the dissemination of project information, while also enabling stakeholder to provide feedback or express concerns.

This updated ESIA report for Project 2 provides an assessment of the unintended negative impacts the project may cause through the planned activities (based on the draft funding proposal from March 2022). The ESIA assesses potential social and environmental unintended negative impacts of the programme against the GCF's Interim Environmental and Social Policy and Indigenous People's Policy. It also refers to the GIZ's Safeguards and Gender Management System. It builds on the original ESIA developed for the GCF programme as well as on the feasibility study, the gender assessment and gender action plans updated during the Project 2 development phase. Wherever possible, this ESIA further draws on documentation made available via the Forest Carbon Partnership Facility (FCPF) REDD+ readiness processes undertaken in the Lao PDR. An ERPD for the six Northern provinces mentioned above has gone through several drafts with comments for improvement from the Technical Advisory Panel (TAP). Based on the observations of the technical assessment (dated 25 May, 2018), the final ERPD has been presented and accepted without conditions at the 18th Carbon Fund Participants Meeting in June 2018 in Paris. The GOL also produced a Social and Environmental Safeguards Assessment (SESA), and an Environmental and Social Management Framework (ESMF) to complement the ERPD. GIZ initially planned to adopt the SESA and ESMF for drafting this ESIA, but the key documents were not available in time. As of March 2022, a SESA has been adopted (October 2019), accompanied by an Environmental and Social Management Framework (February 2020). A benefit sharing plan is available since September 2021.

The ESIA for Project 2 will be taken forward by a site specific Environmental and Social Management Plan (ESMP, available in Annex 6b to the FP), which builds on the original ESMP for FP117 developed in 2019, and has since been updated in March 2022 based on the results of this report in conjunction with local consultations, as well as more detailed field investigations in selected village clusters. It is further complemented by the project's Stakeholder Engagement Plan (Annex 7 to the FP), Gender Assessment (Annex 8a to the FP), and Gender Action Plan (Annex 8b to the FP).

2 OVERVIEW OF PROJECT 2 DESIGN

2.1 Project objective and components

Project objectives, activities and target areas

Project 2 aims to achieve the paradigm shift towards a low-emissions and climate resilient forest and land-use sector in Lao PDR²² already initiated with Project 1. Project 2 will scale up project activities in all six ER Program provinces (see Figure 4below), Specifically, Project 2 will:

- Implement activities in 12 districts (240 villages) in Luang Namtha, Oudomxay and Bokeo, which are provinces that were not included under Project 1. This support will include scaling up successfully implemented approaches to forest restoration and management as well as the deforestation-free and climate-resilient agriculture and agroforestry.
- Implement activities in an additional 50 villages in Houaphan, Luang Prabang and Sayabouri Provinces (the provinces covered under Project 1), to support replication and up-scaling that maintains the momentum for sustainable low-emission and climate-resilient land use.
- Support the continuation of activities in the 240 target villages located within 17 districts included under Project 1 (after 06/2024 when Project 1 ends)

Continued support for the villages included under Project 1 will not include additional funding support, but instead will focus on technical backstopping (e.g. related to the implementation of annual activity plans, and monitoring of land use plans and changes in forest cover), in addition to the deepening of linkages to private sector companies for sustainable deforestation-free, climate-resilient and low-emission value chain investments (for select commodities). This will be necessary as many crops selected from the White List will only enter production stage 2-4 years after initial establishment. Continued technical and extension support by PAFO and DAFO will further strengthen the sustainability of Project 1, and is part of the project's coordinated exit strategy. Funding for the annual forest management plan implementation and investments in sustainable agriculture for these villages will come from bonus payments to the VFAG accounts after 2 years of successful forest management which will be fully disbursed by the end of Project 1.

Next to expanding the programme intervention area to 3 more provinces, Project 2 will support 240 villages, who are currently supported under Project 1 and will also include adaptation measures to enable the transition to sustainable and climate-resilient forest and land management in the uplands of Northern Lao PDR. Although the project area has certain climate vulnerabilities (see section on Climate Risk and Vulnerability below) and under Project 1 the adaptation co-benefits were highlighted by iTAP and the GCF Secretariat to have a high potential to reframe Project 2 as cross-cutting, the main issue in the under Project 1 and 2 selected area is still deforestation. Therefore, the focus of Project 2 will remain on reducing emissions as proposed and approved under Project 1.

²² The Lao People's Democratic Republic (Lao PDR) and Laos is used synonymously throughout the Funding Proposal Package.

To achieve such a paradigm shift, the Programme already outlined in FP 117 (in which Project 2 is embedded) will:

- Strengthens the **enabling environment for REDD+** through the following means: enhancing the availability of financing investments in climate-resilient and deforestation free agriculture, forestry and land use – including channeling investments for climate change adaptation and mitigation under the EPF’s Climate Change Funding Window established under Project 1 (Project 2); revising and strengthening the legal and regulatory framework for forestry (completed under Project 1); and improving the enforcement of the new regulatory framework (both Project 1 and 2). Project 2 will further strengthen the framework to improve the implementation of cross-cutting measures, with both climate change adaptation and mitigation benefits, in line with the latest NDC. This will include insuring land use and forestry planning are climate-informed, and selected measures not only support reducing deforestation and reducing emissions, but further strengthen the resilience of local livelihoods, ecosystems and/ or strengthen food security.
- Supports the **further implementation of integrated and improved land use planning processes** (Projects 1 and 2),²³ which include local level planning while ensuring plans are climate informed and feed into broader watershed level planning. This will ensure an ecosystem-based approach to adaptation, where measures such as resilient agricultural practices, and sustainable forest management will contribute to strengthening the resilience of local communities and ecosystems within watersheds, with a focus on strengthening their resilience to increasing temperatures, droughts and extreme heat, and wildfires, as well as extreme precipitation events and floods.
- Supports **deforestation-free and climate-resilient agriculture and agroforestry** by promoting climate resilient value chains and agricultural interventions (e.g.), enhancing productivity, strengthening farmers’ adaptive capacities, increasing farmers’ integration into resilient and low-emission agricultural value chains, and improving access to finance and private sector participation in economic activities that reduce pressure on forests (Project 2). As agricultural expansion and the pioneering shifting cultivation are among the main drivers of deforestation, this intervention targets major underlying causes including access to technology and finance, inadequate financial conditions for agri-micro, small and medium enterprises (MSMEs), market access, and monitoring and enforcement, among others. The project will also support farmers with income diversification, promoting diverse agricultural commodities and farming systems that are suitable for the varied contexts, as well as diverse biogeophysical and climatic conditions in Northern Lao PDR. Project 2 builds on the lessons learned from Project 1, and identified the need to target agri-micro, medium and small enterprises (MSMEs), where there is a notable absence of financing opportunities due to i) poor penetration of Lao financial institutions (FIs) in rural areas, ii) high and unsuitable interest rates that discourage lending; iii) perceived high risk of lending to agriculture, and iv) many MSMEs lack sufficient capacities and collateral, thereby discouraging FIs from lending to them. With over 800 MSMEs in the project area, they are often left out of discussions on

²³ Project 1 developed a revised template and improved approach for PLUP that Project 2 will utilize, based on the successful experiences and lessons learned from Project 1.

sustainability, and as a result are insufficiently integrated in deforestation free and sustainability oriented value chains, limiting the involvement of a critical actor at the intersection of deforestation, production systems and value chains.

- Supports the implementation of **Sustainable Forest Landscape Management (SFM)** and **Forest Landscape Restoration (FLR)** of over 1.5 million ha of degraded forest lands (projects 1 and 2). Climate-informed management plans will be developed and implemented by the project considering measures for reducing deforestation and forest degradation, enhancing forest restoration and rehabilitation, and identifying opportunities to strengthen the resilience of forest ecosystems and communities within the watershed through ecosystem-based adaptation (e.g. restoring riparian zones and gully areas, reducing sedimentation through increasing vegetative cover, among other practices). Project 2 will further strengthen climate change awareness raising and include an enhanced emphasis on climate risk and vulnerability and resilience building within forest management plan development, implementation and monitoring processes for village forestry and protected areas.

Project 1 (FP117) laid the ground for the transformational change in the project area, including supporting policy mainstreaming, strengthening the regulatory framework, and implementing and improving the MRV system, among others. It also supported interventions on the ground in 3 provinces, namely: Houaphan, Sayabouri and Luang Prabang. However, to fully reach the paradigm shift towards low-emission and climate-resilient forest and land use practices, additional support is needed – as outlined in the programmatic approach within FP 117. Specifically, project 2 is needed to build on the efforts of project 1, while scaling up climate-resilient, low-emission and deforestation free agriculture and forestry practices across six provinces (including 3 additional provinces – Bokeo, Luang Namtha and Oudomxay), and support the country to unlock emission reduction payments. It also builds on the lessons learned from project 1 and includes additional targeted measures to facilitate the mobilization of additional sources of public and private public finance. Furthermore, it will develop capacities and opportunities for national institutions and funds for mobilizing additional climate finance and efficiently and effectively channeling it for investments in climate change adaptation and mitigation. At the same time, project 2 acknowledges the urgent need for climate action for climate change adaptation, and aims to strengthen synergies between REDD+ and activities that build the resilience of ecosystems and local rural livelihoods, in full alignment with Lao PDR's latest NDC (2021). Thus, project 2 is complementary and additional to project 1, and together both projects will facilitate a paradigm shift in the forestry and land use sector in Lao PDR that will be sustained by unlocking additional results-based payments, and public and private finance managed through national funds and institutions with strengthened capacities for climate finance.

The project consists of three components, as depicted in the following Figure.²⁴

²⁴ Note: Project 1 used the term 'outputs' instead of components. In order to ensure alignment with the GCF Integrated Results Management Framework and new Funding Proposal Template, the term 'component' is applied under Project 2. Outputs under GCF's IRMF are "Changes delivered as a result of project/programme activities that contribute to the achievement of outcomes." – GCF. 2022. [Guidance Note to support the completion of the IRMF elements of the revised funding proposal template for PAP and SAP, p. ii.](#)

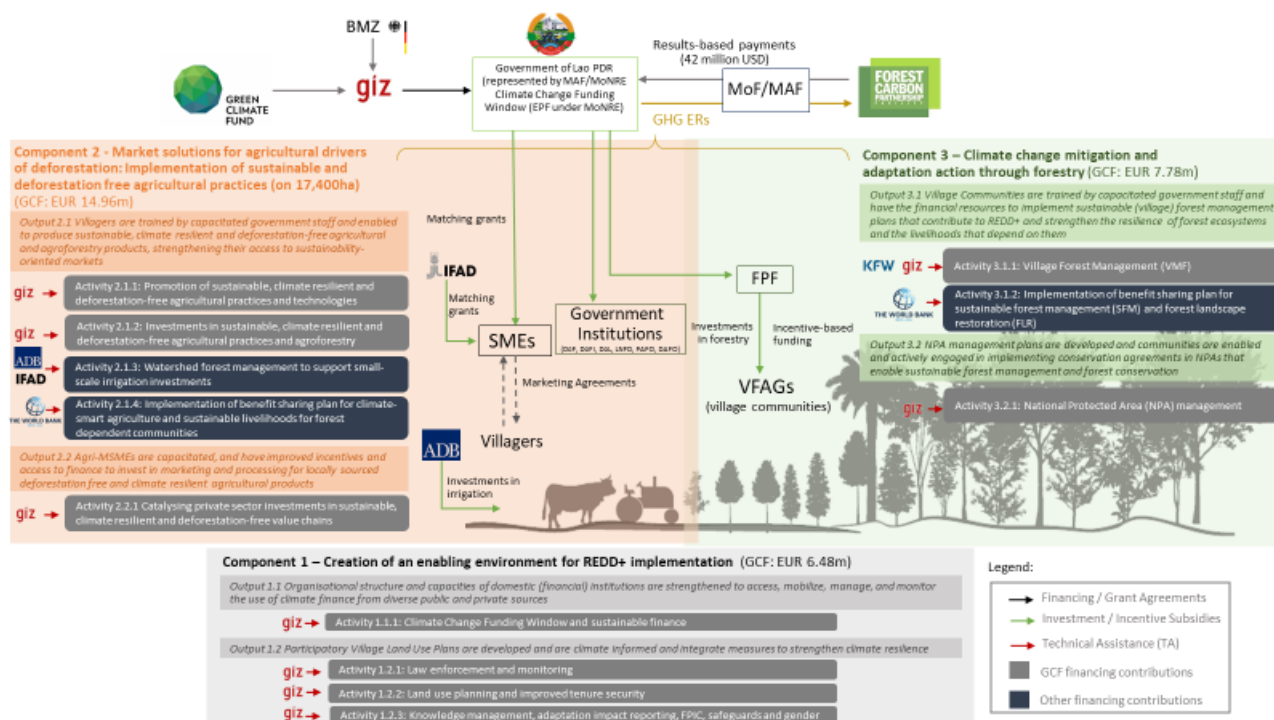


Figure 4: Overall Project Overview

Component 1: Creation of an enabling environment for REDD+ implementation

Component 1 addresses barriers at the national and sub-national levels, including measures that aim to scale-up climate-informed participatory land use planning, strengthen land tenure security, improve law enforcement and monitoring, and scale-up and ensure access to sustainable financing for the forest and land use sector.

Main adjustments from Project 1 to Project 2: Notable changes from FP117 include the removal of activities that have been completed under project 1 (mainstreaming REDD+ into the NDC and socio-economic development plans and strengthening the regulatory framework). The implementation of the MRV system is still supported by JICA, however outside of Project 2.

Component 2: Market solutions for agricultural drivers of deforestation: Implementation of sustainable and deforestation-free agricultural practices (on 17,400 ha and targeting at least 17,400 households)

Component 2 builds on recent in-country experiences and studies that note the relevance of engaging with and strengthening the capacities of micro-, small- and medium-enterprises (MSMEs) to invest in climate-resilient, deforestation-free and low-emission agricultural value chains. The project will channel matching grants to eligible agri-MSMEs, and support the development of a green credit line for the sector to help mobilize private sector investments in climate change mitigation and adaptation.

Component 2 addresses key drivers of deforestation and degradation. It delivers emission reductions on the ground at scale through reducing the expansion of agricultural activities into forested landscapes. Furthermore, the Promotion of Sustainable Agricultural Practices (PSAP) and the definition of 32 sustainable farming models in a “White List” (see table below) includes

aspects of adaptation to climate change through selection of robust crop varieties, the promotion of intercropping, mixed cropping, and the adoption of low-emission processing methods applied by farmers (e.g. dry processing of coffee beans, solar drying). By promoting various farming models, the project also aims to support agricultural diversification, which will build the resilience of smallholder farmers – who are often dependent on one or two climate-sensitive crops (e.g. upland maize).

Main adjustments from Project 1 to Project 2: This Component has been substantially adjusted from its initial conceptualization under Project 1 to have a stronger focus on agricultural value chains, private sector actors, and market-solutions for agricultural drivers of deforestation. Adjustments have been implemented during Project 1, therefore Project 2 will see a continuation of activities that will be scaled up to an additional 240 villages.

Table 1: Subset of White List commodities

Commodity	Steps of Value Adding	Possible End Products
Coffee	Drying, fermenting, grinding, roasting, packaging	Green beans Roasted coffee
Tea	Drying, fermenting, cutting, packaging	Green or black tea varieties
Bong Bark	Drying, cutting, milling, paste making, packaging	Incense sticks
Tung Oil	Drying, extracting oil, bottling	Oil for paints
Benzoin	Drying, cleaning, grading, packaging	Fragrance powder
Rubber	Cleaning, compressing, heating, grading	Sheet rubber, timber
Paper Mulberry	Drying, cutting, grinding, grading, pulp making, packaging	Mulberry paper
Bamboo	Drying shoots and canes, fermenting shoots, conserving shoots, cutting canes, milling for pulp, grading, manufacturing of handicraft items, packaging	Canes, shoots, handicraft, pulp
Cardamom	Drying, grinding, grading, packaging	Seeds, Cardamom powder
Rattan	Drying, cleaning, heating, grading, Manufacturing of handicraft items	Handicraft, furniture, conserved shoots
Sichuan Pepper	Drying, cleaning, grinding, grading, packaging	Sichuan pepper husks
Broom Grass	Drying, cleaning, grading, broom manufacturing	Brooms
Sascha Inchi	Drying, conserving, roasting, extracting, grading, packaging	Nuts, oil, creams, cosmetics
Cotton	Cleaning, grading, spinning	Handicrafts, clothes
Beans	Drying, hulling, cleaning, grading, oil extraction, tofu processing, packaging	Beans, tofu, sprouts, oil
Peanuts	Drying, hulling, cleaning, roasting, milling, oil extraction, packaging	Peanuts, butter, oil
Job's Tears	Drying, hulling, cleaning, roasting, milling, oil extraction, grading, packaging	Berries, flour, seed oil
Sesame	Drying, cleaning, roasting, milling, oil extraction, grading, packaging	Seeds, oil, paste (Tahini)

Component 3: Climate change mitigation and adaptation action through forestry

Component 3 will build upon Component 1 (enabling environment), and will reduce emissions through sustainable forest landscape management and the promotion of Forest Landscape Restoration (FLR), especially on degraded lands. Activity 3.1 focuses on village forests, whereas Activity 3.2 focuses on conservation forests.

The approaches implemented under Project 1 Output 3 have been found to be suitable for the local context, Guidelines under Project 1 will be used to replicate and scale up village forestry in

all six provinces. In general, the project's phased and gradual approach to scaling up local forest management (such as village forest management, sustainable forest management activities within NPAs), is suitable and needed to gradually build up the capacities of government staff, and local forest-dependent men and women. It builds on past experiences in Lao PDR, and not only supports the development of management plans (based on thorough participatory land use planning), but also provides hands-on capacity building and finance to implement the annual operational plans. The anticipated bonus payments (i.e. performance-based bonus payments, hereby referred to as *bonus* payments) will bridge the phase until forests can be commercially used as outlined under article 120 of the revised forest law. In addition, with the approved Benefit Sharing Plan under the ER-Programme sub-national agencies will receive finance to provide their services and village communities will receive finance to further implement their management plans.

Main adjustments from Project 1 to Project 2: An extension of the focus from climate change mitigation to adaptation. This includes a strengthened link to climate risk and vulnerability, and watershed management (under PLUP within Component 1), and the promotion of practices to also strengthen climate resilience (e.g. reforestation of degraded areas, gully control, riverbank stabilization, among others). Private sector agroforestry measures in production forests have been removed from Project 2.

2.2 Project implementation arrangements

Institutional arrangements

Since Project 2 will build upon Project 1 and expand the area being covered to the initial 6 provinces, the institutional arrangements already in place will not be changed (see Figure below). The National Project Steering Committee (NPSC) provides administrative oversight of the project, ensuring coordination across ministries – initially for Project 1 and upon approval also for Project 2. The NPSC provides strategic implementation guidance to the National Project Management Unit (NPMU) and Provincial Project Steering Committees (PPSCs, the Provincial REDD+ Task Forces), whilst ensuring compliance with the NDC, the National REDD+ Strategy and national socio-economic development objectives. The structure of the NPSC builds upon the existing institutional structure for REDD+ in Lao PDR. Thus, the REDD+ Task Force, as the responsible government entity for REDD+, serves as the NPSC.

Source: Funding Proposal

For Project 2, GIZ head office (in Germany) will serve as the Accredited Entity (AE), similar to Project 1. The GIZ office in Lao PDR will fulfil the role of an Executing Entity (EE) of Project 2, together with the Government of Lao PDR (represented by MAF and MoNRE) where the EPF will be responsible for execution. The Climate Change Funding Window under the EPF, already established and operationalised under Project 1, will also be utilised as a financial delivery mechanism for Project 2 in the three additional provinces.

As the project will involve implementation in various land use-related sectors, it will be necessary to continue close coordination and cooperation with a number of Ministries, Departments, Provincial, District and Village Authorities, Mass Organizations, Task Forces and TWGs. The formal organizations involved include:

- REDD+-specific bodies: National and Provincial REDD+ Task Forces, National and Provincial REDD+ Offices, and national TWGs;
- MAF: down to District, including sub-district level for Technical Service Centers; the key departments will be Department of Forestry, Department of Forest Inspection, Department of Village Forests and NTFPs, NPA-responsible Department, Department of Agriculture Extension and Cooperatives, and the Department of Agricultural Land Management (DALAM);
- MONRE: down to District; including Department of Land Administration;
- Ministry of Planning and Investment: down to District;
- Administrative Authorities: Provincial and District Governors' Offices, plus Village Authorities and Committees;
- Lao Front for National Development (LFND): Mass organization down to village level, often used to assist with local consultations.
- Lao Women's Union (LWU): Mass organization down to village level, often used to assist with local consultations.

Furthermore, the project concept includes important roles for non-governmental organizations (NGOs), and CSOs to complement responsibilities of the government/mass organizations. The project will strengthen CSOs by providing capacity building with GCF funds for project-related tasks including participation in the steering structure, consultations, monitoring and evaluation, and for providing capacity building and mentoring at local level. In project 1, CSOs are involved in village-level activities, including, for example, Free, Prior, and Informed Consent (FPIC), Participatory Land Use Plans (PLUPs) and Village Forest Management Agreements (VFMAs), which will be subject to prior village-level discussion and agreement, with full CSO participation encouraged and facilitated. The involvement of CSOs is planned to be maintained in project 2. There are different kinds of CSOs or NGOs that could be involved in Project 2 activities. Options for their involvement will be elaborated during implementation:

- International NGOs (INGOs): There may be an important role for INGOs, particularly in terms of local capacity building and mentoring in the districts, which the ESMP should explore and specify;
- CSOs at the local level: Including such bodies as any farmer-based associations, farmers' cooperatives, village banks and other established groups, not including village committees that are part of the formal establishment. These could again play an important role, potentially in cooperation with INGOs, to facilitate capacity building and mentoring at local level, which the ESMP should explore and specify;
- CSOs/Non-Profits: More formally established, but generally small and few in number; nonetheless, there are potentially important roles for them in conducting ongoing consultations, assisting in FPIC in selected villages/village clusters considering their FLEGT involvement and experience²⁵, which the ESMP should explore and specify.

²⁵ In identifying Lao stakeholders in the FLEGT process leading to VPA, the following statement is on the EU-FLEGT website, "Civil society: A group of 20 civil society organizations (CSOs) formed the 'Lao CSO FLEGT' in 2015 through a transparent selection process, which identified five organizations to represent the group in the national FLEGT structures." <http://www.euflegt.efi.int/q-and-a-Lao-PDR>.

There will be adequate time to provide capacity building measures for government and mass organization staff in all key departments, particularly at the sub-national levels, and CSOs including on environmental and social management. Such measures will have to continue throughout the life of the project, as staff rotation is a common feature of the Lao institutional landscape. A good example for CSO involvement in development cooperation is the CSO network supported by GIZ's ProFLEGT project.

Coordination with development partners:

KfW, World Bank, ADB and IFAD will provide co-financing through the Government of Lao PDR for Project 2. Coordination with co-financiers as to unified management arrangements in the provinces (such as with ADB) will be crucial to avoid overlaps, double payments for similar work under different projects and the like. Regarding unified safeguards approaches and risk management, no difficulties with co-funders are foreseen in that ADB, IFAD, KfW, and the World Bank are all accredited entities of the GCF (just like GCF), and therefore should already meet GCF's requirements. It will be important to ensure that the PMUs closely manage, follow up and monitor the implementation of the various frameworks and plans pertaining to risk management and mitigation across central, provincial, district and site-specific levels.

2.3 Stakeholder engagement for project design

Stakeholder engagement has always been considered as a key element of the programme, which was continued during Project 2 formulation. Extensive consultations have informed project design. It builds on extensive consultations and multi-stakeholder engagement conducted in the framework of Project 1 and the country's Emission Reduction Programme. Additional multi-stakeholder consultations were conducted to directly inform the design of the proposed project 2, including consultations at the central, provincial, district, village district (*kumban*) and local level. The Stakeholder Engagement Plan (FP Annex 7) provides a detailed overview of the different stakeholder engagement processes conducted, including a description of the feedback provided, and how it has informed the design of the project.

3 LEGAL AND POLICY FRAMEWORK

3.1 International treaties, conventions and agreements

Lao PDR's Government has been involved in a constant process of improving its rule of law by establishing and revising its policies, laws and regulations (PLRs) to bring them into conformity with international standards. This includes the Lao PDR's accession to the major United Nations human rights instruments. The need to adjust domestic law to conform to treaty requirements is recognized by the GOL. The relevant human rights instruments to which the Lao PDR has acceded are as follows:

Table 2. Human Rights Ratification Status for Lao People's Democratic Republic

Treaty Name/ Description	Treaty Ab- breviation	Signature Date	Ratification Date, Acces- sion(a), Succession(d) Date
Convention against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment	CAT	21. Sep 2010	26. Sep 2012
Optional Protocol of the Convention against Torture	CAT-OP		
International Covenant on Civil and Political Rights	CCPR	07 Dec 2000	25. Sep 2009
Second Optional Protocol to the International Covenant on Civil and Political Rights aiming to the abolition of the death penalty	CCPR-OP2-DP		
Convention for the Protection of All Persons from Enforced Disappearance	CED	29. Sep 2008	
Convention on the Elimination of All Forms of Discrimination against Women	CEDAW	17. Jul 1980	14. Aug 1981
International Convention on the Elimination of All Forms of Racial Discrimination	CERD		22 Feb 1974 (a)
International Covenant on Economic, Social and Cultural Rights	CESCR	07 Dec 2000	13. Feb 2007
International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families	CMW		
Convention on the Rights of the Child	CRC		08 May 1991 (a)
Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict	CRC-OP-AC		20 Sep 2006 (a)
Optional Protocol to the Convention on the Rights of the Child on the sale of	CRC-OP-SC		20 Sep 2006 (a)

children child prostitution and child pornography			
Convention on the Rights of Persons with Disabilities	CRPD	15. Jan 2008	25. Sep 2009

Source: https://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=94&Lang=EN

The GOL paid high attention to meet all the Millennium Development Goals and is now incorporating all indicators of the Sustainable Development Goals (SDGs) into its national plans, such as the 8th National Socio-Economic Development Plan (NSED 2016-2020), as well as the succeeding 9th NSED 2021-2025. Lao BRD has submitted Voluntary National Reviews on the Implementation of the 2030 Agenda for Sustainable Development in 2018 and 2021.²⁶

Relevant for the environment, Lao PDR is a signatory state/ party to the three Rio Conventions: the Convention on Biological Diversity (CBD), UNFCCC, and the United Nations Convention to Combat Desertification (UNCCD). Lao PDR has further ratified the Convention on International Trade in Endangered Species (CITES), and the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat. The GOL has also designated authorities to liaise with the Secretariats of other international conventions, such as different departments under MONRE for the CBD, Ramsar and UNFCCC. Plans and reports are made in respect of these conventions, such as the National Biodiversity Strategy and Action Plan 2016 - 2025.

FAO's Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) have also been introduced in Lao PDR. Related specifically to forestry, the Lao Government embarked on Voluntary Partnership Agreement (VPA) negotiations under the European Union's (EU) Forest Law Enforcement, Governance and Trade (FLEGT) process in 2016. Lao PDR is in the negotiation phase which was to be concluded in March 2021 but has been delayed due to COVID.²⁷ Related to agriculture, particularly the use agrochemicals, Lao PDR is a signatory to the Stockholm Convention on Persistent Organic Pollutants (POPs).²⁸ It also ratified the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and their Disposal (2010).

3.2 Domestic policies, laws and regulations

The legal framework in Lao PDR is based on a hierarchy starting with the Constitution (1991 but updated in 2003 and again in 2015), then laws, resolutions, Presidential ordinances, decrees, orders and decisions as determined by the "Law on Making Legislation" passed in 2012. Legal transparency is aided by the Lao Gazette, where all domestic laws, resolutions and decrees must be posted.²⁹

²⁶ https://sustainabledevelopment.un.org/content/documents/279472021_VNR_Report_Lao.pdf

²⁷ <https://flegtlaos.com/flegt/flegt-vpa/>

²⁸ A list of POPs that should be restricted, eliminated or reduced under the Convention can be found at the following link: <http://www.pops.int/TheConvention/ThePOPs/AllPOPs/tabid/2509/Default.aspx>.

²⁹ This includes provincial orders, resolutions and the like. District and village regulations only require local posting, such as on a billboard, in order to be considered official.

Key laws that are relevant for the programme are listed and briefly described in the following Table 3 (for more detailed information refer to the Lao PDR Forestry Legality Compendium [2015]):

Table 3. Overview of applicable legal framework

Law	Brief description
Law No. 29/NA on Environmental Protection 2012 ³⁰	The Environmental Protection Law defines the principles, regulations and measures related to environmental management, monitoring of protection, control, preservation and rehabilitation. It has key principles that promote sustainable development that protects the social and natural environment. It provides the framework for preventing environmental damage, including articles on strategic environmental assessment, preventative measures against natural disasters, requirements for investment projects (initial environmental examinations, and environmental impact assessments), and the identification of national environmental standards, among others.
The Forestry Law No 64/NA 2019 ³¹	The principal legislative instrument governing the management, protection, development, use, and inspection of forests and forest land in Lao PDR. Article 4 of the Forest Law reaffirms Article 17 of the Constitution, through which forests and forest land is under the ownership of the national village, and the State is charged with the centralized and uniform management through organizations, all people participate in restoring, protecting, and using legally. Natural forest and forestland are the property of the Lao Nation. The State is the designated authority to centrally manage forest and forestlands with the participation of all organisations and the people in the management, protection and utilization of forests and forestland. Forest may be State-owned, or 'ownership' is held by individuals, villages or other organizations. Under the Forest Law 64/NA 2019, all forest is classified into a category for which boundaries must be determined (protection forest, conservation forest, and productive forest.). The forest strategy is based on the policy of management, protection, development, and use of forest and forest land in a green and sustainable direction by increasing forest cover up to 70% nation-wide.
Law on Land 40/NA 2019	The Land Law 40/NA 2019 is the principal legislative instrument governing the land monitoring and management to ensure the protection, development and use of land in Lao PDR. Article 3 of the Land Law reaffirms Article 17 of the Constitution, through which land is under the ownership of the national village, and the State is charged with the centralized and uniform management of land, including allocation, land use planning and land development. Land may be State land, State asset, public land asset or land for which 'ownership' or land use rights are held by individuals, villages or other organizations. Under the Land Law 04/NA 2019, all land is classified into a category for which boundaries must be determined (e.g. agricultural land, forest land, water areas, industry land, transportation land, cultural land, land for national defence and security, and construction land). The category of land determines the scope of use, including allocation to the State, individuals or for lease, concessions or infrastructure development. The change of land from one land type to another land type can be made only if it is considered to be necessary to use the land for another purpose without having negative impact on the natural or social environment and must have the prior approval of the concerned management authorities (Article 25).
Law on Agriculture No 01-98/NA 1998 ³²	The law on agriculture has the function of determining principles, rules, and measures regarding the organization and activities of agricultural production. This includes the management and preservation of agricultural activities and production to encourage promote and expand agricultural production.

³⁰ <http://www.laolandissues.org/wp-content/uploads/2012/03/Environmental-Protection-Law-2013English.pdf>

³¹ <http://extwprlegs1.fao.org/docs/pdf/lao89474.pdf>

³² <http://extwprlegs1.fao.org/docs/pdf/lao18996.pdf>

Law	Brief description
Law No. 02/NA Investment Promotion 2009 ³³	Includes information on establishing forestry and agricultural concessions, including registration processes and requirements. It notes that MPI is responsible for registering concessions and that concessions or leases must be approved by the government.
Wildlife and Aquatic Law, No. 07/NA 2007 ³⁴	Determines the principles, regulations and measures on wildlife and aquatic life in nature to promote the sustainable regeneration and utilization of wildlife, and aquatic resources, without any long-lasting harmful impact on natural resources or habitats. One of the law's principles is to protect and manage conservation zones for animal species, and their habitats to maintain key ecosystems.
Penal Code Law No. 26142, NA PO 201705	Outlines the legal offences and penalties, including for environmental damage or unauthorized activities (e.g. illegal logging).
Customs Law No. 05/NA 2005 ³⁵	Provides the legal framework and regulatory requirements for importing and exporting timber and forest products.
Law No. 24/NA on Transportation 2012 ³⁶	Establishes the legal requirements for vehicles and machinery for logging, processing, log hauling and transportation. Specifically, it requires the registration of vehicles for timber harvesting and extraction.
Law No. 6847/NA on Local Administration 201503 ³⁷	Forests and forest land are allocated to the Provinces, and Vientiane capital authorities, who are then responsible for allocating them to the district or municipal levels. At the district and municipal level, they are able to further allocate resources to village administration authorities. As such, the <i>"local administration has responsibility to manage natural resources and may issue regulations and instructions for management and use."</i> ³⁸
Law No. 46/NA on Enterprise 2013 ³⁹	Includes an article on business operations in the forest (Article 45), that states <i>"Timber harvesting and haulage businesses must be registered by MOIC and approved by MAF"</i> . ⁴⁰ It further discusses the registration of enterprises, partnership enterprises, and other joint companies. MOIC is responsible for issuing investment licenses (Law no. 46 on enterprise), whereas MPI is responsible for issuing investment licenses (Decree no. 119, [2011])
Law No. 01/NA on Contract and Tort 2008	Notes that the sale and purchase of timber is <i>"by way of contract between the State and the seller"</i> ⁴¹
Law No. 26/NA on Irrigation 2012	Provides obligations for natural resource protection, including forest and biodiversity prevention, protection, and conservation in watersheds, reservoirs, and water resources.
Law No. 71/NA on Disaster Management 201	Notes that forest fires are man-made disasters and people have a responsibility to manage them.

³³ Smith and Alounsavath 2015.

³⁴ https://www.lexadin.nl/wlg/legis/nofr/oeur/arch/lao/wildlife%20law_official%20translation.pdf

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

³⁸ Smith and Alounsavath 2015

³⁹ Smith and Alounsavath 2015

⁴⁰ Smith and Alounsavath 2015

⁴¹ Smith and Alounsavath 2015

Law	Brief description
Law No.45/NA on Resettlement and Vocation 2018	Identifies resettlement areas as areas with difficult access and a lack of development conditions, such as those where slash-and-burn rice production causes environmental harm, mountain forest areas, and watershed forest areas; and special areas, such as conservation forests and protection forests.
Deree No. 3/PM on Endorse the controlled and concession list 2019	Identifies investment criteria for upland crop cultivation, tree plantation, livestock rearing, and forest and forest activities, except for rubber tree plantation.

Source: Information from translated versions of laws, and Smith and Alounsavath 2015

The Environmental Protection Law (EPL 2012) establishes the framework for the sustainable management of environmental resources in Lao PDR. The following instructions, decrees and processes are also relevant for environmental impact assessments:

- Ministerial instruction on the Process of Environmental Impact Assessment of Investment Projects and Activities (No. 17/MONRE, December 2013)
- Ministerial instruction on the Process of Initial Environmental Examination of Investment Projects and Activities (No. 8029/ MONRE, December 2013)
- Process of Environmental and Social Impact Assessment of Investment Projects and Activities (No. 8030/MONRE, December 2013)

The Environmental and Social Impact Assessment within MONRE oversees the environmental impact screening process, and follow-up processes related to initial environmental evaluations, environmental impact assessments, and related management plans. This includes screening projects, issuing environmental compliance certificates for projects that have successfully completed the process, coordinating with concerned agencies to issue guidance for practical implementation. They are further responsible for monitoring compliance, and sanctioning non-compliance.

The following Table 4 provides a summary of the types of investment projects and environmental and social impact requirements, based on the above mentioned laws, instructions, and decrees:

Table 4. Overview of project categories and environmental and social requirements for initial environmental examinations and environmental impact assessments

Type of Investment Project ⁴²	Requirements	Description of Environmental and Social Requirements ⁴³
Category 1: Small scale investment projects with minor environmental and social impacts, for which initial environmental examination is required	Initial Environmental Examination (IEE)	IEEs require studying, surveying, researching and analyzing data to estimate initial environmental and social impacts, including issues related to climate change and impacts on health, which may arise from Category 1 investment projects. IEEs further require the identification of measures to prevent and mitigate possible environmental and social impacts.
Category 2: Large-scale investment projects which are complicated or create significant environmental and social impacts, for which environmental and social impact assessment is required	Environmental and Social Impact Assessment (ESIA)	ESIAs require studying, surveying, researching-analyzing and estimating of possible positive and negative impacts on the environment and society, including impact related to climate change, short and long-term impacts on health created by Category 2 investment projects. ESIAs must also identify appropriate alternatives to be included in an environmental and social management

⁴² Article 2 of PM Decree 112/ 2010

⁴³ Article 3 of PM Decree 112/ 2010

tal impact assessment is required. (e.g. large hydropower dams)		and monitoring plan to prevent and mitigate possible impacts that are likely to happen during construction and operation of the investment project(s).
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Investments must be screened to determine the category of the proposed programme. If an investment project is neither category 1 or 2, but expected to create a social and environmental impact the project developed must submit an investment application to the Water Resources and Environment Administration (WREA) within MONRE. This is particularly for investment projects with the following characteristics:⁴⁴

- Projects that are likely to create severe environmental and social impacts, or create cumulative or trans-boundary impacts.
- Investment projects that are allowed to operate, but later expand or increases its production power, or production processes
- Investment projects that create impacts on protected areas, protection forests, and production forests, national biodiversity conservation areas of cultural heritage and historical preservation areas, and other prohibited areas.

The WREA in coordination with other relevant government authorities (e.g. MAF), will screen the programme, and inform the project developer in writing, within 15 working days, accordingly:

- If the investment project (project developer) must conduct an initial environmental examination;
- If the investment project (project developer) must conduct an environmental impact assessment
- If the investment project does not require an initial environmental examination or environmental impact assessment.

The programme's activities are not expected to require an ESIA under Lao PDR law, as they are only including small-scale projects with minimal environmental and social impacts. It is also unlikely that programme's investments within Activities 2.1, 2.3, 3.1, 3.2, and 3.3 require an IEE. In terms of joint investments on forested areas, all activities will be based on an approved forest management plan, including a regeneration plan, proof of village consultations and FPIC. Since activities will be continuously overseen by government authorities, and are already dependent on their approval it is not expected that an additional IEE is necessary. This is further supported by the (draft) forest law in Article 57 Promotion of Forest Regeneration Activities that notes:

"The state promotes individuals, households, legal entities, and organizations to rehabilitate degraded natural forest, young fallow forest in areas allocated by the government, through supplementary plantation activities or natural regeneration and maintain such areas to increase forest density and become dense forests again, and they will benefit from the promotion policy of the state, such as praise certificate, recognize the rights to protect,

⁴⁴ Environmental Protection Law

rights to benefit from timber and NTFP uses, carbon credits and ecosystem services, in according to regulations.”

Initial Environmental Examination⁴⁵

If an Initial Environmental Examination (IEE) is needed, the project developed must submit an investment application to WREA. Upon submitting this application and receiving confirmation from WREA that an IEE is necessary, the IEE must be conducted in 50 days (not including time for revision once submitted to the government authority responsible for its revision).⁴⁶

Then they shall conduct a related to the physical, biological and social impacts, which may arise from the development of the project. This includes data and information from different sources (existing studies, stakeholder consultations, information from local administrations, surveys, etc.). The Lao PDR Guidelines on Public Involvement must be followed, ensuring consultations in the areas affected by the project and ensuring their engagement is without the use of threat, coercion, force, violence, bribery and deception. In dissemination and stakeholder consultation meetings with affected communities, the project developer must coordinate with local authorities to ensure their presence. Consultations should occur at the beginning to inform the report, and also after the first draft of the report has been elaborated to disseminate the findings and receive feedback/ validate the findings. They must be fully documented, with signed attendance sheets and minutes attached to the IEE report. Reports must be made in English and Lao if it is a foreign investment, and only in Lao if it is a domestic investment. At least 15 hard copies of the report must be made once submitted to the agencies responsible for the programme. The responsible agency will then review the report within 10 days, notifying the project developer if additional inputs are required. They will also send the report to the local administration within 5 working days, and permit an additional 20 working days for commenting. Once the commenting period is over, a technical workshop will be organized by the government agency responsible where the project developer will clarify questions and address outstanding comments. The report and recommendations from this process will then be sent to WREA (MONRE) who will decide on whether or not an environmental compliance certificate should be issued or not. WREA may also demand that the project makes adjustments to the IEE report, or may recommend that an EIA is conducted if the project appears to have severe environmental and social impacts.

Environmental Impact Assessment⁴⁷

For Category 2 projects, or projects deemed in need of an environmental and social impact assessment, an initial report on the scope of the study and terms of reference should be developed by the project developer. Within receiving the documents, MONRE will review the report and TORs and within 15 days either approve the scoping report and TOR or provide comments for needed revisions. Once the scoping study and TOR are approved by MONRE, the ESIA report will

⁴⁵ Text summarized from Lao PDR Decree on Environmental Impact Assessment (No. 112/PM), February 16, 2010

⁴⁶ The “development programme responsible agencies” are responsible for leading the field inspection, participate in consultation meetings and support coordination with other government authorities. They further are responsible for reviewing the IEE reports, in coordination with other local authorities as necessary, and report to WREA with their recommendations for issuing the Environmental Compliance Certificate.

⁴⁷ Information adapted from the Ministerial Instruction on Environmental and Social Impact Assessment Process of Investment Projects and Activities (DESIA/ ESMP 2014).

be elaborated by the Project Owner, based on the TOR and other relevant technical guidelines, laws and regulations. An Environmental and Social Management and Monitoring Plan must be attached to the ESIA report, and comply with national regulations and laws. As with the IEE, the report must follow the guidelines on Participation, and include clear documentation of stakeholder consultations and feedback. The report must be prepared in Lao.

Once completed the ESIA must be submitted to MONRE, who will review the ESIA report in 10 days to ensure that it is correct and comprehensive. If it is deemed, accurate and comprehensive, MONRE will request the project owner to submit 15 or more ESIA reports (hard and soft copies) to MONRE for a more detailed review. If it is considered flawed, MONRE will provide feedback outlining necessary revisions. During the ESIA detailed review, it could take up to 95 business days from the date of detailed submission for the full review process to take place (within 5 days of receiving the ESIA copies MONRE will distribute the report to all relevant line agencies at the central, provincial and if necessary local level – who will then have 50 working days to assess the report). A technical workshop will then be held with MONRE, the project developer and other stakeholders to discuss the ESIA, and clarify outstanding comments, questions and concerns. All written comments will be compiled by MONRE and provided to the project developer, who will address them and submit a final version of the ESIA for re-consideration. MONRE will revise the final ESIA report within 40 business days, and then will either:

- Issue the environmental compliance certificate, approving the ESIA report and its environmental and social management and monitoring plan
- Provide comments to the project owner to revise and resubmit the reports
- Or reject the ESIA report, if MONRE believes the project has “substantial, unavoidable, and un-remedied social and environmental impacts.”

3.3 Gap assessment

3.3.1 Gaps identified in the ER-PD’s Environmental and Social Management Framework (ESMF)

A detailed gap assessment is provided in the ER-PD’s Environmental and Social Management Framework (ESMF 2020, Chapter 3.3). The gap assessment refers to studies conducted by GIZ in the framework of their CLIPAD project, which have not only informed the elaboration of this ESIA, but also the design of the program in general.

Examples of some of the gaps identified are as follows (see Chapter 3.3 page 43-47 of the ESMF for a comprehensive overview of the gaps):⁴⁸

- To meet policy directives on “Three Build (*Samsang*),” which outline the development roles at the provincial, district, and local levels, more support is still needed at the local level to increase the local authorities’ capacities and support their decision-making, including access to information.
- No specific environmental and social provisions or guidelines exist for conducting consultations with different ethnic groups in ways that the groups consider appropriate.

⁴⁸ Text from ER Program’s ESMF (pages 43-47). Once formally approved (in August or September 2019), the ESMF for the Emissions Reduction Programme will be attached to this document in Annex 12.

Guidelines for FPIC have been developed for the Climate Protection through Climate Deforestation (CliPAD) and are applied under Project 1. It is planned to further apply this proven and tested guideline for the FPIC procedure to be implemented in the three new provinces under Project 2. Moreover, an Ethnic Group Development Plan (EGDP) has been elaborated in preparation of Project 2.

- Procedural aspects of participation are not well defined and usually are not followed in the absence of donor-supported projects;
- Weak or irregular collaboration between technical ministries and MoNRE as well as the local Government institutions;
- High and frequent demand for external support for both environmental and social aspects;
- The lack of socio-economic data and other data, or - if available, its low quality;
- Insufficient or difficulty in enhancing capacities of the government institutions and relevant stakeholders to strengthen forest protection and establish sustainable forest management in Lao PDR
- Even though the business registration requirement and the IEE and/or ESIA process follow some guidelines, a proper consultation process with all stakeholders and information sharing and dissemination, including risks, impacts and measures, is still needed, as is follow-up monitoring and reporting;
- Promotion of biodiversity conservation and sustainable use for all planning and implementation programs has also been found to be a big challenge for achieving the main goals of the Forestry Strategy 2020.
- The conversion of barren land and degraded forest to agriculture land is supposed to follow the socio-economic plan and to be based on the Article 70 of the Forestry Law. However, the implementation at provincial level often has not followed the whole process, especially delineation of such areas on maps and into the planning of infrastructure development. Under Project 1, efforts to develop Provincial REDD+ Action Plans in pilot provinces, and work to promote provincial-level forest landscape management, improved this situation, by better aligning provincial and national policies. Project 1 provided technical inputs for the development and formulation of sub-sequent legislations, including the National REDD+ Strategy (2021). The Provincial REDD+ Action Plans (PRAP) have been integrated into the 8th Provincial 5-Year Socio-economic Development Plans and REDD+ related activities have been integrated into Provincial and District Annual development plans.

The program has been designed taking into consideration key challenges and gaps, and aims to strengthen local capacities, and fill these gaps to the greatest extent possible. It further has been designed understanding that there are ongoing synergetic programs and projects that will also address key barriers and build institutional and individual capacities (see Feasibility Study in Annex 2a to the FP for a detailed description of synergetic projects and programmes).

4 APPLICABLE ENVIRONMENTAL AND SOCIAL POLICIES AND STANDARDS

4.1 GCF environmental and social safeguards

The GCF is in the process of developing and finalizing a set of environmental and social safeguards, as part of an Environmental and Social Policy and Environmental and Social Management System (ESMS). During the period until which time the GCF ESS Policies are finalized, accredited entities (AEs) shall adhere to the GCF's interim safeguards; these are the Performance Standards (PS) of the International Finance Corporation (IFC; Table 4). The safeguards and policy respond to a mitigation hierarchy that goes beyond "do no harm" as follows:

1. Anticipate and avoid adverse risks and impacts on people and the environment;
2. Where avoidance is not possible, adverse risks and impacts are minimized through abatement measures;
3. Mitigate any residual risks and impacts; and
4. Where avoidance, minimization or mitigation measures are not available or sufficient, and where there is sufficient evidence to justify and support viability, design and implement measures that provide remedy and restoration before adequate and equitable compensation of any residual risks and impacts.

The GCF Board of Directors has additionally approved an Indigenous People's Policy (decision GCF.B.19/11). The Indigenous People's Policy applies to the GCF, AEs and National Designated Authorities (NDAs). The Policy includes stringent safeguards for all projects/programmes that include indigenous people (IPs). In the case of this programme, the people potentially affected by the programme include "ethnic groups" which count as "indigenous people" by the definition used in the Indigenous People's Policy (for detailed discussion refer to Chapter 8).

GCF has further approved its Gender Policy (GCF.B09/23, Annex XIII), which has the following main objectives:

1. Building equally women and men's resilience to, and ability to address climate change, and to ensure that women and men will equally contribute to, and benefit from activities supported by the Fund;
2. Addressing and mitigating against assessed potential project/programme risks for women and men associated with adaptation and mitigation activities financed by the Fund;
3. Contributing to reducing the gender gap of climate change-exacerbated social, economic and environmental vulnerabilities.

An updated Gender Assessment and Gender Action Plan have been elaborated for Project 2, which provide more details on the gender-specific risks, impacts, and risk avoidance and mitigation measures (available as a separate document).

Table 5. Overview of IFC Performance Standards

Performance Standard	Description
PS 1. Assessment and management of environmental and social risks and impacts	<p>PS 1 applies to all programmes/ projects that have environmental and social risks and impacts. It has the following objectives:</p> <ul style="list-style-type: none"> ▪ To identify and evaluate environmental and social risks and impacts of the project. ▪ To adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, and, where residual impacts remain, compensate/offset for risks and impacts to workers, Affected Communities, and the environment. ▪ To promote improved environmental and social performance of clients through the effective use of management systems. ▪ To ensure that grievances from Affected Communities and external communications from other stakeholders are responded to and managed appropriately. ▪ To promote and provide means for adequate engagement with Affected Communities throughout the programme/ project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated.
PS 2. Labor and working conditions	<p>PS2 asks that companies treat their workers fairly, provide safe and healthy working conditions, avoid the use of child or forced labor, and identify risks in their primary supply chain. It has the following objectives:</p> <ul style="list-style-type: none"> ▪ To promote the fair treatment, non-discrimination, and equal opportunity of workers. ▪ To establish, maintain, and improve the worker-management relationship. ▪ To promote compliance with national employment and labor laws. ▪ To protect workers, including vulnerable categories of workers such as children, migrant workers, workers engaged by third parties, and workers in the client's supply chain. ▪ To promote safe and healthy working conditions, and the health of workers. ▪ To avoid the use of forced labor. <p>The scope of application of this Performance Standard depends on the type of employment relationship between the client and the worker. It applies to workers directly engaged by the client (direct workers), workers engaged through third parties to perform work related to core business processes⁴⁹ of the programme/ project for a substantial duration (contracted workers), as well as workers engaged by the client's primary suppliers (supply chain workers).⁵⁰</p>

⁴⁹Environmental and social impacts refer to any change, potential or actual, to (i) the physical, natural, or cultural environment, and (ii) impacts on surrounding community and workers, resulting from the business activity to be supported.

⁵⁰ Contractors retained by or acting on behalf of the client(s), are considered to be under direct control of the client and not considered third parties for the purposes of this Performance Standard.

Performance Standard	Description
PS 3. Resource efficiency and pollution prevention	<p>PS 3 recognizes that increased economic activity and urbanization often generate increased levels of pollution to air, water, and land, and consume finite resources in a manner that may threaten people and the environment at the local, regional, and global levels.⁵¹ This Performance Standard outlines a programme/ project-level approach to resource efficiency and pollution prevention and control in line with internationally disseminated technologies and practices. It has the following objectives:</p> <ul style="list-style-type: none"> ▪ To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from programme/ project activities. ▪ To promote more sustainable use of resources, including energy and water. ▪ To reduce programme/ project-related GHG emissions.
PS 4. Community health, safety and security	<p>PS 4 recognizes that programme/ project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration and/or intensification of impacts due to programme/ project activities. PS 4 has the following objectives:</p> <ul style="list-style-type: none"> ▪ To anticipate and avoid adverse impacts on the health and safety of the Affected Community during the programme/ project life from both routine and non-routine circumstances. ▪ To ensure that the safeguarding of personnel and property is carried out in accordance with relevant human rights principles and in a manner that avoids or minimizes risks to the Affected Communities.
PS 5. Land acquisition and involuntary resettlement	<p>PS 5 recognizes that programme/ project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons that use this land. Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood⁵² as a result of programme/ project-related land acquisition⁵³ and/or restrictions on land use.⁵⁴ The standard's objectives are:</p> <ul style="list-style-type: none"> ▪ To avoid, and when avoidance is not possible, minimize displacement by exploring alternative programme/ project designs. ▪ To avoid forced eviction.

⁵¹ For the purposes of this Performance Standard, the term "pollution" is used to refer to both hazardous and non-hazardous chemical pollutants in the solid, liquid, or gaseous phases, and includes other components such as pests, pathogens, thermal discharge to water, GHG emissions, nuisance odors, noise, vibration, radiation, electromagnetic energy, and the creation of potential visual impacts including light,

⁵² The term "livelihood" refers to the full range of means that individuals, families, and communities utilize to make a living, such as wage-based income, agriculture, fishing, foraging, other natural resource-based livelihoods, petty trade, and bartering.

⁵³ Land acquisition includes both outright purchases of property and acquisition of access rights, such as easements or rights of way.

⁵⁴ Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

Performance Standard	Description
	<ul style="list-style-type: none"> ▪ To anticipate and avoid, or where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost⁵⁵ and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected. ▪ To improve, or restore, the livelihoods and standards of living of displaced persons. ▪ To improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure⁵⁶ at resettlement sites.
PS 6. Biodiversity conservation and sustainable management of living natural resources	<p>PS 6 recognizes that protecting and conserving biodiversity,⁵⁷ maintaining ecosystem services, and sustainably managing living natural resources are fundamental to sustainable development.</p> <ul style="list-style-type: none"> ▪ To protect and conserve biodiversity. ▪ To maintain the benefits from ecosystem services. ▪ To promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities. <p>Based on the risks and impacts identification process, the requirements of this Performance Standard are applied to programmes/ projects (i) located in modified, natural, and critical habitats; (ii) that potentially impact on or are dependent on ecosystem services over which the client has direct management control or significant influence; or (iii) that include the production of living natural resources (e.g., agriculture, animal husbandry, fisheries, forestry).</p>
PS 7. Indigenous peoples	<p>PS 7 recognizes that Indigenous Peoples, as social groups with identities that are distinct from mainstream groups in national societies, are often among the most marginalized and vulnerable segments of the population. In many cases, their economic, social, and legal status limits their capacity to defend their rights to, and interests in, lands and natural and cultural resources, and may restrict their ability to participate in and benefit from development. Indigenous Peoples are particularly vulnerable if their lands and resources are transformed, encroached upon, or significantly degraded. Their languages, cultures, religions, spiritual beliefs, and institutions may also come under threat. As a consequence, Indigenous Peoples may be more vulnerable to the adverse impacts associated with programme/ project development than non-</p>

⁵⁵ A host community is any community receiving displaced persons.

⁵⁶ Replacement cost is defined as the market value of the assets plus transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. Market value is defined as the value required to allow Affected Communities and persons to replace lost assets with assets of similar value. The valuation method for determining replacement cost should be documented and included in applicable Resettlement and/or Livelihood Restoration plans (see paragraphs 18 and 25).

⁵⁷ Biodiversity is defined as “the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems”.

Performance Standard	Description
	<p>indigenous communities. This vulnerability may include loss of identity, culture, and natural resource-based livelihoods, as well as exposure to impoverishment and diseases.</p> <p>The objectives of PS 7 are:</p> <ul style="list-style-type: none"> ▪ To ensure that the development process fosters full respect for the human rights, dignity, aspirations, culture, and natural resource-based livelihoods of Indigenous Peoples. ▪ To anticipate and avoid adverse impacts of programmes/ projects on communities of Indigenous Peoples, or when avoidance is not possible, to minimize and/or compensate for such impacts. ▪ To promote sustainable development benefits and opportunities for Indigenous Peoples in a culturally appropriate manner. ▪ To establish and maintain an ongoing relationship based on Informed Consultation and Participation (ICP) with the Indigenous Peoples affected by a programme/ project throughout the programme/ project's life-cycle. ▪ To ensure the Free, Prior, and Informed Consent (FPIC) of the Affected Communities of Indigenous Peoples when the circumstances described in this Performance Standard are present. ▪ To respect and preserve the culture, knowledge, and practices of Indigenous Peoples.
PS 8. Cultural heritage	<p>PS 8 recognizes the importance of cultural heritage⁵⁸ for current and future generations. Consistent with the Convention Concerning the Protection of the World Cultural and Natural Heritage, this Performance Standard aims to ensure that clients protect cultural heritage in the course of their programme/ project activities. It's objectives are:</p> <ul style="list-style-type: none"> ▪ To protect cultural heritage from the adverse impacts of programme/ project activities and support its preservation. ▪ To promote the equitable sharing of benefits from the use of cultural heritage.

Source: Descriptions from IFC's website - https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards

⁵⁸ "Cultural heritage refers to (i) tangible forms of cultural heritage, such as tangible moveable or immovable objects, property, sites, structures, or groups of structures, having archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values; (ii) unique natural features or tangible objects that embody cultural values, such as sacred groves, rocks, lakes, and waterfalls; and (iii) certain instances of intangible forms of culture that are proposed to be used for commercial purposes, such as cultural knowledge, innovations, and practices of communities embodying traditional lifestyles."

Another important safeguards-related topic is the Independent Redress Mechanism (IRM) as decided on by the GCF Board (see decision B.16/20). The IRM forms an integral part of the Indigenous People's Policy and is referred to under its Chapter 7.3. It emphasizes the possibility of an anonymous grievance redress mechanism (GRM) at the programme-level, should this be required.

As put forward in the Environmental and Social Policy (GCF/B.19/06, Annex II) GCF will not support activities that do not comply with applicable laws, including national laws and/or obligations of the country (directly applicable to the activities) under relevant international treaties and agreements. The higher standard applies. Thus, the safeguards must be consistent with the country's policies, laws and regulations (PLRs), but if the PLRs are less stringent than the clauses of applicable international treaties, covenants or conventions, then the latter apply.

4.2 GIZ safeguards

The German Federal Ministry for Economic Cooperation and Development (BMZ) also requires that all programmes and projects utilizing their funds are screened according to GIZ's safeguards.⁵⁹ GIZ's safeguard and gender management system has various policies, strategies and safeguards that are congruent with the IFC Performance Standards described in the previous sub-section.

Table 6. Alignment of GCF/IFC Performance Standards with GIZ's Safeguards and Gender Management system

GCF/IFC Performance Standards	GIZ Safeguards and Gender Management System
PS1: Assessment and Management of Environmental and Social Risks and Impacts	GIZ Sustainability Policy
PS2: Labor & Working Conditions	Human Rights
PS3: Resource Efficiency & Pollution Prevention	Environment, Climate Change Mitigation
PS4: Community Health, Safety & Security	Human Rights, Conflict and Context Sensitivity, Environment, Climate Change Adaptation
PS5: Land Acquisition & Involuntary Resettlement	Human Rights, Conflict and Context Sensitivity
PS6: Biodiversity Conservation & Sustainable Management of Living Natural Resources	Environment, Human Rights, Conflict and Context Sensitivity
PS7: Indigenous People	Human Rights, Conflict and Context Sensitivity
PS8: Cultural Heritages	Environment, Human Rights, Conflict and Context Sensitivity
GCF Gender Policy	GIZ Gender Strategy
GCF Indigenous Peoples Policy	Human Rights

⁵⁹ See the GIZ publication: Safeguards and Gender Management System.

4.3 Note on other safeguards

World Bank Safeguards for the FCPF Carbon Fund

As previously mentioned, an ERPD was prepared under the World Bank's Forest Carbon Partnership Facility (FCPF). The following World Bank safeguards (Operational Policies – OPs, and Bank Procedures - BPs) were triggered by the emission reductions programme (ERPDP: 194):

- Environmental Assessment (OP/BP 4.01);
- Natural Habitats (OP/BP 4.04);
- Forests (OP/BP 4.36);
- Pest Management (OP 4.09);
- Physical Cultural Resources (OP/BP 4.11);
- Indigenous People (OP/BP 4.10);
- Involuntary Resettlement (OP/BP 4.12); and
- Gender and Development (OP/BP 4.20).

The list of World Banks OPs/BPs is somewhat different from the GCF/IFC PS, and GIZ lists, but essentially amount to the same set of safeguards requiring specific management plans, and frameworks with risk mitigation measures to be implemented and monitored.

UNFCCC REDD+ Safeguards

The UNFCCC safeguards agreed on at COP 16, Cancun and reiterated under the Warsaw Framework for REDD+ also largely overlap with the safeguards (and the principles behind them) mentioned above. That local people's rights and well-being should be safeguarded at all times is reiterated in the Preamble of the Paris Agreement:⁶⁰

“Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.”

Note: In any instances of discrepancies or gaps between the national legal and regulatory frameworks and GCF and GIZ requirements, the most stringent policy, law or requirement will be followed. While the national legal and regulatory framework will serve as a foundation for the project, the project may require the use/ application of additional (supplementary) measures (as appropriate) to ensure the programme and its activities fully complies with GCF and GIZ requirements. This ensures the most stringent regulations and requirements will be applied within the project.

⁶⁰ UNFCCC Paris Agreement, p. 1.

5 SOCIO-ECONOMIC AND ENVIRONMENTAL BASELINE CONDITIONS, TRIGGERED SAFEGUARDS, AND RISK CONSIDERATIONS

This chapter presents the socio-economic and environmental baseline conditions in the project context, assesses the implications for ES policies and standards, and considers the risk for each triggered policy or standard. For all topics, it must be stressed that information sources are both disparate and secondary. Nonetheless, the aim here is to present an overview of the socio-economic conditions in the proposed project area. While a wealth of information assembled during implementation of Project 1 for the three provinces Houaphan, Luang Prabang and Sayabouri has been considered, programme management will have to increase the information base iteratively in the course of Project 2 implementation in the three new provinces Bokeo, Luang Namtha and Oudomxay.

5.1 Environmental and Social Risk Classifications

According to the GIZ and GCF safeguard systems presented in Chapter 4, programmes/ projects are rated according to unintended negative impacts (or environmental and social (ES) risks) associated with the programme/ project:⁶¹

- **A** for highest risk: “Activities with potential significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented”
- **B** for medium risk: “Activities with potential limited adverse environmental or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures”
- **C** for minimum to no risk: “Activities with minimal or no adverse environmental or social risks and/or impacts.”

For GIZ, a programme/ project is given an overall category based on the single highest ES risk of any safeguard category and not by averaging risks. The definition of “ES risk” employed by GIZ is as follows: “Possible unintended negative impacts of a GIZ programme/ project on humans and objects of protection.” In addition to the unintended negative impacts, external risks that arise from the programme/ project’s context or environment (informed by climate risk and vulnerability assessments) are taken into account.

Project 2 is categorized as “Category B” or “medium”, in line with the GCF Programme Risk categorization, in terms of the environmental and social risks in adherence with GIZ’s guidelines for its S+G Management System, which applies the highest risk classification of triggered safeguards/standards to automatically inform the programme’s overall ES risk category. For GIZ, Category **B** equals a programme/ project with “potentially rare or locally limited occurrence,

⁶¹ GIZ and WRI 2015.

largely reversible consequences, easy to manage.” Risks are defined as unintended negative impacts of the programme/ project on its social and/or ecological environment. External risks do not inform the risk category⁶², but are important context for the programme/ project in managing ES risks. External risks to the programme/ project can indeed be important and should be monitored carefully in the context of the programme/ project’s safeguard management.

The following Table 7 provides an overview and discussion of the GIZ and GCF safeguards triggered by the proposed project. The triggered IFC performance standards - Assessment and Management of Environmental and Social Risks and Impacts (PS 1), Resource Efficiency and Pollution Prevention (PS4), Land Acquisition and Involuntary Resettlement (PS 5), Indigenous Peoples (PS 7), and Cultural Heritage (PS 8) were assessed as “medium” in terms of E&S risks. The triggered GIZ safeguards “environment” and “human rights” were assessed as “medium” in terms of E&S risks. All other triggered safeguards/standards were assessed as low in terms of E&S risks. For a more detailed assessment of triggered safeguards, please see ESIA Annex 5: Summary of E&S PS and GIZ Safeguards triggered.

Table 7. Overview of GCF and GIZ safeguards triggered by the programme

ES Policy/ Standard ⁶³ :	Triggered?	Risk Assessment:
PS1: Assessment and Management of Environmental and Social Risks and Impacts	Yes	Medium
PS2: Labor and Working Conditions	Yes	Low
PS 3: Resource Efficiency and Pollution Prevention	Yes	Low
PS4: Community Health, Safety, and Security	Yes	Medium
PS 5: Land Acquisition and Involuntary Resettlement	Yes	Medium
PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Yes	Low
PS7: Indigenous Peoples & GCF Indigenous Peoples Policy	Yes	Medium
PS8: Cultural Heritage	Yes	Medium
GIZ Sustainability Policy	Yes	n/a
GIZ Safeguard Environment	Yes	Medium
GIZ Safeguard Climate Change	CCM ⁶⁴ : No CCA ⁶⁵ : Yes	Low
GIZ Safeguard Conflict & Context Sensitivity	No	n/a
GIZ Safeguard Human Rights	Yes	Medium
GCF & GIZ Gender Policy	Yes	n/a
GCF Independence Redress Mechanism/GRM	Yes	n/a

n/a: Not applicable

⁶² An exception is GIZ’s safeguard „climate change adaptation“, which considers climate change-induced risks to the programme, to reaching its objective, and the sustainability of the programme impacts.

⁶³ Applicable are GCF/B.07/11 dated 2014 and including the ESS at Annex III and GIZ Sustainability Policy with associated Safeguards.

⁶⁴ CCM stands for “Climate Change Safeguard: Mitigation of Greenhouse Gas emissions”.

⁶⁵ CCA stands for “Climate Change Safeguard: Adaptation to the Impacts of Climate Change”.

5.2 Assessment and Management of Environmental and Social Risks and Impacts (PS1)

All programmes/ projects that have environmental and social risks and impacts trigger PS 1. This standard emphasizes the necessity to manage and monitor the environmental performance of the programme throughout its lifetime, requiring a dynamic and robust environmental and social management system.

The environmental and social risk associated with implementing the project is assessed as medium, as described in the previous sub-section. Generally, the project will mainly have positive social and environmental impacts, but if not managed adequately, it can have unintended negative impacts (UNIs or ES risks) in the context of working with ethnic groups, land-use planning, influencing regulated and customary land-use, and in the agricultural sector for example with herbicides and pesticides (among others, described in more detail in the following sub-sections). The ESMP implementation risks can readily be addressed, and best practices are available. The programme's long duration of 7 years in which Project 2 is integrated and its concept allows for participatory, consent-based and adaptive approaches that the programme can test in a selected site before scaling up activities to other target areas.

For medium risk programmes/ projects, i.e., Category B, it is necessary to develop a project-level environmental and social management plan (ESMP) for its entire duration. The project will need to:

- Plan and budget for qualified human resources to support the implementation of the ESMP, and continuously monitor and adapt ESMP implementation in close coordination with partners and stakeholder in Lao PDR.
- Establish a mitigation hierarchy (anticipate, avoid; minimize, compensate or offset)
- Ensure that regular dialogues, consultations, and effective engagement of affected stakeholders at the local level
- Establish a culturally appropriate communication and redress mechanism.

5.3 Baseline conditions and additional environmental and social risks

Based on the project's characteristics, additional PS apply that are described in the following sub-sections along with the project baseline. A summary table is provided in Annex 5.

5.3.1 Socio-economic conditions

5.3.1.1 Baseline situation

The demography of the six provinces represents a diverse picture, including when looking at demographic growth. An underlying driver of deforestation and degradation in the PRAPs and ERPD was demographic change, meaning population increase - primarily due to population

growth and migration to the region. During the fieldwork for the PRAPs and ER-PD development, it was discussed that the increasing population in some provinces, puts increased pressure on land and natural resources to sustain villagers' livelihoods. Table 8 below provides an overview of the provincial population in 2005 and 2015. The data are presented here to show that population growth, especially in rural areas, differs among the provinces. While the provinces of Bokeo, Luang Prabang, and Sayabouri had declines in their rural populations, the rural population in Oudomxay and Luang Namtha increased, and Houaphan's rural population remained nearly unchanged. To what extent this might be because of changed definitions of "rural" versus "urban" is not known. Thus, the programme will find diverse migration trends depending on the local settings, varying in some cases community by community.

Table 8. Total and rural provincial populations (2005 and 2015)

Province	Total Provincial Population		Total Rural Population	
	2005	2015	2005	2015
LNT	145,310	175,753	113,576	128,170
ODX	265,179	307,622	224,770	233,636
BKO	145,263	179,243	125,348	120,348
LPB	407,039	431,889	330,374	292,194
HPN	280,938	289,393	247,916	247,911
XBY	338,669	381,376	261,685	229,218
Total	1,582,398	1,765,276	1,303,669	1,251,477

Table Notes: Source is the Census Report 2005 (Table 2.2) and the Census Report 2015 (Table P1.1). Provinces shaded in dark grey with reduced rural populations and in light grey with constant population from 2005 to 2015.

Poverty also remains a feature of the socio-economic landscape in the Northern region. It declined, however, steadily over the years. The 28 pre-selected districts have poverty headcount rates (income-based poverty) ranging from a low of 11.3% in Thongmixay (XBY) to a high of 45.6% in Huameuang (HPN; Table 9). As the Lao PDR's Voluntary National Review on the Implementation of the 2030 Agenda for Sustainable Development (2018: 17) points out: *"Households in agriculture are twice more likely than non-farm households to fall back into poverty, as they are highly vulnerable to shocks"*. These shocks range from sudden crop price drops, natural disasters including crop pests and diseases, to livestock deaths, to sudden health problems in the family. This is particularly alarming considering that the agricultural sector is the primary source of livelihoods for the majority of people in Lao PDR.⁶⁶

⁶⁶ World Bank (2018) Lao People's Democratic Republic— Sustainable Forestry for Rural Development Project. Washington D.C, USA.

Table 9. Poverty in the Six Northern Provinces (2016)

Province	Poverty Headcount %	Poverty Gap Index	Estimated Number of Poor	Range of Poverty Headcounts in Target Districts %
LNT	21.1	4.6	35,524	16.2 (Namtha) – 27.9 (Nalae)
ODX	25.5	5.7	75,327	17.7 (Xay) – 30.6 (Beng)
BKO	25.5	5.9	43,738	21.7 (Huay Xay) – 34.2 (Pha Oudom)
LPB	22.9	4.9	95,575	16.3 (Nan) – 30.5 (both Phonxay and Viengkham)
HPN	37.0	8.5	105,680	27.7 (Viengxay) – 45.6 (Huameuang)
XBY	20.2	4.5	74,325	11.3 (Thongmixay) – 23.5 (Phieng)

Table Notes: Changes may have occurred since. The so-called poverty gap index measures the extent to which individuals fall below the poverty line (the poverty gaps) as a proportion of the poverty line.

Source: Lao Statistics Bureau et al. (2016) Where Are the Poor? Lao PDR 2015 Census-Based Poverty Map: Province and District Level Results, Appendix 8: Monetary Poverty Indices, by Province and District.

The socio-economic conditions in the six Northern provinces vary considerably. However, the high reliance of the rural population on agricultural and forest resources for both income and subsistence is a common feature. Some ethnic groups and communities have done very well through commercialized, agriculture, often at the cost of forest cover. For example, there are Akha villages in Luang Namtha that have parlayed cross-border relations with Chinese-based relatives into lucrative trading relationships. Likewise, some Hmong villages have also done well with commercial agriculture.

Hidden under the poverty data, and the steady improvements that Northern Lao PDR experienced over the past decade, is increasing levels of inequality within villages, village clusters and districts.⁶⁷ The latest Human Development Report (2018) for Lao PDR notes that Lao PDR has an average Gini coefficient of 36.4 (similar to other ASEAN members). Just because a district has a relatively low poverty rate, doesn't mean that there won't be several poor families⁶⁸ present. For instance, the following photos demonstrate examples of different housing within one village, where it is possible to see wealth gaps.

⁶⁷ Personal observations over many years of village visits in northern Lao PDR, plus the latest reports on economic development in Lao PDR point to an increasing Gini coefficient, meaning a trend towards greater income inequality.

⁶⁸ Particularly vulnerable groups include women-headed households, households new to a particular village who are denied Access to decent quality land, households with disabled persons, and households that have suffered severe harvest losses, or lost land, among others.



Photos of Village Houses

Photo Notes: The houses are in the same village in Phiang District, Sayabouri, but the wealth differences between the families who live in them are great. (Photo: Gebert)

Intra-village inequality and poverty gaps have become greater over the years as some families are increasingly well-positioned to take advantage of cash cropping and trading opportunities. Their accumulation of capital has allowed them to accumulate more land. While landlessness was previously unheard of in the Lao PDR, there are now poor families who are farming leased land and/or subsisting primarily from hiring out their labor (see Info Box below on land tenure). A United Nations (UN) assessment of general development in Lao PDR, not specific to Northern Lao PDR, reported: *“There is rising inequality in land, land tenure security, and landlessness. It is estimated that up to 15% of rural households are landless, half of which engage in sharecropping*

or renting land”.⁶⁹ The 2015 Census Report also reports that 86.7% of rural households (with road) and 85.2% of those without road access have land for agriculture.

PRAP and ER-P consultations identified local people’s poverty as an underlying driver of deforestation and forest degradation. This is in agreement with other consultations and research, which found that poverty contributes to local people being pushed into areas where they have to clear steep forested slopes to cultivate upland rice and cash crops.⁷⁰ This is linked to various other factors such as topography, demographic trends, agricultural production systems and resulting productivity, reduction of fallow periods, and soil fertility, among other factors.⁷¹ It is also true that a coping strategy in times of shortage may be illegal timber cutting and animal poaching, but this is mostly a short-term coping strategy as there are few families who do this on a regular basis for a long-term livelihood strategy.

Info Box 1. Land tenure in the programme region

Secure land tenure remains an issue for the majority of northern rural upland communities. In rural areas, there are apparently over two million parcels (Department of Agricultural Land Management (DALAM) presentation⁷²), most of which have no titles. Communal land titles are possible in law (old Land Law of 2003), but are seldom issued in practice. Rock et al. (2015) noted “the vast majority of the land titles have been issued in urban and peri-urban areas, while rural areas have only been reached in the case of donor-funded programme support.”

As a result, many upland areas, customary, communal lands may not be recognized as such by the State (may be classified instead under one of the three forest categories rather than “village use land”) although they are crucial to maintain local people’s livelihoods.⁷³ While there is some recognition in law for communal (cooperative) tenure, as mentioned above, the issuance of communal land titles in the Northern provinces has yet to take place, even in the wake of Participatory Land Use Planning and Village Forest Management. This is largely due to the varied levels of skills, as well as limited staffing and resources available at the district level.

⁶⁹ Country Analysis Report (2012): Lao People’s Democratic Republic: Analysis to inform the selection of priorities for the next UN Development Assistance Framework (UNDAF) 2012-2015. The statement applies generally to rural Lao PDR, not specifically to the North.

⁷⁰ Viau et al. 2011; Vongvisouk et al. 2014 in Kallio et al. 2019. For example, in some districts households planted rubber and cash crops on all of their land that was allocated by land use planning processes. For maize, various studies found that this includes even very poor households (with land), with some studies demonstrating various motivating drivers for farmers to join maize planting (e.g. income generation opportunities, lower labor requirements compared to upland rice, market outlets through traders, land due to government support for maize expansion, and infrastructure development), or a lack of alternate livelihood (cash income) generating opportunities. For many households who cultivated cash crops on their entire allocated areas, they continued to cultivate subsistence crops in marginal upland areas or by clearing forested areas to ensure food security, and to generate additional household income. One study in three villages in Northern Lao PDR found that “swidden rice continued to be the main food provider and played an essential role as a fallback strategy for farmers in all three villages. The fact that most of the farmers had not completely abandoned swidden, even in the highest boom of maize, enabled them to ensure some food security during the maize price crash”.⁷⁰ Poorer households who do not have sufficient land are often dependent on upland agriculture for subsistence and additional household income.

⁷¹ Viau et al. 2011; Vongvisouk et al. 2014 in Kallio et al. 2019

⁷² No date, but entitled Strategy of Agricultural Land Management and Development Up To 2025.

⁷³ See also Rock (May 2018) on Land Policy Briefs in Cambodia, Lao PDR and Myanmar: He states that “Customary land rights often overlap with what the laws (Land Law and Forestry Law) define as state land.”

Thus, Lao PDR still faces challenges in harmonizing land tenure security with opportunities for land investment.⁷⁴ Project 1 helped to strengthen land tenure agreements, supporting communal and collective land use planning to provide tenure security for forest management and its outputs.

Project 1 promoted the elaboration of PLUP 2.0, a new guideline on Participatory Land Use Planning (PLUP) in December 2020 after consultation with NPMU, relevant development partners and provincial authorities. A signed PLUP can serve as a legal document to secure tenure security for agricultural and forest land. The PLUP 2.0 guideline is applied during land use planning in all target villages. Between March and June 2021, kick-off training workshops on PLUP 2.0 to key implementers from DAFOs and DoNREs were organised in the three Provinces. As most of technical staff from DAFOs and DoNREs lack hands-on experience in land use planning, on-site technical backstopping was subsequently provided by concerned authorities from Department of Land (DoL/MoNRE), DoF, PAFOs/PoNREs and project staff. More than 14,000 villagers engaged in the consultation process of PLUP with 46% of total participants female. In about 80% of the completed villages, existing village land use plans have been reviewed, updated or redone during PLUP 2.0 process.

As a result, the total village land area of approx. 220,000 ha is demarcated and under village land use plans, all the 48 village regulations are established and approved by villagers. 64% of the total land areas are designated as village forestland. 25.1% of total village area is zoned as fixed agriculture areas, while shifting cultivation and fallow land make up about 10%.

The process has been delayed due to pandemic induced lockdowns. A continuation of activities in the three Provinces is planned and will be extended under Project 2 in the three new Provinces.

5.3.1.2 Triggered policies and safeguards

Project 2 may unintentionally contribute to changed, reduced or denied access to land through some of its activities (for example participatory land-use planning and management plans for different land-uses) resulting in unintended negative livelihood impacts. The project therefore triggers PS 5 “Land Acquisition and Involuntary Resettlement” and GIZ’s safeguard “Human Rights”. It could further trigger PS 7 (Cultural Heritage), if the land in question is considered an area of cultural heritage – however, this risk is discussed in further detail in Chapter 5.2.3.

5.3.1.3 Risk considerations and potential avoidance/ mitigation measures:

Land use planning and the implementation of plans (PS 5)

The project does not require land acquisition or involuntary resettlement and does not anticipate economic displacements. It cannot be ruled out, though, that programme activities such as participatory land-use planning and implementing (forest) management plans, stricter policies,

⁷⁴ Ironside 2017.

and improved law enforcement change, reduce or deny access to land with unintended negative livelihood impacts. For example, there is a trade-off when considering RV as potential forest rather than future cropping land, which may have potentially negative impacts on livelihoods. Project activities may affect stakeholders differently, depending on their socio-economic vulnerability in conjunction with ethnic or cultural contexts across the project area. However, it is expected that unintended negative impacts will likely be rare, site-specific and reversible. Thus, the ES risk is assessed as medium.

Government partners and programme staff can anticipate, avoid, minimize and manage these potentially negative impacts through the following measures:

- Awareness raising and capacity building on good sustainable land use practices, and the importance of ecosystem services.
- Implementation of participatory land-use planning, based on proven best practices, and regular consultations to ensure an inclusive process that enables all village members to benefit from the programme. Capacity development of government staff at the provincial and district level will focus on improving inclusiveness in participatory processes to support the implementation of the programme. Well tested and successful participatory approaches applied under Project 1 will be rolled out to the three additional provinces targeted under Project 2.
- Provision of technical support through capacity development / trainings and extension agents. Such ongoing support needs to be designed in a way that is inclusive, culturally appropriate, and addresses barriers for diverse people to access and learn from such services (incl. poor households, women-headed households, among others).
- The implementation of the project will be based on free, prior and informed consent (FPIC) of all project beneficiaries and affected people, based on nationally appropriate best practices. Participation in the project is voluntary, and the project's complaint and grievance redress mechanism will be communicated to all participants to ensure that complaints and grievances can be filed in an accessible and culturally appropriate manner. If anyone believes their land tenure has been compromised by the project they are able to file an official complaint or grievance.

5.3.2 Ethnic Groups

5.3.2.1 Baseline situation

The programme area is home to at least 20 of the officially recognized ethnic groups, although the number would be higher if all groups and "sub-groups" were counted separately. The ethno-linguistic groups present include the Lao-Tai (such as Lao, and Tai-Thay), Mon-Khmer (especially the Khmu), Sino-Tibetan / Tibeto-Burman (mainly Akha), Hmong-lumien (mainly Hmong) and Palaungic (including smaller groups such as Bid that are mainly found in Bokeo within the programme area). Many provinces and districts have a higher composition of non-Lao-Tai ethnic

groups. The following Table depicts the ethno-linguistic categories of people by Province, confirms that only Sayabouri has a clear Lao-Tai majority, while Houaphan has a fairly even divide between Lao-Tai and non-Lao-Tai ethnic groups.

Table 10. People of different ethno-linguistic categories by province in percent

Province	Lao	Tai-Thay	Khmu	Palaungic	Tibeto-Burman	Hmong	Iumien	Not Stated
LNT	2.9	23.8	24.6	3.6	33.2	7.2	3.2	1.3
ODX	9.4	10.3	58.9	0.1	4.9	15.0	0.1	1.1
BKO	13.1	20.0	25.2	11.0	9.3	15.6	2.4	3.4
LPB	28.4	5.1	47.0	0	0.2	17.7	0.3	1.1
HPN	0.0	48.0	19.5	0	0	30.1	1.1	1.0
XBY	58.8	11.6	17.5	0	0.2	9.2	0.9	1.7

Table Notes: Source is underlying data set from the Population and Housing Census, 2015.

Of the 28 districts, only districts in Sayabouri and Houaphan have significant Lao-Tai populations, all others, with the exception of Nan (in Luang Prabang) have other ethnic groups who comprise the majority of the population, especially Khmu. For more detailed information at the district level, refer to the District Table in Annex 2.

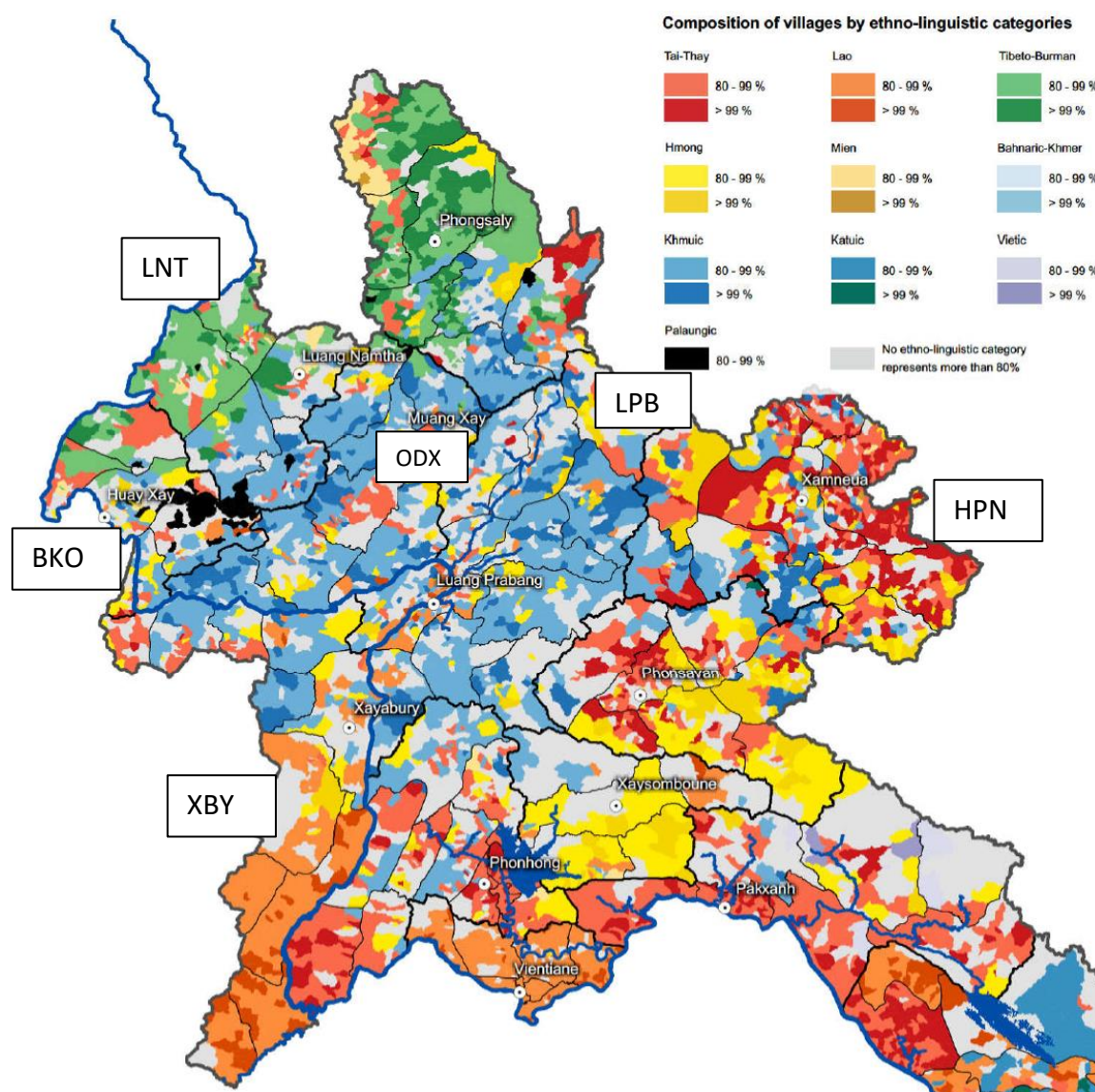


Figure 6. Composition of Villages by Ethno-Linguistic Categories

Source: Socio-Economic Atlas of the Lao PDR, 2018 (p. 74). The provinces of LPB, ODX, LNT and BKO have non-Lao-Tai ethnic groups in the majority, while the selected districts in XBY are largely Lao-Tai. HPN presents a more mixed picture, but with many areas having a Tai-Thai majority.

Aside from the Lao-Tai who tend to inhabit low-lying areas in river/stream valleys where paddy rice cultivation and riverbank vegetable gardening are possible, all other groups tend to live and earn their livelihoods primarily from midland and upland ecosystems. There are, however, various ethnic communities that have been resettled (or have resettled on their own) from higher, remoter locations to roadsides and lower lying areas. The Lao People's Revolutionary Party (LPRP) policy⁷⁵ aims to consolidate village settlements in rural areas to form larger commercial/market centers. This policy has led to village relocation and consolidation over the years, mainly affecting ethnic minority communities. Between the two censuses of 2005 and 2015, the total

⁷⁵ See Central Committee Instructions, 09/2004 and 03/2011.

number of villages in Lao PDR dropped from over 11,000 to some 8,640⁷⁶ and continued to drop to 8,416⁷⁷ in 2020. In recent years, village numbers in the six northern provinces have remained fairly stable. However, in general, the total villages in the six provinces were reduced from 2,994 to 2,986 villages from 2015 to 2020, due to village consolidation. When village consolidation has physically taken place, it often disadvantages the “new” group, as the best land will have already been “reserved” or is already under use by the existing villagers.⁷⁸ In many observed instances, village consolidation and/or relocation has resulted in farming households moving their homes but returning to their former land for the agricultural season.⁷⁹

Table 11. Number of villages from 2005 to 2020 by provinces

Provinces	No. Village			
	2005 ⁸⁰	2010	2015	2020
LNT	380	356	364	354
ODX	587	471	471	472
BKO	354	283	256	248
LPB	855	783	753	755
HPN	784	721	718	728
XBY	487	446	432	429
Total	3,447	3,060	2,994	2,986

Table Notes: Source is from Lao Statistics Bureau (LSB) statistical Yearbooks. It is difficult to know precisely how many ethnic communities have been affected by relocation and/or consolidation, as this has been a process conducted over decades and going back at least until the early 1990s, if not earlier. According to tradition, the different ethnic groups maintained single ethnicity villages as these reflected their clan and other leadership structures (spiritual and secular) and customs, including their internal “regulatory” frameworks. These structures would regulate much of the socio-cultural and economic aspects of village life, including land and resource use and disputes. Elder men would often decide which swidden area to use in a particular season and direct young families to particular areas as well. In all villages, labor exchange would also be practiced to ensure the subsistence of the entire village. There are now many villages in the north that are comprised of people from various ethnic groups. Traditional villages will have a 99% single ethnic group, while all others show that there are “newcomers” in the village. Judging from the map (

Figure 6), most Khmu villages fall into the 80 – 99% range. In some rural areas, shown in grey, there is no single predominant group, which is evidence of relocation and migration.

While there are positive regional development imperatives behind the wish to consolidate and relocate village communities to be closer to transportation infrastructure, markets and services, there have been notable negative effects on the social solidarity of affected groups. Traditional

⁷⁶ Information from Lao Statistics Bureau (LSB) statistical Yearbooks, available online: <https://www.lsb.gov.la/>.

⁷⁷ Information from Lao Statistics Bureau (LSB) statistical Yearbooks 2020.

⁷⁸ In some districts, consolidation has been more of an administrative exercise to put smaller hamlets under one “official” village without physically moving them.

⁷⁹ See Gebert and Luangkhot, 2009, *At the Crossroads: Poverty, Gender and Ethnicity Issues in the Northern Uplands*. SDC.

⁸⁰ Information from Lao Statistics Bureau (LSB) statistical Yearbooks 2006.

structures may no longer be applicable where several ethnic groups live together, and State-sponsored structures such as Village Management Units (VMUs) may not always be a suitable replacement for traditional means of dispute resolution. Land-use-related decision-making also loses its importance with the demise of self-determined shifting cultivation systems, thus also disempowering traditional leadership. This, in turn, may have serious social repercussions in villages with fewer, effective social controls and increased alcoholism and gender-based violence.⁸¹ Moreover, the combination of resettlement, demise of traditional shifting cultivation and advent of commercialized agriculture has also led to a demise of labor exchange practices, with a shift to hiring labor instead.

Info Box 2: Experience with village relocation or consolidation under Project 1

As principle, Project 1 did not engage in villages to be relocated in order to ensure sustainability of PLUP exercises. In order to retrieve this information, six departments of the government have been surveyed on potential relocation/resettlements that would affect the target villages.

During this survey, two villages subject to relocation/resettlement were identified: One of them was removed as a target villages (Houayong) and was replaced by Phoudokmay, Hongsa District, Sayabouri Province. The second village, Lornng, in Xiengnern District, Louangprabang Province was kept as target village because resettlement would only affect a limited number of households and would happen within the boundary of the village. For Project 2, this procedure is planned to be maintained.

5.3.2.2 Triggered policies and standards

The project area has more people of the non-Lao-Tai ethnic groups than of the Lao-Tai in most of the selected districts. The socio-economic and multi-ethnic contexts as well as the ethnicity data in the project areas have implications for the application of the GCF's Indigenous Peoples Policy, which the programme triggers, along with PS 7 "Indigenous Peoples" and GIZ's Human Rights safeguard.

In addition, changes in land use and access rights may also limit access to cultural heritage (especially of an intangible nature), triggering PS 8 "Cultural Heritage".

5.3.2.3 Risk considerations and potential avoidance/ mitigation measures

Ensuring Project 2 benefits diverse ethnic groups and does 'no harm' (PS 7)

The programme aims to foster full respect for human rights, dignity, culture, and the natural resource-based livelihoods of ethnic groups in the programme region. While the programme has been designed to benefit men and women from diverse ethnic groups in the programme area, unintended adverse risks may affect ethnic groups living in the project area (e.g. land use planning may conflict with customary land use). In the described multi-ethnic and socially dynamic

⁸¹ ESIA of SUFORD-SU (2012): Chapters 5.3 – 5.5 on ethnic groups, p. 74).

context, the project may unintentionally prevent ethnic groups from exercising their rights of participating in decision-making and access to information as per GCF and GIZ policies. This may be caused, for example, by the project not being aware of persistent impacts of displacements and resettlements (not triggered by the project), barriers related to language, cultural practices and literacy, or capacity gaps of counterpart and project staff in relation with working in a multi-ethnic environment.

By adopting approaches of previous programmes, notably the preceding GCF Project 1, and learning from them, these potentially unintended negative impacts can be anticipated, avoided, minimized and managed through, for example, meaningful consultations, FPIC, planning routines with communities taking multi-ethnic aspects into account, participatory approaches in land-use planning and natural resource management, as well as appropriate communication and outreach. The government partners (MAF) and the population in Lao PDR have applied or been involved in these approaches through national guidelines and programmes for example of ADB, World Bank and GIZ. Relevant references include:

- GCF FP117 (“Project 1”): Ethnic Groups Development Planning Framework, as part of the ESIA, applied during implementation of Project 1 under the GCF Programme
- Lao PDR’s ER Programme 2019: Ethnic Group Policy Framework (EGPF) and Benefit Sharing Plan
- GoL: Guideline on Ethnic Group Consultation⁸²
- GIZ CLIPAD, 2017: FPIC Guideline⁸³
- GIZ/KfW/GoL 2017: Guideline for Conflict Mediation at the Village Level⁸⁴ ADB, 2018: Climate-friendly Agribusiness Value Chains Programme, implemented by MAF, which included an Indigenous Peoples and Ethnic Minority Development Framework⁸⁵
- ADB, 2006: Northern Region Sustainable Livelihoods through Livestock Development Programme, implemented by MAF, which included an Ethnic Groups Development Plan⁸⁶
- WB, 2018: Agriculture Competitiveness Programme, implemented by MAF, which included an Ethnic Groups Engagement Framework⁸⁷
- WB, 2002: Sustainable Forestry for Rural Development Programme (SUFORD), implemented by MAF, which included an Ethnic Group Development Plan⁸⁸

If unintended negative impacts occur, they are expected to be rare, site-specific and reversible through continued consultations, a grievance mechanism and facilitation. Those cases may happen for example in the context of land-use planning and forest inspection.

An “Ethnic Group Development Planning Framework” has been developed in 2018 for the GCF Programme. Based on this, an “Ethnic Group Development Plan” has been developed for Project

⁸² Available in hard copy only.

⁸³ [Internal Project Document](#)

⁸⁴ [Internal Project Document](#)

⁸⁵ <https://www.adb.org/sites/default/files/project-documents/48409/48409-004-ippf-en.pdf>

⁸⁶ <https://www.adb.org/projects/documents/northern-region-sustainable-livelihoods-through-livestock-development-project-eth>
⁸⁷ <http://documents.worldbank.org/curated/en/619241513655548731/pdf/SFG3891-REVISED-IPP-P161473-Box405323B-PUBLIC-Disclosed-1-15-2018.pdf>

⁸⁸ <http://documents.worldbank.org/curated/en/763931468753303127/pdf/multi0page.pdf>

2 to promote social inclusion, provide a targeted approach for ethnic groups to benefit from the project's activities, and ensure the project does no harm (refer to 6b of the Funding Proposal).

Additional measures to manage risks to ethnic groups include, among others:

- Application of FPIC prior to the implementation of project activities, and maintained throughout the project's lifetime
- Aim to direct project activities and financing measures that enable the most vulnerable ethnic groups to have better access to land, and technical support for the implementation of good agricultural practices, SFM and FLR.
- National laws will be respected by the project, and all project activities have been screened against the national legal framework.
- Project staff and trainers to include male and female representatives from diverse ethnic groups, and positively target particularly vulnerable group. Project staff should further receive trainings on gender equality and social inclusion within the context of the project.
- Outreach, extension and technical support at the community-level, workshops and capacity building activities shall be socially inclusive, culturally appropriate, and take into account local and traditional knowledge.
- All information on project activities will be made easily accessible, and in appropriate ethnic languages. Land use planning activities will also be conducted in appropriate ethnic languages, where translators can be made available if necessary. Translators will be made available as necessary (either from within the community, or external translators)
- Opportunities for collaboration with other stakeholders (e.g. CSOs, LWU, etc.) to be sought out to strengthen stakeholder outreach, and the engagement of various ethnic groups, and vulnerable households.

The ES risk associated with the GCF's Indigenous Peoples Policy, PS 7 "Indigenous Peoples" and GIZ's Human Rights safeguard is therefore assessed as medium.

Cultural heritage (PS 8)

During project preparation and consultation, no cultural heritage places, building or monuments were identified in the project area (i.e. where access could become an issue). Nonetheless, residual uncertainty remains. It is thus recommended that further investigation of cultural practices, and places of cultural and historical significance is conducted prior to the implementation of project activities in the field. Such a process should be participatory, closely coordinating with communities and local leaders to identify village areas of traditional or cultural significance. The programme must respect ancestral and spiritual land use and apply sensitivity to customary land use by the community, especially ethnic groups. For instance, the programme shall ensure that rights remain to conduct ritual ceremonies (often taking place in forest). In addition to this the programme will have to preserve and respect indigenous knowledge, including traditional knowledge and practices (incl. the use of medicinal plants whenever needed).

The ES risk associated with PS 8 was assessed as medium. The following measures will support the programme to manage the ES risk:

- All information on project activities will be made easily accessible, and in appropriate ethnic languages. Land use planning activities will also be conducted in appropriate ethnic languages, where translators can be made available if necessary.
- Consultations with stakeholders will continue throughout the project's lifetime, as local stakeholder and community members will have a key role in the implementation and monitoring of the project. This will ensure that stakeholders are aware of the project, its progress, as well as any changes. This will also be used as an important mechanism to receive ongoing feedback throughout project implementation.
- For activities that will be undertaken in areas near to those identified as having historic value, a training will be conducted on cultural heritage awareness.
- Information dissemination and awareness raising campaigns will pay particular potential to women, ethnic groups, illiterate people, people with disabilities, and people with limited or no access to internet, among others. Where possible, information dissemination and awareness raising will engage project counterparts and local actors including village and kumban leaders, producer associations, CSOs, LWU, LNF, etc.

If objects of cultural heritage are uncovered by the project, the procedures described in the Lao PDR Emission Reduction Programme's ESMF will be followed, as described in Section 4.3 "Chance Finds Procedure", part of Chapter 4 "Potential Impacts and Mitigation Measures" (see Annex 12 ESMF)). This includes stopping activities in the area, delineating and securing the area, and notifying the respective members of the PPMU and responsible Government Authorities (incl. the Provincial Department of Culture within 24 hours).

5.3.3 Gender ⁸⁹

5.3.3.1 Baseline situation

Women in Lao PDR still face discrimination in many aspects of their lives, despite positive strides made in the past decades by the Lao PDR Government's policies to promote gender equality and protect women's and children's rights. This discrimination, in turn, results in ongoing barriers for them to participate in public life, and to access many of the services to which they have a right.

Many of the ethnic groups found in the northern uplands, such as the Hmong-lumien and Sino-Tibetans, are patrilocal and patriarchal in their clan leadership structures. Women have no rights to children in the case of separation, some groups practice polygamy, and among some groups a female-headed household does not "*exist*" because interventions with house spirits can only be done by males.

⁸⁹ For more detailed information on gender within the GCF programme and project 2, please refer to project Gender Assessment and Gender Action Plan within Annex 8a and 8b to the FP.

Discussions on gender and communications are incomplete without mentioning female heads of household. Patriarchal and patrilocal customs mentioned above are exacerbated in the Lao PDR, with administrators (and the census) always referring to a “head of household.” This person is always understood as a male in the first instance. It is only in the absence of an adult male, that a household is deemed female-headed. Female-headed households comprise less than 10% of rural households in the programme area. Nonetheless, they include many of the poorest and most vulnerable households, as they often suffer from acute labor shortages and are much less likely to be able to take advantage of public services (e.g., agricultural extension). According to the Agricultural Census 2011, female-headed farming households sold less agricultural produce than their male counterparts in every category. The categories included non-rice crops (while 40% of interviewed male-headed households sold non-rice crops, only 31% of women-headed households did), livestock (41% male-headed households compared to 33% women-headed households), and fish (33% male-headed households and 28% women-headed households). FAO assesses the reasons for this are that women-headed households are more subsistence-oriented, potentially because markets are more accessible for men than to for women.⁹⁰

Table 12. Distribution of Sex of Household Head (HH) by Geographic Area and Province in %

	Total HHs		Urban HHs		Rural HHs	
	Male-Headed	Female-Headed	Male-Headed	Female-Headed	Male-Headed	Female-Headed
Luang Namtha	92.7	7.3	91.8	8.2	93.3	6.7
Oudomxay	92.1	7.9	91.7	8.3	92.2	7.8
Bokeo	91.2	8.8	90.5	9.5	91.4	8.6
Luang Prabang	92.4	7.6	87.3	12.7	94.4	5.6
Houaphan	95.9	4.1	91.2	8.8	97.3	2.7
Sayabouri	92.5	7.5	90.9	9.1	93.3	6.7

Table Notes: Source is Table 8 of the Lao PDR Labour Force Survey 2017, published in 2018 by the Lao Statistics Bureau (available at the LSB website). The data in Table 8 are based on the Population and Census data, 2015.

In terms of land titles and registration, while land titling has not proceeded very far in rural areas Support is needed to improve awareness of their rights in such process, and to proactively support women to claim their rights. Some sources claim that women’s land tenure rights have been weakened by the revised Land Law (2019) as a paragraph on dual names (wife and husband) on land titles has been removed from the law⁹¹. Yet, by law women and men enjoy equal access to agricultural and forest land but customary practices tend to override these. Communal or village ownership of land is recognized by the Land Law (2019) and is a common form of land ownership in Laos. How a village manages its communal ownership strongly depends on the ethnic group’s

⁹⁰ FAO. 2018. FAO: Country Gender Assessment of Agriculture and the Rural Sector in Lao People’s Democratic Republic, , p. 24f. Available online: <https://www.fao.org/3/ca0154en/CA0154EN.pdf>.

⁹¹ LIWG 2020, Women and Land Rights in Lao PDR: Rural Transformation and a dream of secure tenure. Available online: https://data.opendatacommons.org/dataset/550ba9aa-79aa-4f80-ba41-8af35d322e6f/resource/22030fa3-66b7-4e9b-8f4e-fd44dd16aca4/download/women-and-land-right_29jan_eng.pdf.

customs. In the matrilineal Lao-Tai (Tai-Kadai language group) villages, inheritance customs follow the female lineage. Daughters and sons are allowed to inherit their agricultural lands, with the decision being left up to the parents. Among most ethnic minority groups, such as the Hmong-Mien and the Khmou (Mon-Khmer), the pattern of agricultural land ownership is patrilineal. The family name and property are transmitted from father to son⁹².

However, irrespective of matrilineal or patrilineal heritage systems, women generally have experienced a loss of access to land due to economic developments in the country. This includes policies promoting monoculture farming and transfer of land to investors, reducing traditional subsistence agriculture and leading to food insecurity and a de-feminization of agriculture.⁹³

Traditional gender roles and expectations of ethnic women and girls make their lives difficult with long working hours in both home and fields. Some of the changes in their livelihoods that have come with restrictions on land use and village resettlement have made their lives even more difficult. When shifting agriculture is reduced to only a three-year rotation, women's work greatly increases because of heavy weed pressure (women and girls are generally tasked with weeding). If female labor is not enough to keep up with weed pressure, the next step might well be herbicide use. Agriculture extension advice is most often provided to the "farmer" (assumed to be a male decision-maker). The use of pesticides and fertilizer in Lao rural communities is increasing. The 2011 Agricultural Census indicated that women have a slightly higher use than men have. One reason for this might be that pesticides and chemical fertilizer reduces the workload of women by decreasing the time needed for tasks traditionally performed by women, such as weeding. However, FAO concludes that *"women and children are particularly vulnerable to the health effects of pesticides and chemicals, as women are frequently the ones spreading them in fields, often with their children on their backs"*.⁹⁴

A crucial gender issue is communication – women's literacy among ethnic groups is generally lower, or even much lower, than men's as Table 13 and Table 14 demonstrate.⁹⁵ For instance, Akha women and girls are among those with the least access to education in all of Lao PDR. There are many gender-related reasons for lower women's literacy rates, starting with early marriage and pregnancy, cultural barriers related to female mobility, and societal expectations that girls'/women's livelihoods will be farm-based. Illiterate women will have had much less exposure to schooling, less exposure to the Lao language, will have less knowledge of their rights, and be unable to exert themselves when Lao is spoken. It may be that they understand the language but are hesitant to express themselves in Lao in public. Lao PDR's 5th National Human Development Report (2017) notes that while significant progress has been made in closing this

⁹² Lao Women's Union, 2018. Gender Profile, Lao PDR.

⁹³ LIWG 2020, Women and Land Rights in Lao PDR: Rural Transformation and a dream of secure tenure. Available online: https://data.opendevelopmentmekong.net/en/dataset/550ba9aa-79aa-4f80-ba41-8af35d322e6f/resource/22030fa3-66b7-4e9b-8f4e-fd44dd16aca4/download/women-and-land-right_29jan_eng.pdf.

⁹⁴ FAO: Country Gender Assessment of Agriculture and the Rural Sector in Lao People's Democratic Republic, 2018, p. 13. Available online: <https://www.fao.org/3/ca0154en/CA0154EN.pdf>.

⁹⁵ The Lao PDR Population Census 2015 provides literacy data disaggregated separately by both province and ethnic group.

gap, that illiterate women above the age of 25-30 are not expected to acquire literacy, as there are relatively few avenues for adults to do so, particularly in rural areas.⁹⁶

This has implications for communication methods with local people. Written materials will not necessarily be understood well, nor would abstract concepts related to climate change. Moreover, some of the conceptual materials may not translate well from English to Lao or to other local languages. At the same time, however, illiteracy should never be equated with “backwardness” or “lack of development.” Many of the ethnic groups have preliterate languages, meaning strong oral traditions and extraordinary abilities to “read landscapes.”

Table 13. Women’s and Men’s Literacy Rates by Province in Rural Areas in %

	Rural With Road		Rural Without Road	
	Men	Women	Men	Women
Luang Namtha	68.6	45.2	65.1	38.9
Oudomxay	81	55.2	75.4	49.5
Bokeo	75.9	53.2	72.5	43.8
Luang Prabang	85.9	70.2	84.2	67.1
Houaphan	88.7	72.8	86.3	66.1
Sayabouri	93.6	87.1	94.1	84.4

Table Notes: Source is Population Census Report, Table P5.1. The much higher literacy rates in XBY reflect also the higher percentage of Lao-Tai native speakers in the province.

Table 14. Women’s and Men’s Literacy Rates by Ethnic Group in %

Selection of Ethnic Groups	Men	Women
Lao	95.8	90.8
Tai	94.4	84.7
Khmu	88.1	68.9
Hmong	81.8	58.4
Lamed	80.8	48.4
Akha	48.7	23.6
Lahu	32.9	15.6

Table Notes: Source is Population Census Report, Table P5.3. Includes urban and rural populations in all parts of the country. Table P5.3 includes the 49 “officially recognized” ethnic groups, of which a selection is presented here.

Considering the prevalent meeting culture in Lao PDR, meetings dominated by male participants may prevent women from speaking up.⁹⁷ This is partly because of traditional gender roles in dealing with outsiders and partly because the mostly male officials coming to conduct such meetings are also “gender blind,” and do not know how to facilitate women’s participation beyond having the village headman call them to attend. The result is often gender tokenism,

⁹⁶ UNDP (2017) National Human Development Report, Graduation from Least Developed Country Status - http://www.la.undp.org/content/lao_pdr/en/home/library/human_development/the-5th-national-human-development-report.html.

⁹⁷ Personal observations of many meetings from village to national level.

whereby the LWU representative is invited to be there “to ensure that gender aspects are effectively considered,” although this may be far from the truth.⁹⁸ It is also true to say, however, that attendance at a large meeting – whether by women or men – does not equate “consultation,” as the larger the number in attendance, the fewer who will actively participate.

The reported consultations for the PRAPs show that women were underrepresented in comparison with men (**Table 15**). Presumably, this is mostly owed to underrepresentation of women in leadership positions including in public and private life. The Government, supported by development partners including GIZ, consulted hundreds of people in the six provinces (unfortunately the documentation did not include disaggregation by ethnic groups). Women were invited to the consultation meetings, and a number of village consultations included women focus group discussions.

Table 15. PRAP Meeting Participation in the ER Programme Area by Gender

Province	Provinces		Districts		Village Clusters	
	Female	Male	Female	Male	Female	Male
LNT	2	24	21	134	17	130
ODX	2	26	20	197	39	244
BKO	1	12	20	96	27	151
LPB	17	153	26	299	56	347
HPN	23	182	61	301	67	321
XBY	8	85	32	324	74	433
Total	53	482	180	1351	280	1626

Table Notes: These data come from the consultation tables provided in each of the PRAP reports. The differences in male – female participation are stark. Even at cluster level, women’s overall participation amounted to only 17%. There were a few meetings, not at cluster level, where no women were in attendance.

⁹⁸ There are a number of reasons for this, relating, among others, to gender relations in the particular ethnic group and the reasons why a particular woman is the designated head of the LWU in the village. Sometimes it is related to Lao language skills rather than the woman’s “seniority,” in turn meaning a young woman who cannot speak up in front of elder males.



Figure 7: Photo taken at a programme community meeting in ODX.

Notes: Many women attended, but their participation was low. Participants at the back with small children can hardly hear the proceedings or read the posters. (Photo: Gebert)

Given the challenges in ensuring the effective participation of women, additional consultations were conducted with a targeted focus on gender to inform the gender assessment and action plan. For these gender-focused consultations, 148 people (79 men [53%], 68 women [47%]) were consulted January 16-21, 2019. Participants included men and women from diverse ethnic groups, including Lao, Tai, Khmu, Hmong, Akha, Lanten (sub-group of Lu-mien). Stakeholder consultations focused on two core elements: aiding the understanding of gendered drivers of change and discussing the planned measures with local implementing partners and beneficiaries from a gender perspective.

Gender-based violence

Violence against women is a reality for women from all ethnic backgrounds in Laos. Research indicates that around 20% of Lao women have been physically and/or sexually abused by a partner or non-partner, and at least 35% of women live in circumstances of emotional violence, with both figures estimated to be much higher since most cases go unreported. Perhaps more jarringly, the majority of women and almost half of all men in Laos believe violence is justified if a woman does not adhere to traditional gender norms and roles, such as leaving the house without permission or burning the food. Traditional gender roles directly influence the village-based justice system, in addition to women's generally weaker access to justice outside the village structures due to illiteracy, lack of Lao language skills and legal knowledge, and lack of means and permission to travel. Lao PDR has one of the highest rates of early marriage in the region as

part of traditional practices, including “bride kidnappings” and child marriages. One-third of women marry before age 18, while one-tenth marry before age 15.

Economically empowering women at local levels can lead to an improvement of their situation but can also bear certain risks that need to be considered. For instance, promoting women to work outside their home could reduce exposure to an abusive spouse, but in turn it may increase the risk of harassment or assault outside the household. As another instance, a study on public work programme in Lao PDR found that “the program was successful in increasing female income, but it did not change women’s experience of gender-based violence”.⁹⁹ Therefore, the project needs to carefully consider local contexts, traditions and gendered roles when designing the interventions.

Gender issues in forestry

The poorer a family is, the more they are dependent on forest resources. Because land allocated by the government is small (1-2 ha), degraded and far from homes, crop production is difficult. Rice shortages and sickness are highest from March to October. In order to survive, men, women, and children collect non-timber products from the surrounding forests for food and some income. Overharvesting and lack of knowledge on sustainable harvesting methods resulted in declining forest productivity and greater demands for labor and time spent gathering and walking further into the forest. Slash-and-burn agriculture also contributes to forest destruction¹⁰⁰.

In the natural resource sector, the main energy source used by both male and female-headed agricultural households was wood, fuel wood and charcoal. The gender inequality between male and female-headed households in the agricultural sector was evidenced by the agricultural land they used, both by the size of the land plots and the number of plots¹⁰¹.

Gender and non-timber forest products

NTFPs play an important role in promoting the livelihood of the rural population and the national economy. About 70% of the total population lives in rural areas, are dependent on upland farming and forest products for their food, cash income, and livelihood. They use NTFPs for their daily subsistence. They also play an important role in food security and are perceived by the Lao government as an important strategy in poverty eradication¹⁰².

Women’s active roles in harvesting and use, but they often do not have direct control of the income derived from commercial NTFPs, and therefore may not directly benefit from increased commercialization. The general pattern is that women are being displaced by men when new labour-saving technologies for NTFP processing are introduced. Women do most of the farm

⁹⁹ Perova, Elizaveta; Johnson, Erik; Mannava, Aneesh; Reynolds, Sarah; Teman, Alana. 2021. Public Work Programs and Gender-Based Violence : Evidence from Lao PDR. Policy Research Working Paper; No. 9691. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/35728> License: CC BY 3.0 IGO.

¹⁰⁰ Care international and European Union, 2016. Gender Profile of Natural Resources Sector in Lao PDR

¹⁰¹ Care international and European Union, 2016. Gender Profile of Natural Resources Sector in Lao PDR

¹⁰² Care international and European Union, 2016. Gender Profile of Natural Resources Sector in Lao PDR.

work (planting, weeding and harvesting crops), tend small livestock and collect NTFPs (men occasionally hunt wild animals in some villages). Hard work is associated with women's virtue, reinforced by the cultural norms that good women are strong, dutiful and do not complain.

Gender in biodiversity

The National Biodiversity Strategy and Action Plan (NBSAP) aims to protect biodiversity resources and to ensure their sustainable use of natural resources. Lao PDR is a country rich in biodiversity, including flowering plants, reptiles and amphibians, birds, bats and large mammals. In the area of forestry, for instance, some non-timber forestry products (NTFP) such as animals, bamboo and rattan shoots, fruits, greens, honey, or Kham grass are sold in local markets and some are traded internationally. Additionally, non-wood forest products, including edible insects.

Gender and biodiversity have strong connections, especially when it comes to biodiversity conservation and sustainable development. To conserve biodiversity, we need to understand and expose gender-differentiated biodiversity practices, gendered knowledge acquisition, and usage. Integrating gender dimensions generate superior results. Gender considerations are not solely a women's issue; instead, this outlook could yield advantages for whole communities and benefit both sexes.

Gender and Climate change

Disaster management has worked as a critical entry-point for challenges related to environmental sustainability with a high degree of acceptance. Women and men experience the impacts of floods and droughts differently. Given women's roles in the home, their responsibility for family care and the nature of their employment, they are more likely to bear the brunt of the impacts of floods and droughts. Different studies show that are disproportionately impacted by climate-induced natural disasters, which in many cases come along with increasing rates of violence against women and girls. Mortality rates of women are often higher than those of men. According to Thurston et al, this is often rooted in "biological differences, gender discriminatory practices in relief efforts, lower access to information and resources, care responsibilities and gendered poverty". Natural disasters at different scale create risk factors that, in turn, increase the risk of gender-based violence. These factors are, for instance, trauma and mental health issues or substance abuse, but also social impacts such as the breakdown of family structure or loss of housing and livelihoods. Moreover, collapsing or lacking law enforcement might worsen the situation. Natural disasters increase the risk of women and girls to become a victim of Sexual Exploitation, Sexual Abuse, and Sexual Harassment (SEAH). Cases of violence against women and girls after natural disasters include rape/sexual assault by a non-partner or intimate partner, but also female genital mutilation, honor killings and the trafficking of women¹⁰³.

¹⁰³ Thurston, et al (2020): Natural hazards, disasters and violence against women and girls: a global mixed-methods systematic review. Available online: <https://gh.bmj.com/content/6/4/e004377> or Virginie Le Masson (2022): Disasters, Climate Change, and Violence Against Women and Girls. Available online: <https://doi.org/10.1093/acrefore/9780199389407.013.393>.

While environmental impact assessment (EIA) provisions are gender sensitive, most other laws and decree are gender blind. They do not include mandates or mechanisms for special measures to achieve substantive gender equality. The Climate Change Decree (2019) focuses on technical aspects of vulnerability, such as hazards, and the impacts of climate change on defined vulnerable groups. This provides an avenue for addressing differential social dimensions of climate change, such as risks and coping capacities of men and women. It also promotes a participatory model of action on climate change, including the participation of women's organizations in risk assessments and adaptation planning and implementation. The environmental burden of disease due to climate change already constitutes 26 percent of the disease burden of Lao PDR. A 2018 dam collapse in Lao PDR underscored the impact of floods on communities.¹⁰⁴ Among the rural population, an estimated 14.2 percent suffer from the disaster-related food insecurity, and 70 percent of the indebted households are forced to increase their loans to secure food and agricultural production. For women are more likely than men loss of livelihoods can lead to domestic migration and increase the risk of being trafficked.

Lao women play key roles in both climate change mitigation and adaptation strategies, but these are insufficiently recognized or supported. Adaptation to climate change is dependent on issues such as wealth, technological power, access to information, all of which are mediated by gender dynamics in the household, economy and society. Lao women's traditional responsibilities in the household and as stewards of natural resources, also position them well to develop strategies for adapting to changing environmental realities. For example, women can have an important impact on the transition to using of clean fuels for household consumption (benefiting both family health and the environment) and in maintaining their traditional roles in the protection of biodiversity – particularly in fragile upland areas and in national protected areas.¹⁰⁵ Climate change has also contributed to natural food deficiency in the forests surrounding remote villages.

The Lao National Adaptation Program of Action (NAPA)¹⁰⁶ does not explicitly address gender challenges or opportunities in relation to climate change. In 2009, NAPA was released and includes a list of 45 adaptation priority projects in the areas of water resources, forestry, agriculture and public health, but it does not include any analysis, strategy or interventions for addressing gender issues.

Gender-specific experiences and gender equity is relevant not only related to climate change, but also with respect to general access to natural resources like water and land. Women benefitted from water harvesting weirs, which eliminated the need for women to travel long hours to fetch water, especially during the dry season when water supply becomes particularly unreli-

¹⁰⁴ UNICEF. 2019. The Situation of Children and Women: Lao People's Democratic Republic. Vientiane, December 2019.

¹⁰⁵ Lao Women's Union, 2018. Lao PDR Gender Profile

¹⁰⁶ National Adaptation Programme of Action to Climate Change (2009). Available online : https://www.adaptation-undp.org/sites/default/files/downloads/laos_pdr_napa.pdf

able for meeting household needs. A significant number of poor farmers, including women, directly benefitted in yields of local varieties - suitable for drought and/or flood conditions - experienced at all project sites¹⁰⁷.

Majority of the people use water from irrigation schemes for wet rice cultivation, while some other still use rainwater for wet rice cultivation. The villagers rotate upland rice practice every year from one of the two or three plots per household. Besides rice, industrial crops are included maize, job's tear, corn, cucumber, and vegetables are cultivated. The climate change, mostly flood and draught, impacts related to agricultural production is different by types of farm practice, and farming practice change of women and men. Most impacts are reduced agriculture production, especially of rice production. Women are more dependent on NTFPs collection, grow more vegetables, and poultry raising to support their families, while the men are more dependent on selling their labor as construction worker in community and migration out to find the job¹⁰⁸.

5.3.3.2 Triggered policies and standards

GIZ's and GCF's Gender Policies are triggered by default.

5.3.3.3 Risk considerations and potential avoidance / mitigation measures

GIZ and GCF Gender Policies do not require a risk classification.

The GCF programme conducted a Gender Assessment and Gender Action Plan to inform programme design and ensure that key gender considerations are mainstreamed throughout the programme proposal. The Gender Assessment and Action Plan has been updated in preparation of Project 2 (Annex 8a and 8b to the FP). The Gender Assessment examined the social, economic, environmental and political factors underlying climate change-exacerbated gender inequality and other gender-issues related to the programme. It further explored how they might benefit from programme activities, and how gender benefits can be strengthened, and risks safeguarded within the programme. It resulted in the development of a gender-responsive M&E framework for the programme, and a Gender Action Plan. The project's gender action plan contains specific actions that will be implemented along with the project's activities.

While there are several gender-related challenges present the project region, the Gender Assessment noted the project has strong leverage to promote female leadership and participation in the planned activities and stakeholder processes from the national to the local level. Through project implementation (incl. the gender action plan), and in the design of the ESMP, it will be necessary to ensure that women are given the opportunity to engage in meaningful dialogue, and to give inputs as to concerns regarding the effects REDD+ activities may have on their livelihoods. The strengthened focus on climate change adaptation within project 2 is expected to generate a particularly positive gender-impact, given women are disproportionately vulnerable

¹⁰⁷ Lao Women's Union, 2018. Lao PDR Gender Profile

¹⁰⁸ Social Development Alliance Association, 2018. Research on Indigenous Women's Voice and Climate Adaptation

to climate change. The project should see women as a change agent, and key actor in strengthening resilience from planning to implementation. A focus should be on reducing women's exposure and vulnerability to climate change.

Info Box 3: Gender in GCF Project 1

Gender considerations of Project 1 are mainly based on the Gender Action Plan (GAP) and have been mainstreamed in the project implementation, data collection and monitoring at all steps of the project. Guided by the Safeguards Consultant Team, gender actions are fully in place.

An ESMP checklist has been successfully introduced and – amongst others – actively promotes the consideration of gender in village-level implementation. Project Owners, as the main implementors of Project 1, are up to now fairly gender balanced, which however is expected to skew more towards men with increasingly technical types of activities and with the choice of implementers being out of control of the Safeguards Team.

Overall participation data of the project shows 51% of female participants in all community meetings over a total 468 community meetings (disaggregated by activity: FPIC 54% out of 16,328 participants, PLUP 46%, PSAP 47%, VFAG 47%). In addition, for specific activities such as PLUP, there are gender-segregated groups where men and women raise their views. These focus groups enable women to raise their opinions freely in a comfortable environment.

The **Village Land and Forestry Management Committees (VFMC)**, which will help design and implement the Village Forest Management Plan, in the first 21 villages largely fell short of the aimed 30% female members, which is currently being addressed. Implementers have already been reminded of the importance of having enough female VFMC members. A quick review of the newly inputted data clearly shows that this trend is being corrected and recently established VFMCs include more women.

Activities within the **Village Forest Management** give income generating opportunities to men and women in the framework of the cash-for-work modality, channeled as grants through the Village Forestry and Agriculture Grants (VFAGs). Overall, VFAG specific activities were attended by 13,811 people, 47% of them women. The acceptance of **women-led patrolling groups** is high (63%) and 10 out of 16 villages have actually selected a woman as head. Business Partner Screening processes and forms are developed, include gender aspects and will soon be implemented. In **Promotion of Sustainable and Deforestation-free Agricultural Practices and Value Chains (PSAP)**, the emphasis of supporting female headed households has so far been successfully implemented.

The Lao Women's Union (LWU) is mandated to mainstream gender into all project's activities. LWU is a member of the Steering Committee and has up to now participated in 87% of 634 village level activities.

5.3.4 Forest land-use

5.3.4.1 Baseline situation

The Forestry Law (No.08/NA, 2019), revised from the previous Forestry Law (No.06/NA, 2007), determines the basic principles, regulations, and measures for the use of forest and forestland.

This includes promoting tree plantations, regenerating and increasing forest resources, ensuring protection of soil, water sources, and biodiversity, environmental protection, and sustainable economic development. The Law defines a number of terms with relevance to the programme (MAF, 2021a):

- Three categories of forest: Protection Forests, Conservation Forests and Production Forests
- Village forest area is defined as area categorized as forest that is under village management. Village forest management planning measures are prescribed in specific regulations.
- Forest regeneration through supplementary planting is defined as regeneration plus the option to plant trees in areas where there is little possibility of natural regeneration.
- The Forest and Forestland Management Organization, and local administration authorities and involved sectors, are responsible for formulating short, medium and long-term plans for forest regeneration and tree plantations in their local area.
- Utilization of forests, timber and NTFPs is classified into 4 categories as follows: i) Utilization of forests, timber, and NTFPs for public benefit; ii) Utilization of forests, timber, and NTFPs for household use; iii) Customary utilization of forests, timber, and NTFPs; and iv) Utilization of forests, timber, and NTFPs for business purposes
- A lease or concession of forestland for activities based on forest ecosystem services is allowed only in areas allocated by the Government
- The Government encourages individuals, legal entities and organizations to conduct trade in forest carbon under international mechanisms, based on agreements with the Agriculture and Forestry sector and the granting of a business license by relevant sectors.
- Natural forest and forestland is “*the property of the Lao nation community*,” which is managed by the state with the participation of the people (MAF, 2021a).

Forests and trees planted by individuals and legal entities, recognized by the Forest and Forestland Management Organization, duly become the property of the individuals and entities. Article 9 of the Forestry Law further states that the state has responsibility for relationships and cooperation with foreign countries and organizations on forest and forest land (MAF, 2021a).

Within the Forestry Law and Land Law there are limited practical guidelines for implementation. There are many implementing decrees and regulations underneath the Forestry law – this makes it more complex to understand and means that the regulations need to be very clear and specific (implementable for local authorities to follow). It also means extensive formulating and updating of regulations is needed following revisions to the Law. Regulations for sustainable land use activities are at times complex, contradictory, inconsistent and/or unclear.

Support is needed to continue to address such gaps and inconsistencies in the regulatory framework to create an enabling environment that facilitates and encourages stakeholders to adopt sustainable forest management, forest landscape restoration and village forestry – all key activities aligned with Lao PDR’s REDD+ objectives.

Forest categories and overlapping regulations

The forest categories do not indicate the current land cover but are instead administrative categories determining management and land use regulations. The three forest categories – although only covered by forest between 47% (National Protection Forests) and 63% (National Protected Areas)¹⁰⁹ – account for more than 70% of the total land area of Lao PDR.¹¹⁰ Hence, it’s no surprise that more than 3000 villages are located inside the three forest categories. The Prime Minister’s Decree 88 (2008) on the Implementation of the Land Law currently forbids any form of land titling inside protection and conservation forests. However, the Department of Land in collaboration with development partners is implementing land registration and land titling of private land even inside such forest categories.¹¹¹

However, several areas mapped, e.g., as protection forests, are being used for agricultural production and even include major town areas and as such are already under alternative land use. In 2014 the National Assembly has instructed the responsible ministries to re-survey and re-delineate the three forest categories to reflect the actual situations on the ground.¹¹² A sub-project under the World Bank funded LENS 2 project managed by the Environmental Protection Fund (EPF) aimed at reviewing and re-delineation of the three forest categories. A team of the Department of Forest Resource Management (DFRM) under the Ministry of Natural Resources and Environment (MoNRE) signed a project document. However, after initial fieldwork the DFRM informed the EPF to not being able to consider any re-delineation and in late 2017 the EPF requested the sub-project to be cancelled.¹¹³ At that time the responsibilities over forest were split amongst the two ministries. MAF was responsible for National Production Forests and MoNRE was responsible for Conservation and Protection Forests. However, with Prime Minister Decree 57 (2016) on the reorganization of the forest sector all responsibilities for forests had been returned to MAF and DFRM had been dissolved into DOF with MAF decision No. 3822 (2017).

There are forests outside of the three forest categories (i.e. **Unclassified Forest Areas**), which are considered to be mostly under village management, however, often without clear management systems.¹¹⁴ These areas include forests, woodlots and industrial tree plantations, among others and agricultural land. The ER-PD¹¹⁵ notes “It is commonly understood that, due to lack of

¹⁰⁹ Ministry of Agriculture and Forestry (MAF). 2015. Forest Cover Assessment 2015, Department of Forestry

¹¹⁰ FCPF 2014. Forest Governance Assessment for REDD+ implementation in Lao PDR through application of the PROFOR forest governance tool. Forest Carbon Partnership Facility.

¹¹¹ Rock, F., Sisoulath, V., Metzger, C., Chanhthaneun, S., Phayalath, X., and J. Derbidge. 2015. Systematic Land Registration in Rural Areas of Lao PDR Concept Document for countrywide application. GIZ.

¹¹² National Assembly Cabinet Office (NACO). 2014. Notice 273 on the review/consideration, for endorsement, of the three forestry categories (Protection Forest, Conservation Forest and Production Forest) (unofficial translation). 21 August. Lao National Assembly Cabinet Office, Vientiane.

¹¹³ World Bank. 2018. <http://documents.worldbank.org/curated/en/552371518096748972/pdf/IL-FRESDATA-EXT-P128393-02-14-2018-1518597749974.pdf>.

¹¹⁴ Smith and Alounsavath 2015.

¹¹⁵ ERPD 2018, p.30.

operational management systems and proximity to villages, forests outside of three forest categories are more prone to disturbance (e.g. shifting cultivation, agricultural expansion, infrastructure, mining road), and unsustainable timber extraction.”

Info Box 4. Village Use Forests

Village use forests are forests located within the village area, which the Government has allocated to the village to manage, preserve and use in a sustainable manner in accordance with the legal and regulatory framework. Village Use Forests may be located in all three categories of forest under the Forestry Law: Production, Protection and Conservation Forest. Forest and forestland at the village level are approved by the district governor based on a proposal from DONRE and DAFO. The utilization of forestland at the village level has to be undertaken according to a village forest management plan for the entire village, for household and individual uses; the plan has to be endorsed by the District Governor based on the proposal by DONRE and DAFO.¹¹⁶

Within village forests, the Government encourages individuals, households, legal entities and organizations to carry out the preservation and development of all forest types, in order to regenerate forest, and to plant trees and NTFPs in degraded and badly degraded forestland and barren forestland areas to become rich forests for environment and biodiversity protection in order to enhance forest carbon stock and ecosystem services, providing that there is benefit sharing in a comprehensive and fair manner.¹¹⁷

Forest cover and trends

Forests cover over 7.27 million hectares in the programme area). The majority of forests within the programme area (73%) are included within the three official forest categories (Table 16). However, only 53% of the total land area is under actual forest while 36% of total forest land use under potential forest land (which refers largely to the regenerative vegetation shifting cultivation landscape).

Table 16. Forest and land classification in the programme area in 2015

Land/ Forest classification	6 Northern Provinces
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¹¹⁶ A list of permitted activities for village forestry is provided in Annex 9 of the VFMP guidelines (CliPAD/GIZ 2016). In village forests, the following are examples of permitted activities: Forest patrolling for protection against encroachment ; fire prevention (e.g. digging fire breaks, ploughing firebreaks, controlled burning of fire breaks, etc.); building check dams or small water reservoirs to have water for firefighting and water for watering planted tree seedlings; identification and marking of trees to be left as mother trees for seed production; selective cutting (in small quantities in different diameter classes in accordance with the sustainable forest model to improve forest structure and provide timber and fuelwood for villages); close parts of forest temporarily and protect young regeneration trees, fencing off of some parts to encourage regeneration; conduct weeding around valuable tree seedlings; marking of trees to be cut every year; enrichment planting; promotion of natural regeneration (e.g. in case of fire damage, shifting cultivation, excessive degradation/ tree cutting(direct seeding in barren highly degraded areas; NTFP management and development; tree planting on national tree planting day).

¹¹⁷ Draft Forest Law 2015.

	Production Forest (ha)	Conservation Forest (ha)	Protection Forest (ha)	Other Area (ha)	Total Area (ha)
Evergreen (highest carbon stock forest) (EG)	84,614	193,686	144,203	58,915	481,417
Current Forest (natural forest with high carbon stock) (MD, DD, MCB, CF)	578,072	579,055	1,731,243	928,868	3,817,238
Forest Plantation	154	3	2,134	6,435	8,726¹¹⁸
Potential Forest (Regenerating vegetation RV)	332,308	209,772	1,464,500	959,957	2,966,537
Agriculture Land	51,367	16,558	189,420	397,120	654,465
Other Land	8,809	18,908	85,384	82,592	195,693
Total land	1,055,324	1,017,983	3,616,882	2,433,887	8,124,076

Source: Based on DOF/MAF dataset used for the development of Forest Reference Level (2005-2015) (FIPD 2018)

With more than 50% of the total programme area located in all four forest categories (production forests, conservation forests, protection forests and village forests), programme interventions are planned in all forest categories.

Household utilization of forest products

The use of timber and non-timber forest products by rural households in the programme region is common. Rural families depend on firewood for cooking and, in certain areas, for heating. To a limited extent local craftspeople such as carpenters, carvers and blacksmiths are also wood-dependent. Wood also finds other uses in rural areas such as for fence posts, tools, sheds, rice barns, homes, furnishings, ritual constructions such as village gates and altars, coffins and funeral pyres. The ERPD (p. 50) mentions that a family may use over two tons of wood annually.

The Population and Housing Census of 2015 shows the high extent to which local communities in the six northern provinces continue to rely on firewood for cooking;¹¹⁹ another indicative purpose shown for wood use is as wall, flooring and roofing material for homes. Firewood dependence among rural households in the six provinces ranges from “only” 89.3% in Sayabouri to a high of 97.7% in rural Houaphan. The other provinces’ rural households all have 95 – 97% firewood use for cooking. Sayabouri is the only province of the six where charcoal use has caught on among rural households at 7.5%. Most rural farming families collect wood from forests and fallow land. Firewood is also collected from trees felled during the land preparation process for swidden fields in the uplands/hills.¹²⁰ Families in rural areas often buy firewood from farming

¹¹⁸ In reality the figure is much higher and higher than 120,000 ha. The remote sensing analysis had limitation in identifying forest plantations.

¹¹⁹ The Census does not provide information on the use of fuel efficient cooking stoves.

¹²⁰ Similar findings were found in a drivers study conducted by WCS (2015) for Houaphan province that also found that fuelwood is primarily a byproduct of clearing for swidden rice or maize production, and thus firewood use in itself is not driving deforestation and forest degradation.

families. The collection and use of firewood is primarily a task for women and girls, although collection may be a shared task with men at times.¹²¹

In upland areas in particular there is still greater reliance on NTFPs to supplement incomes and/or subsistence, but this also varies greatly with location and quality of forest. Commonly harvested NTFPs in the programme area include broom grass, paper mulberry, wild palm fruit (*mak thao*), rattan, bamboo, wild cardamom, mushrooms, incense bark, honey or medicinal plants, and roots of various types, among others. NTFP collection is often not specific to different ethnic groups, although gender aspects may vary depending on the NTFP. Although little detailed information is available, the amount and variety of NTFPs has undoubtedly reduced. This has much to do with the conversion of primary forest, and bush fallows to either commercial tree plantations (particularly rubber) or annual commercial crops, such as maize. The overharvesting of more valuable NTFPs has also contributed to the decline in NTFPs.

Deforestation and forest degradation in the programme area (2005 - 2015)

The programme area has seen an increase in deforestation and forest degradation during the period from 2005 to 2015. The following Table provides an overview of emissions and removals from various sources and sinks from 2005 to 2015. Forest degradation is the largest emissions source, followed by deforestation.

Table 17. Average Annual Historical Emissions and Removals over the Reference Period

Source/Sink	Emissions(+)/ Removals(-)		
	2005-2010 (tCO ₂)	2010-2015 (tCO ₂)	Annual average 2005-2015 (tCO ₂ /year)
Deforestation	19,561,481	17,924,974	3,748,645
Forest Degradation	38,286,544	29,201,727	6,748,827
Changes among REDD+ strata	33,466,780	25,988,551	5,945,533
Logging	4,819,764	3,213,176	803,294
Reforestation	-8,731,889	-5,453,126	-1,418,501
Restoration	-2,537,961	-2,921,082	-545,904
Total Emission	57,848,024	47,126,701	10,497,473
Total Removals	-11,269,849	-8,374,208	-1,964,406

Source: ER-PD Lao PDR, 2018, page 135

Net deforestation from 2005 - 2015 amounted to 197,799 ha, of which the majority (161,581 ha; 82%) was deforested from low-carbon forest stock (Regenerating Vegetation; 64 tCO₂/ha) to non-forest land, which is mainly agricultural land.¹²² This deforestation is largely linked to the

¹²¹ Note: PRAP consultations included questions on firewood harvesting as a driver, however the consultations determined that it was not considered a major driver of deforestation or forest degradation as it is primarily a by-product of agricultural clearing. PRAP consultations also looked at logging for personal and village construction, however it was also not considered a major driver of deforestation at scale.

¹²² Deforestation and forest degradation were analyzed by identifying land cover change using the forest-type maps for 2000, 2005, 2010 and 2015. The mapping is based on high-resolution remote sensing with ground-truthing. The 2010 map was used as the base map to detect changes in the other years. Maps and key information on the assessment can be found in the activity data report, prepared for the ERPD.¹²²

expansion of agricultural land and shifting cultivation dynamics in the programme area and represents relatively small average carbon stock loss compared to forest degradation.

Forest degradation amounted to 116,034 ha over the period 2005 – 2015. About 115,249 ha (99%) was converted from mixed deciduous high-carbon-stock forest ($> 320 \text{ tCO}_2/\text{ha}$) to regenerating vegetation forest (average carbon stock of $64 \text{ tCO}_2/\text{ha}$). This land use transition mainly refers to shifting cultivation and agricultural development activities and is the largest GHG emission source in the programme area.

Forest restoration amounted to 51,669 ha, of which the majority of the land was converted from Regenerating Vegetation to mixed deciduous high-carbon-stock forest ($> 320 \text{ tCO}_2/\text{ha}$). This reflects the shifting cultivation dynamic of forest degradation and natural regeneration.

Reforestation of 162,754 ha was observed, which is linked either to agribusiness plantation (such as rubber) or agricultural land regeneration towards regenerated forest land use (RV).

Drivers of deforestation and forest degradation

The drivers of deforestation and forest degradation were identified during the ER Programme preparation using an approach that combined spatial assessments, with stakeholder consultations at the national, provincial, district, *kumban* (village cluster) and village level, and the revision of additional literature (agricultural statistics, academic journals, among other publications; a more detailed description is available in the Feasibility Study and ERPD).

The following figure presents the main proximate drivers of deforestation and forest degradation within the programme area (2005 - 2015). Shifting cultivation and agricultural land expansion, together with plantation agriculture development, was responsible for 55% of disturbances greater than 5 ha; road construction was responsible for 12%, selective logging 10% and the establishment of tree plantations (including rubber) 6.7%, among others.¹²³

¹²³ Note: Shifting cultivation as a practice can involve different agricultural crops, there is no clear distinction between what composes a pioneering shifting cultivation plot, versus a plot that has encroached into forests for permanent agricultural purposes. With observation over time, it becomes possible to determine whether that plot is in fact shifting, or permanent. For these reasons, it is important to understand that the drivers of shifting cultivation and permanent agricultural activities need to be viewed together, particularly for addressing deforestation.

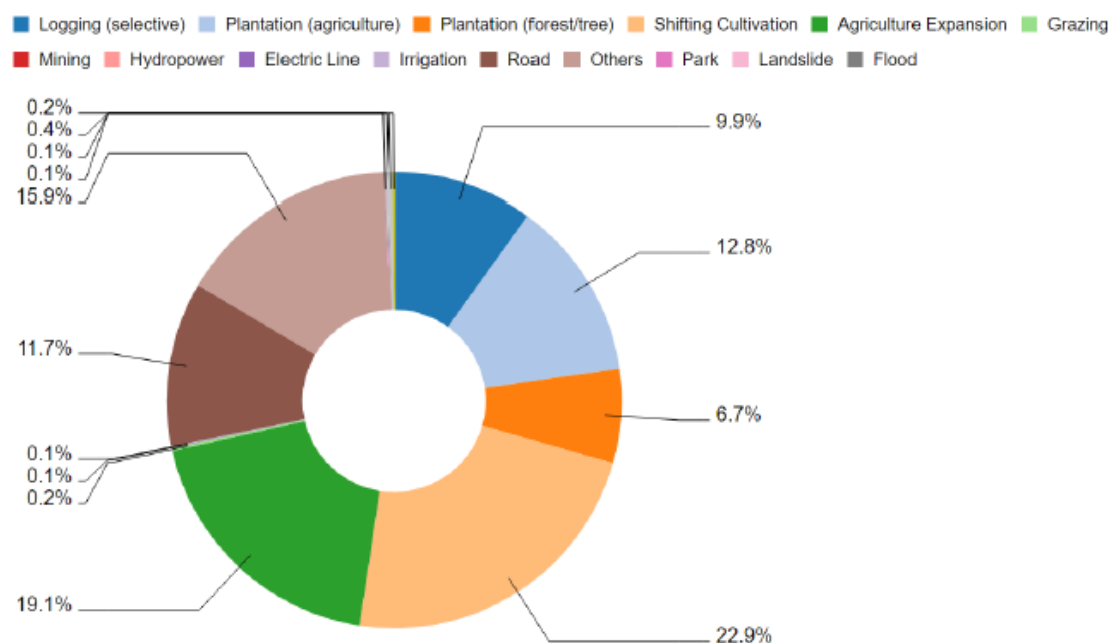


Figure 8: Disturbance by type (disturbances > 5ha) in the programme area (2005-2015)

Note: Forest/ tree plantation includes rubber

Source: REDD+ Readiness Project in Lao PDR 2017 in ERPD 2018, p. 38

The following Table summarizes the results of stakeholder consultations discussing the relative influence of the main drivers of deforestation and forest degradation in each of the target Provinces. Similar results were found within the consultations that validated the findings of the spatial analysis, although it also provided increased insight into sub-regional trends.

Table 18: Drivers of deforestation and forest degradation identified through stakeholder consultations

	BKO	HPN	LNT	LPB	ODX	SAY
Expansion of agricultural land for cash crop cultivation by villagers and/or companies (deforestation)	++	+++	+++	+++	+++	+++
Rubber	+++		+++	++	+++	+
Banana	++				++	
Shifting cultivation and pioneering expanding agriculture for subsistence (deforestation/degradation)	+++	+++	+++	+++	+++	++
Unsustainable and Illegal logging by companies (degradation)	+++	+	++	++	++	++
Infrastructure development (hydropower, mining , road construction) (deforestation)	++	+	+	+	++	+
Forest fires from agricultural practices, shifting cultivation land expansion, hunting (deforestation/ degradation)	++	+	+	+	+	++
Unsustainable and Illegal logging and fuelwood collection by villagers (degradation)	+	+	+	+	+	+

Legend: The importance level of the individual drivers is based on the relative scale of deforestation and forest degradation in the provinces. “+” indicates the level of relative importance per province, “+++” being “relatively high importance” and “+” being “relatively low importance”.³⁸

BKO: Bokeo province, HPN: Houaphan province, LNT: Luang Namtha province, LPB: Luang Prabang province, ODX: Oudomxay province, SAY: Sayaburi province.

Source: ERPD 2018, p. 39

In addition to the above-described proximate (direct) drivers of deforestation and forest degradation, the underlying causes¹²⁴ of such drivers were further analyzed during the development of the ERPD, PRAPs and feasibility study. The following table provides a summary of the proximate/direct drivers, agents and underlying causes identified during stakeholder consultations in the programme area.

¹²⁴ Underlying causes of deforestation and forest degradation take into account demographic, economic, agro-technological, policy and institutional and cultural factors.

Underlying Causes -->		Demographic	Economic		Agro-Technological			Policy & Institutional				Cultural
Direct drivers	Agents	Population Growth & Migration	Demand/ market forces	lack of alternative livelihoods / poverty	Low productivity	Soil/ Land Degradation	Infrastructure development	Inadequate land tenure	Poor governance & law enforcement	Inadequate land use planning	Gov't development policies	Traditional practices
Shifting cultivation ⁷⁵	Villagers	↑	↑	↓	→	↑	↑	↓	→	→	→	→
Cash crop and tree crops (rubber)	Villagers & Companies	↑	↑	↓	↓	↑	↑	↓	→	→	→	
Unsustainable Harvesting of Wood Products	Villagers & Companies Gov't	↑	↑	↓	→	↑	↑	↓	↓	→	↓	→
Mining	Gov't & Companies	↑	↑	→	→	→	↑	→	→	→	→	
Hydropower (incl. village relocation)	Gov't	↑	↑	→	→	→	↑	→	→	→	↑	

Legend:

Current underlying cause and impact of deforestation / degradation		Likely future impact of underlying cause in deforestation & degradation	
High impact	↑	↑	Increasing impact
Medium impact	→	→	Business as usual
Low impact	↓	↓	Decreasing impact

Figure 9: Summary of drivers, agents and underlying causes for the programme area

Source: ERPD 2018, p. 52

For more detailed information on the proximate drivers and underlying causes of deforestation and forest degradation, please refer to the ERPD and Feasibility Study.

Biodiversity

The Lao PDR has signed a number of international environmental agreements and conventions, such as the Convention on Biological Diversity, the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), and the Ramsar Convention on Wetlands. The Lao PDR's National Biodiversity Strategy and Action Plan 2016-2025 (NBSAP) notes that the country is "one of the most biodiversity rich countries in Southeast Asia." Nevertheless, the country is threatened by a loss of biodiversity due to a large range of factors. According to the ER-PD ESMF, these include "hunting (for consumption); habitat loss and degradation resulting from expansion of agriculture and infrastructure; extraction of forest products; and fires [...]. Several mining and tree plantation concessions and hydropower projects overlap with national protected areas, protection forests and other forest types, which are areas of high biodiversity." Further, it is found that "over-exploitation of forest products, the impact of wildlife hunting for commercial wildlife meat and medicinal uses, rather than for subsistence consumption, has had a very negative impact on wildlife populations." Last but not least, Lao biodiversity is put at risk by invasive species, environmental pollution, agro-chemicals (pesticides, herbicides, and fertilizers) and climate change.¹²⁵

¹²⁵ Lao PDR Emission Reduction Programme, ESMF 2018, p. 13ff.

5.3.4.2 Triggered safeguards and policies

The project triggers PS 1 (Assessment and Management of Environmental and Social Risks), where a project level ESMP will be needed. PS 2 (Labor and Working Conditions) was also triggered by the project, as there are occupational health and safety risks associated with forest management activities (e.g. cutting operations). While the project is expected to have primarily positive impacts in terms of biodiversity, there is a low risk of unintentional negative impacts from the promotion of smallholder timber plantations on degraded land triggering PS 6.

Through the implementation of stricter policies, land use plans and improved law enforcement, there is a risk that local people could lose access to customary use/communal lands. There is a trade-off when considering regenerating vegetation as potential forest rather than future cropping land, which may have potentially negative impacts on livelihoods. Thus, as described in Chapter 5.1, the project may also unintentionally contribute to changed, reduced or denied access to land through some of its activities (for example participatory land-use planning and management plans for different land-uses) resulting in unintended negative livelihood impacts and triggering PS 5 “Land Acquisition and Involuntary Resettlement” and GIZ’s safeguard “Human Rights”. This associated risk and avoidance/ mitigation strategies are discussed in detail in Chapter 5.1.3.

5.3.4.3 Risk considerations and potential avoidance/ mitigation measures

The programme will support interventions in production, protection, conservation and village forests. The programme anticipates to generate primarily positive benefits for forest ecosystems and local people, based on participatory land use planning. Nonetheless, unintended negative impacts (UNIs or ES risks) may arise and have to be taken into account. The ES risk is considered medium for PS 1, 2 and 5, and low for PS 6.

Biodiversity (PS 6)

The project’s negative ***impact on biodiversity is assessed as low***. All project activities will be implemented on agricultural land (i.e., that is already under agricultural use) or in forested lands.

Within protection and conservation forests, only native tree species will be promoted if any planting is to occur (based on approved management plans). Natural regeneration has priority over assisted regeneration, but of course it is dependent on specific site conditions. The selection of species will be based on the principle of site-species matching, which ensures that promoted species have suitable characteristics given the environmental and bio-geophysical conditions.

Concerning deforestation risks, the project has potential to improve monitoring of deforestation risks as it supports the development of Provincial Deforestation Monitoring Systems (PDMS) that will speed up the detection of deforestation and improve monitoring and law enforcement. Project 1 supported the revision of standard operating procedures, provided trainings on Provincial Deforestation Monitoring Systems (PDMS), and supported the implementation of PDMS

in 3 provinces (Houaphan, Sayabouri, Luang Prabang). Activities are planned to be continued under Project 2.

The project will support NPA management aiming to raise awareness of the importance of NPAs, while also providing clear mechanisms for local communities to benefit from the sustainable management of NPAs (through voluntary co-management agreements, village forest conservation agreements and supporting village patrols). Project activities in NPAs and national parks will need to closely monitor potential adverse impacts on biodiversity.

Occupational health and safety (OHS) in forestry (PS 2)

A potential risk is occupational health and safety of forest workers. Forestry activities present diverse occupational health and safety risks, including risks associated with terrain and site factors (e.g., slippery or uneven ground, slopes, rock-falls), falling trees or branches, chainsaws (incl. inappropriate use leading to bodily harm, kickbacks, noise, hand-arm vibration), and loading and unloading of wood, among others.¹²⁶

This risk is, however, assessed as low. Staff directly employed by the project will not be involved in cutting operations. Forest workers may work for the GOL or on other contractual arrangements financed indirectly through grant funding from the project in the context of promoted sustainable forest management activities (within Component 3). The type of works may include maintenance cuttings and final harvesting of timber. Official records of accidents of forest workers were not available or obtainable. Consulted partners indicated low numbers of incidents in recent years.

Best practices and occupational health and safety (OHS) guidelines are available for forest workers, and will be applied by the programme:

- FAO (2019) - “Occupational Health and Safety in Forestry Module” for forest workers¹²⁷
- ILO (1998) - “Safety and health in forestry work”

5.3.5 Agriculture

5.3.5.1 Baseline situation

Predominant agricultural production systems in the programme area

The agricultural sector is the primary source of livelihoods for the majority of people in Lao PDR, in 2019 it counted for appx. 60% of the national employment (WB, n.d.). Statistics regarding economic activities fluctuate quite significantly due to the seasonal nature of some jobs and rain patterns in the agricultural sector. Around two-thirds of the population live in rural areas and three out of four households reported to be owners of agricultural land (Lao Statistics Bureau 2015).

¹²⁶ FAO 2019 .

¹²⁷ <http://www.fao.org/sustainable-forest-management/toolbox/modules/occupational-health-and-safety-in-forestry/tools/en/>.

The agricultural sector is characterized by a comparably low productivity, subsistence agriculture and informal or family work with low incomes and poor working conditions. To increase productivity, the development of local MSMEs has been identified a key diversifying factor for the national economy. Access to social protection is often not available and health insurance coverage is low, only accessible in the context of formal employment. The minimum working age is 14 years as per Lao PDR Labor Law (2013). Yet, in rural areas child labor is still an issue with approximately 15 percent of children working.¹²⁸

The Northern Uplands region of Lao PDR is characterized by hilly topography combined with flatland areas.¹²⁹ Of the total 783,000 farm households in the country, roughly 21% live in the Northern uplands. Agricultural land per person in the Northern provinces is on average between 0.32 and 0.38 hectares; the average farm size is between 1 and 2 hectares.¹³⁰

The main crops cultivated in Lao PDR are rice, maize for animal feed, coffee, tea, rubber, vegetables, starchy roots, and beans. There is also livestock farming with cattle, buffalo, pigs and aquaculture, which are commodities that have expanded recently (Government of Laos 2015). In the six Northern Uplands provinces, rain-fed (lowland and upland) paddy rice, maize and vegetables are among the key agricultural crops grown (Figure below). Agricultural production systems in the programme area are closely linked to the terrain. Sayabouri, with more flat terrain compared to the other provinces, has substantially more commercial agriculture and paddy rice. In other provinces that are hillier/ more mountainous, upland production systems are predominant. There is increased competition for commercial agricultural lands that contributes to trends where shifting subsistence agriculture (upland rice, vegetables, etc.) and certain cash crops (e.g. maize, Job's tear and cassava) to less suitable upland areas. For more detailed information on the six project provinces, see the Feasibility Study prepared for Project 2.

¹²⁸ Lao PDRs Voluntary National Review on the implementation of the 2030 Agenda für Sustainable Development. 2018. Available online: https://laopdr.un.org/sites/default/files/2019-08/2018%20VNR_0.pdf.

¹²⁹ Onphanhdala et al. 2016.

¹³⁰ Agricultural Census Office 2012.

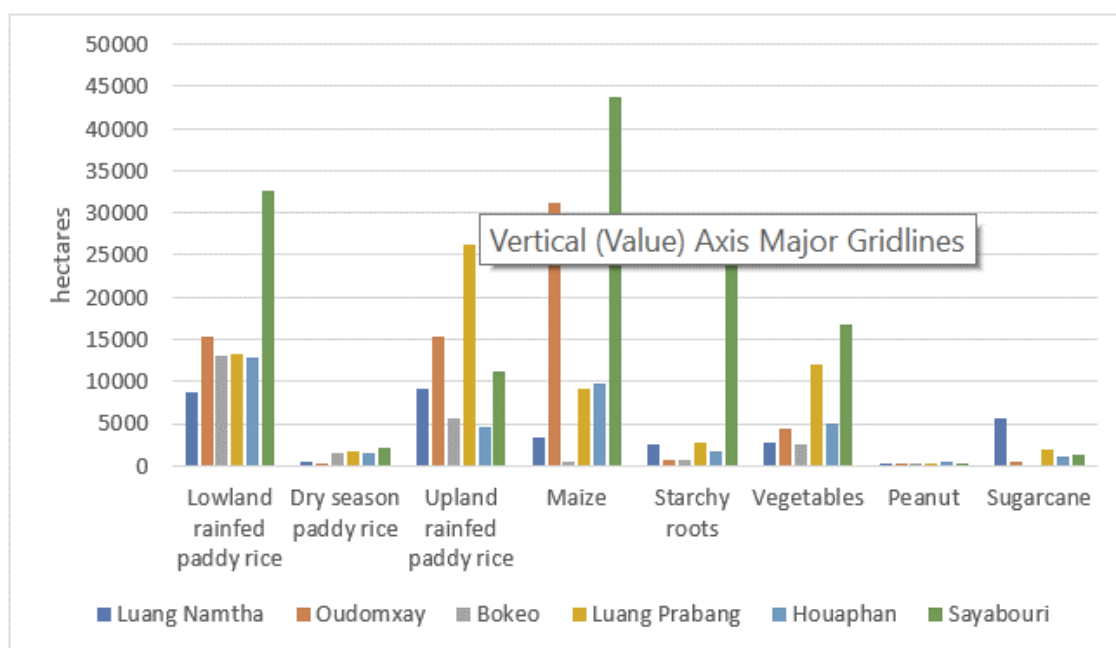


Figure 10. Key agriculture crops in the target provinces (ha planted)

Source: Based on Ministry of Planning and Investment, Statistical Yearbook 2019

Shifting cultivation and deforestation risks

There is a complex dynamic between forest cover, regenerating vegetation and agricultural land in upland agricultural production systems. Forests on hillsides are often cleared for agricultural land (usually using shifting cultivation agricultural practice), which is eventually left fallow once the land is no longer productive. Villagers then shift their cultivation to either natural forests or regenerating vegetation areas which were formerly fallow lands. This fallow land have undergone natural regeneration, and are considered forest land according to the national forest definition. The use of shifting cultivation practices can lead to additional deforestation and degradation due to uncontrollable forest fires. Stakeholder consultations in all provinces in the programme area noted that agriculture is a major driver of deforestation:

Table 19. Agricultural drivers of deforestation and degradation identified through stakeholder consultations

	BKO	HPN	LNT	LPB	ODX	SAY
Expansion of agricultural land for cash crop cultivation by villagers and/or companies (deforestation)	++	+++	+++	+++	+++	+++
Rubber	+++		+++	++	+++	+
Banana	++				++	
Shifting cultivation and pioneering expanding agriculture for subsistence (deforestation/degradation)	+++	+++	+++	+++	+++	++

Legend: The importance level of the individual drivers is based on the relative scale of deforestation and forest degradation in the provinces. “+” indicates the level of relative importance per province, “+++” being “relatively high”, and “+” being of lower importance.

Source: ERPDP, p. 39

Yet, it needs to be distinguished between different forms of shifting cultivation. The government clearly distinguishes between rotational (haimounviang) and encroachment into designated forest land at village level (thangpha hed hai). Shifting cultivation has a long tradition, especially for ethnic groups in northern Laos. Clearly distinguished boundaries between agricultural and forest land are key success factors for landscape stabilization.

Therefore, the project will still facilitate traditional rotational practices, when considered in the overall land use planning process and PLUP. The primary focus will be to stabilize the landscape and reduce/avoid the so-called pioneering shifting cultivation practices.

Subsistence agriculture

The agricultural sector mainly compromises subsistence farmers and is characterized by low yields, among other reasons due to low use of high-quality inputs such as seeds or fertilizer, low soil quality, limited irrigation and insecure land tenure. Even though food security is a development priority for the country, it is a major challenge for many households in rural areas in the northern region of Lao PDR. An estimated 25% of rural households in the region are food poor.¹³¹ Extension services are of low quality and have limited reach due to low (human and financial) resources. Agricultural value chains are very fragmented, with limited farmers’ organizations and cooperatives and weak connections between value chain actors (GIZ, 2018). Additionally, the Enabling the Business of Agriculture Score for Lao PDR was 37.10 out of 100 in 2019. Which places the country below average and highlights diverse areas where the sector is still deficient, especially the indicators: supplying seed, registering fertilizer and sustaining livestock (WB, 2019).

Regional trade dynamics

The agriculture sector is the fifth-largest sector for foreign direct investment. In 2019, approximately USD 50 million was invested in the sector. Countries investing in the agriculture sector with specific relevance to the Northern Region of Lao PDR include Vietnam, Malaysia, China and Thailand. Lao PDR has worked with cooperation agreements with other countries, including

¹³¹ Pimhidzai et al. 2014 in UNDP 2015.

China and European countries. However, the agricultural sector struggles to meet export standards and requirements due to several challenges it faces (Lao PDR, 2021a).

Increased international trade and expanding markets directly influence the agriculture sector in the Northern Region. The Northern Uplands are increasingly viewed as a production base for agricultural products with a high demand, such as maize for livestock feed, paddy rice or rubber. As a result, contract farming has increased in the region: farmers are provided with inputs (e.g. seeds, fertilizer), capital and agronomic advice, and in return for their land and labor inputs commit their agricultural produce to the contracting party (investor) (ADB, 2018).

Increasing cross-border trade dynamics influence not only the type of crops that are grown, but also impact agricultural practices. Although contract farming can secure farmers with a stable income, it may also impact sustainability of farming practices, and risk land conflicts.

Paddy rice and upland rice cultivation

Rice is a major dietary staple in the country. It is produced in two systems: paddy rice and upland rice. Paddy rice is grown on flat terrain; the majority of the suitable terrain in the provinces are often already covered by paddy fields or other types of commercial agriculture, thus limiting the expansion of this crop. A major limitation for ensuring food security is the region's mountainous terrain, and limited valley space for growing rice paddy.

Table 20. Cultivation of rain-fed and dry season paddy rice and upland rice: 2015 – 2017 in ha

Province	Rainfed Paddy			Dry Season Paddy			Upland Rice		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
LNT	10,458	9585	9590	169	230	282	7176	6810	6434
ODX	15,387	15,282	15,290	207	253	186	10,500	8860	15,826
BKO	14,643	14,565	14,632	1486	1520	2360	7435	7300	7209
LPB	13,949	14,093	13,496	1508	1560	1369	24,349	24,480	24,635
HPN	12,632	12,770	12,580	1600	1500	1670	16,647	13,700	14,469
XBY	32,236	32,390	34,321	2657	3364	2132	12,099	10,150	11,101
Totals	99,305	98,685	99,909	7627	8427	7999	78,206	71,300	79,674

Source: Statistical Yearbooks: 2016 and 2017. Areas planted. Dry season paddy means irrigated paddy (na saeng in Lao).

Upland rice is a traditional crop characterized by shifting cultivation in upland areas. It remains an important crop for subsistence purposes and ensuring food security in the programme area. Many communities have a long-standing tradition of growing upland rice and may even prefer the taste. However, in terms of the production system, cultivation requires challenging and time-consuming physical labor, and yields are low. Increasingly unsustainable practices (e.g., declining fallow periods), can contribute to degradation (landslides, mass erosion events, sedimentation, expansion of cultivated areas in forested areas). Many districts in the programme area plan to either decrease the area of upland rice or maintain current areas in an effort to curb shifting cultivation and deforestation.

Other vegetables for household subsistence are also grown in relatively small quantities in upland areas, although there are limited statistics on cultivation areas and yields.

Cash crop cultivation

Cash cropping experiencing repeated boom and bust price cycles (e.g. maize, cassava, Job's Tear, among others). Cash crops are increasingly promoting intensified production systems, including mono-cropping and more intensive practices that generate various environmental and social impacts and risks. The “boom and bust” nature of many cash crops can have notable impacts on local livelihoods. While many farmers and households have benefitted from the maize “boom”, during there are substantial risks for local livelihoods. Maize, for instance, experienced a bust in 2016 where market prices drastically declined (Table 21).¹³² Many smallholders found themselves in debt, with higher levels of food insecurity.¹³³ In addition, other risks associated with contract farming is a high dependency on traders and other key people in maize networks, increased inequality and household differentiation, among others.¹³⁴ One study found that “farmers were well aware of the impacts of maize, but had little other opportunities for income generation. In fact, education paid for with maize money was seen as a key way out of poverty, and expanding paddy rice production (funded with maize money) a key way towards food security.”¹³⁵

Table 21. Area (ha) planted under selected cash crops

Province	Maize			Vegetables			Starchy Roots		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
LNT	5490	5170	1790	3250	2635	2255	3190	2900	1940
ODX	58,930	58,685	56,320	12,220	11,665	10,725	1770	1925	1945
BKO	4285	4185	1595	835	845	995	180	180	185
LPB	13,240	13,110	13,380	12,120	12,595	2600	4795	3270	2390
HPN	31,550	31,640	9740	4790	6385	4850	2375	1415	1800
XBY	61,530	62,205	61,645	11,395	13,535	15,555	12,255	15,960	15,960
Total	177,040	177,011	146,487	46,625	49,676	38,997	26,580	27,666	26,237

Table Notes: Source is Statistical Yearbooks for 2016 and 2017. Only a selection of cash crops is given in the Yearbook tables. Starchy roots include cassava, among others.

The following table provides a brief summary for Cassava and Maize in terms of common production systems, challenges with existing production systems, and good agricultural practices promoted within the programme.

¹³² Kallio et al. 2019.

¹³³ Ibid.

¹³⁴ Ibid.

¹³⁵ Kallio et al. 2019, p. 193.

Table 22. Examples of common upland annual crops in terms of common production systems and potential good agricultural practices to address common challenges and barriers facing existing production systems.

Crop	Brief description of production systems	Challenges with production systems	Potential good agricultural practices promoted within the programme
Maize ¹³⁶	<ul style="list-style-type: none"> ▪ Maize expanded extensively since the introduction of contract farming systems in the early 2000s, peaking around 2007 and 2008 and since then leveling off - particularly notable in Sayabouri,¹³⁷ Oudomxay and Houaphan provinces. ▪ Annual crop produced in rotating shifting cultivation systems in both flat and upland areas. ▪ Mono-cropping for successive rotations is often applied, leading to accelerating land degradation. ▪ Contract farming systems, which have provided farmers with improved maize varieties and agricultural in- 	<ul style="list-style-type: none"> ▪ Intensive farming on sloping lands, and the intensive utilization of the same plot for several successive rotations of mono-cropping is leading to land degradation, declining soil fertility, and declining yields over time. ▪ Emerging pests and diseases lead to declined harvest levels and crop failures ▪ Reduced biodiversity due to land degradation and declining fallow periods ▪ Inappropriate use of agro-chemicals due to various reasons (inadequate awareness about impacts of inappropriate agrochemical use, provision of agrochemicals from foreign countries without instructions available in Lao, lack of safety equipment/ protective clothing during 	<ul style="list-style-type: none"> ▪ Promotion of swidden and long-rotation fallows and agroforestry systems ▪ Conservation agriculture can increase crop productivity, reduce production costs, improve soil conditions, reduce soil erosion, and increase soil organic carbon, ▪ Inter-cropping and relay cropping can increase total production and productivity per unit of land, income diversification, nitrogen fixation, weed control, long-term soil cover maintenance, conservation of soil organic matter, biomass from residues returned as organic inputs in form of mulch and compost, stabilizes soils, reduces the risk of total crop failure ▪ Improved education and capacities on agrochemicals and agricultural inputs, including risks to human health and the environment, and appropriate use (See Chapters 5 and 6 for more detailed information on how this will be maintained) ▪ Improved awareness on banned and dangerous substances, and related laws and regulation

¹³⁶ Note: One study found that “farmers were conscious of the limits of maize in terms of being a long-term sustainable land-use option, but had little alternatives for income generation” – Kallio et al. 2019, p. 191

¹³⁷ Currently province is the largest producer of maize in the country, accounting for 22 % of national maize production.

Crop	Brief description of production systems	Challenges with production systems	Potential good agricultural practices promoted within the programme
	<p>puts have supported intensification of maize cultivation including mono-cropping on steep slopes, increasing problems with weeds and pest.</p> <ul style="list-style-type: none"> Maize is often harvested, de-husked and dried in-province before being sent to middlemen and traders for both national and international companies 	<p>application, among others identified in the feasibility study in greater detail).</p>	<ul style="list-style-type: none"> Improve quality and accessibility to extension activities to focus on forest protection, climate-smart agriculture, REDD+ and FLR Refer to Appendix 3 of the Feasibility Study (FP Annex 2a) for more detailed information on good agricultural practices promoted within the programme
Cassava ¹³⁸	<ul style="list-style-type: none"> Annual crop produced in rotating shifting cultivation production systems in upland areas, often by poor farmers. Traditionally grown as a subsistence crop, but increasingly grown for commercial uses (biofuels, food products, etc.) 	<ul style="list-style-type: none"> Traditional practices are still applied (upland ecosystems, primarily use locally available varieties, little inputs applied) Current production systems result in low yields, soil nutrient depletion, soil erosion and land degradation, increasing the pressure on forested areas for more fertile lands Emerging pests and diseases in Asia¹³⁹ 	<ul style="list-style-type: none"> Intercropping cassava with other crops can reduce the risk of crop failure, improve soil fertility, and reduce soil erosion (e.g. using grain legumes) Application of balanced and appropriate fertilizers can increase yields and net income Improved tools can be constructed using locally available materials to improve harvesting, slicing roots to make dry chips and for chopping leaves for silage production¹⁴⁰

¹³⁸ Information from CIAT (2016) – Cassava Production in Lao PDR and Myanmar.

¹³⁹ CIAT 2016; Newby (2016) – Cassava in Asia: Exposing the drivers and trajectories of the hidden ingredient in global supply chains.

¹⁴⁰ CIAT 2016; Maung Aye and Howeler 2008 – Cassava in Laos: Enhancing sustainable production through farmer participatory research.

Crop	Brief description of production systems	Challenges with production systems	Potential good agricultural practices promoted within the programme
			<ul style="list-style-type: none"> ▪ Improve quality and accessibility to extension activities to focus on forest protection, climate-smart agriculture, REDD+ and FLR ▪ Refer to the feasibility study (FP Annex 2a) for more detailed information on good agricultural practices promoted by the programme

Permanent Agricultural Plantations and Rubber

Large-scale agricultural plantations for bananas and rubber have also emerged as drivers of deforestation over the past decade. Different parts of the programme area also have both larger scale (concession) and smallholder rubber plantations, although here, too, boom and bust cycles play a role in farmer behavior.¹⁴¹ In future, it is thought that in the future rubber and banana plantations will no longer be drivers of deforestation, due to recent policy changes limiting production and market dynamics. While the project will not work with large scale plantations, it is important to understand the main agricultural plantations and dynamics in the project region.

Table 23. Area (ha) of banana and rubber plantations in the GCF programme's provinces

	Area (ha) of bananas	Area of Rubber
Bokeo	9,000-11,500 ⁽¹⁴²⁾	29,516 ⁽¹⁴³⁾
Houaphan	Data unavailable	Data unavailable
Luang Namtha	1,275 ⁽¹⁴⁴⁾	33,400 – 35,500 ⁽¹⁴⁵⁾
Luang Prabang	Data unavailable	18,191 ⁽¹⁴⁶⁾
Oudomxay	2,867 ⁽¹⁴⁷⁾	28,392 ⁽¹⁴⁸⁾
Sayabouri	1,000 ⁽¹⁴⁹⁾	14,824 ⁽¹⁵⁰⁾

Rubber

Rubber cultivation was introduced through promotion by DAFO as a means to stabilize shifting cultivation practices, and also through investors from neighboring countries such as China¹⁵¹ and Vietnam. The farmers located in the northern Lao provinces predominately work via production contracts with Chinese rubber companies. Land concessions as been limited in favour of the promotion of smallholder production and contract farming. In contrast, southern Laos rubber plantations are characterized by relatively large-scale land concessions granted by the government and financed by Vietnamese investors. As a consequence, the Lao government approach towards rubber cultivation in the country is not consistent, smallholder production is encouraged simultaneously with the promotion of large-scale rubber plantations given to foreign investors.¹⁵² In stakeholder consultations for the development of the ER-PD, rubber was identified as a major driver of deforestation and forest degradation in most Provinces (all mentioned rubber, with the exception of Houaphan). It has further had a major impact on biodiversity, as it covers at least 120,000 ha in the six programme provinces. In Nam Ha NPA, it is possible to see the extensive expansion of rubber into the protected area.

¹⁴¹ Some LNT smallholder rubber farmers have cut down their rubber plantations to the tune of hundreds of hectares in recent years, but extent is not known exactly. See LNT PRAP.

¹⁴² PDPI (2015), range of areas from 2015-2020 based on the Provincial SEDP.

¹⁴³ Douangsavanh et al. (2008) in Hicks et al. (2009); PDPI (2015). Area in 2015.

¹⁴⁴ Luang Namtha PRAP.

¹⁴⁵ Data collected from individual district SEDPs for the periods from 2010-2015 and 2016-2020.

¹⁴⁶ 2015, Luang Prabang PRAP.

¹⁴⁷ PAFO Agriculture and Forestry Statistic Unit (2015).

¹⁴⁸ Area in 2013; Southavilay (2016).

¹⁴⁹ PAFO (2015).

¹⁵⁰ PPIO (2013).

¹⁵¹ In particular, Chinese investments have seen Lao as a favorable destination for investing in rubber to supply the factories in China, and has been supported by Chinese government policy incentives to promote replacements to opium cultivation.

¹⁵² Miles Kenney-Lazar, Grace Wong, Himlal Baral, Aaron J.M. Russell, Greening rubber? Political ecologies of plantation sustainability in Laos and Myanmar, *Geoforum*, Volume 92, 2018, Pages 96-105.

In comparison to annual cash crops, rubber production requires medium-to-long-term agricultural investments, where there are minimal returns during the first 6-8 years. Despite a rubber boom happening in the mid-2000s in Northern Lao PDR, prices have drastically declined in recent years – increasingly as rubber plantations in Bokeo and other northern provinces are reaching maturity.¹⁵³ This has had major impacts on rubber-based livelihoods. Some farmers that have larger rubber plantation areas who can afford non-household laborers, are putting off tapping in the hopes that prices will increase in the future. Other farmers who are dependent on household labor have to tap at extremely low prices and try and recuperate their investments and support their livelihoods.

Government policies have reacted to the changing market conditions and rampant expansion of rubber, with many Provinces limiting the expansion of rubber, and the establishment of a government moratorium on rubber concessions.

There are a number of major risks associated to rubber plantation which can, to a certain degree, be mitigated by mixed-cropping or agroforestry approaches and adequate site-selection¹⁵⁴:

- It takes 6-8 years until the crop is mature and economic return can be realized. Agroforestry and mixed cropping can realize and diversify short-term income for smallholders and increase economic resilience. At the same time, mixed cropping positively affects local ecosystems as it improves soil quality and biodiversity.
- Rubber is often planted on agricultural land and can therefore put local livelihoods at risk by negatively impacting food security. Mixed cropping approaches mitigate this risk as food security is maintained as the rubber plantation does not compete with agricultural production.
- Rubber plantations often come along with an increasing use of herbicides. By benefiting the local ecosystem and improving soil quality, the use of herbicides could be tackled through mixed cropping approaches, combined with extension services and adequate training of smallholders.
- There is a risk that rubber plantations replace forested areas and can contribute to deforestation and biodiversity loss. In the project context, it will not invest in agroforestry activities in forested lands. Only agricultural land or strongly degraded areas will be used for agricultural practices such as rubber plantation.
- Intensive rubber plantations can impact local climate and lead to higher temperatures and drought. The project will not invest in large-scale rubber plantations. Generally, agroforestry approaches focus on smallholder development as the smaller scale.

Though a mixed cropping approach may seem like a path to sustainable rubber plantation, there are also a number of challenges. From an economic standpoint it can be difficult to convince smallholder to choose agroforestry over monocropping as the latter induces a higher yield per hectare due to a higher density of rubber trees. Especially when considering that environmentally and socially sustainable sourcing of rubber is not economically rewarded at Chinese and Vietnamese markets and the competition from large-scale monocropping is strong. Last but not

¹⁵³ Vongvisouk & Dwyer 2017; From 2011-2014 prices have plummeted from 14 yen/kg (~\$2.54/kg) to 3.5 yen/kg (~\$0.52/kg).

¹⁵⁴ Miles Kenney-Lazar, Grace Wong, Himlal Baral, Aaron J.M. Russell, Greening rubber? Political ecologies of plantation sustainability in Laos and Myanmar, *Geoforum*, Volume 92, 2018, Pages 96-105.

least, mixed cropping requires technical know-how that can be challenging for smallholders to develop and maintain, and therefore requires significant agricultural extension support. Thus, there is a risk that smallholders may tend to choose monocultures over mix cropping approaches; a risk that needs to be mitigated by the project through adequate training of extensionists and thorough activity monitoring.

Banana cultivation

Banana cultivation has also boomed in some of the provinces, and was identified as a driver of deforestation in Luang Namtha, Oudomxay and Bokeo.¹⁵⁵ While official figures are limited, it is estimated that in 2015 banana plantations covered over 14,000 ha. It has also had a major impact on biodiversity (see photo below), and has led to several reported cases of negative impacts on the environment and human health. Prime Minister Order No. 483 from March 27, 2017 placed a ban on the establishment of new banana plantations, and noted the intention to phase out banana production in the six Northern Provinces (Phonsaly, Luang Namtha, Bokeo, Oudomxay, Luang Prabang, and Sayabouri), as well as in Vientiane due to negative environmental and social impacts associated with banana plantations. The programme will not support the establishment or expansion of banana plantations.



Figure 11. Photo of expansive banana cultivation in Northern Lao PDR¹⁵⁶

Figure Notes: The photo demonstrates the impact of monoculture banana plantations on biodiversity. Banana monocultures in northern Lao PDR have further been associated with substantial environmental and social impacts due to the inappropriate use of harmful agrochemicals.

¹⁵⁵ Negative environmental and health impacts have been acknowledged by the GOL, and attempts to curtail banana plantations have started, albeit with mixed success as reported in the Vientiane Times. *Although the government has imposed a moratorium on new banana concessions in six Provinces, and are planning to phase down banana production. However, assembly members said local authorities have found it difficult to implement, citing contract farming between investors and farmers, which require detailed measures to manage.* http://www.vientianetimes.org.la/freeContent/FreeContent_Comply.php. In some Provinces visited, such as Luang Namtha, it was possible to see alternative crops beginning to replace banana plantations, such as sugar cane.

¹⁵⁶ At the 2nd Regional Land Forum in Bangkok, May 2018 by Mr. Phouvong Phaophongsavath, Deputy Director of Investment Promotion Division, Investment Promotion Department, MPI.

Labor requirements for large permanent agriculture plantations

The mechanisms by which agricultural practices absorb additional labor must be understood for planning and mitigation purposes. If existing land cannot absorb additional labor, in other words the returns to labor become too low, there are several logical consequences of this:

1. Expansion of land under agriculture (perhaps to areas designated as “potential forest”);
2. Temporary or permanent outmigration of family labor from the farm;
3. To a far lesser degree, intensification on existing plots of land.

The latter option is seldom employed partly for reasons related to farmers’ intuitive assessments of returns on labor and other inputs, based on an extensive farming system. An opposite trend in the northern uplands is that people *expand* the land to labor ratio by using agro-chemicals, especially true for cash crop production, such as maize. The better off expand their areas by hiring in labor (does not expand land: labor ratios).

Sourcing of seeds and planting materials

Lao PDR is a signatory to the International Treaty on Plant Genetic Resources for Food and Agriculture (IT-PGRFA) aiming at food security through conserving, using and managing plant genetic resources for food and agriculture around the world. The Treaty ensures sustainable use of the world's plant genetic resources, the fair and equitable benefit sharing arising from its use, as well as the recognition of farmers' rights. Despite being characterized by a large diversity of crops for agriculture, plant genetic diversity is under increasing threat in Laos. According to the Country Report on the State of PGRFA in Lao PDR, reasons for the loss of plant varieties include¹⁵⁷:

- Rapid trend towards the introduction of modern varieties for increase productivity in the rural agriculture sector resulting in the displacement or disappearance of local landrace cultivars from their origin (e.g. the role of modern rice varieties in rural sector)
- Less interest on local landraces, especially local fruits and some vegetables, due to their poor yielding ability and quality
- Less attention on utilizing some PGRFA (local fruits and wildflower) because of low impact on the current market economy
- Shifting from traditional agriculture to market-oriented agriculture (crops with high seasonal or periodic demand)
- High production (yield) targets under moderate to low input management (e.g. By 2010 the government is aiming at 3.2 million tons of rice production in Lao PDR)
- Rapid exploitation of some genetic material to meet the emerging and inconsistent demand for genetic material from conservation areas (e.g. rapid declining of wild orchid species from the forest area in the south)
- Land clearing
- Poor communication between conservation groups and the timber industry in order to protect the genetic resources from human activities

¹⁵⁷ As listed in The State of Plant Genetic Resources for Food and Agriculture in Lao PDR, Country report 2007, p. 18. Available online: <http://lad.nafri.org.la/fulltext/2934-0.pdf>.

- Lack of resources and training for monitoring genetic resources
- Floods, droughts, pest and disease outbreaks
- Lack of an early warning system to protect biodiversity in Lao PDR

Consequently, the project needs to ensure that erosion of plant diversity in Laos is not triggered by project activities. Thus, sustainable sourcing of seeds and planting materials for project activities needs to be ensured. The project will support local agri-MSMEs to improve their capacity to market sustainably produced agricultural and forest products, including sustainable sourcing of seeds and planting materials for local producers.

Agri-MSMEs and the private sector

Project 2 builds on the lessons learned from Project 1, and identified the need to target agri-micro, medium and small enterprises (MSMEs), where there is a notable absence of financing opportunities due to i) poor penetration of Lao financial institutions (FIs) in rural areas, ii) high and unsuitable interest rates that discourage lending; iii) perceived high risk of lending to agriculture, and iv) many MSMEs lack sufficient capacities and collateral, thereby discouraging FIs from lending to them. With over 800 MSMEs in the project area, they are often left out of discussions on sustainability, and as a result are insufficiently integrated in deforestation free and sustainability-oriented value chains, limiting the involvement of a critical actor at the intersection of deforestation, production systems and value chains.

Agri- MSMEs either market unprocessed commodities (e.g., maize, cassava, rubber, cardamom) to markets in China, Vietnam and Thailand depending on demand, or are involved in some kind of value addition. The current focus on low value raw products and the promotion of monocropping systems without sufficient quality management over the final products is indirectly fostering the expansion of unsustainable agricultural activities into forest zones. It further makes farmers particularly vulnerable to climate shocks, as they are dependent on non-diversified value chains with limited practices to strengthen their resilience against climate change

The poor market situation of Agri-MSMEs create the need for due-diligence, as well as the development of eligibility criteria for matching grants, which will be promoted by Project 2. The Climate Change Funding Window can bring concrete benefits to those Agri-MSMEs, yet suitable due-diligence criteria need to be developed that ensure sustainable financing but also enable the participation of poorly equipped enterprises. Moreover, a monitoring of private sector agro-MSMEs is needed to ensure sustainably sourced products.

Agro-chemical use in Lao PDR

The 9th NSEDP promotes the development of a 'green economy' so as to conserve natural resources. The GOL has identified several major farming systems based on Lao PDR's geography, and the Northern Uplands as a target for rural development due to the medium-to-high levels of poverty. In commercial agriculture systems, agrichemicals, especially pesticides, are commonly used to boost production, but they affect human health and potentially pollute soil and water. Harmful and illegal pesticide use can be a concern for human health and the environment in Lao PDR.¹⁵⁸

¹⁵⁸ "Pesticides: A Cause for Concern" Compiled By Sopavanh Rassapong, LURAS, November 2016.

Lao PDR ratified the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemical and their Disposal in 2010. More recently, the GOL issued a decree on the use and management of pesticides.¹⁵⁹ This decree is pursuant to:

- The Law on Government No. 04/NA, dated 08 November 2016;
- The Law on Plant Protection and Quarantine (Amended Version) No. 13/NA, dated 15 November 2016;
- The Law on Chemical Management No. 07/NA, dated 10 November 2016;
- Based on the letter of proposal of the Minister of Agriculture and Forestry No. 482/MAF, dated 12 May 2017

The Decree further defines the principles, regulations and measures regarding the use of pesticides, management and monitoring of pesticide activities to ensure the quality, efficiency and safety for humans, animals, plants and environment with the aim of allowing the agricultural and forest production to be carried out in line with clean, green and sustainable agriculture, capable to ensure regional and international integration, and contribute to the national socio-economic development.

Classified chemical substances (incl. pesticides and other agro-chemicals), should refer to the “WHO Recommended Classification of Pesticides by Hazard and Guideline to Classification”. Lao PDR has defined the following categories of agro-chemical hazards¹⁶⁰ (based on WHO classifications):

- Ia – Extremely hazardous
- Ib – Highly hazardous
- II – Moderately hazardous
- III – Slightly hazardous
- U – Unlikely to present acute hazard

Lao PDR’s 2010 Regulation on the control of pesticides includes an annex on the banned substances, summarized in the following table:

¹⁵⁹ Decree on Pesticide Management, No 258 /GOV, 24 August 2017.

¹⁶⁰ “Regulation on the Control of Pesticides in Lao PDR”, No.2860/MAF, 11 Jun 2010.

Table 24 List of banned pesticides in Lao PDR, June 2010

Insecticides and acaricides	Fungicides
1. Aldrin	30. Binapacryl
2. BHC	31. Captafol
3. Chlordane	32. Cycloheximide
4. Chlordimeform	33. Mercury and mercury compounds
5. Chlorfenvinphos	34. MEMC
6. Chlorthiophos	35. PMA
7. Cyhexatine	36. Selenium compound
8. DDT	Rodenticides
9. Dieldrin	37. Chlorobenzilate
10. Dimefox	38. Sodium fluoroacetate
11. Dinitrocresol	Herbicides
12. Demeton	39. 2, 4, 5 –T
13. Endrin	40. Dinoseb
14. Endosulfan	41. Dinoterb acetate
15. Ethyl Parathyon	42. Paraquat
16. EPN	43. Sodium chlorate
17. Heptachlor	Fumigants
18. Hexachloro cyclohexane	44. EDB
19. Leptophos	45. Ethylene oxide
20. Lindane	46. Methyl bromide
21. Methamidophos	Others
22. Methomyl	47. Arsenic compound
23. Methyl parathion	48. Calcium arsenate – herbicide, rodenticide, molluscicide, insecticide
24. Monocrotophos	49. DBCP – Nematocide
25. Polychlorocamphene	50. Daminozide – Plant growth regulators
26. Phorate	51. Fluoroacetamide – Insecticide, rodenticide
27. Schradan	52. Oxamyl – Insecticide, acaricide, termiticide
28. TEPP	53. Phosphamidon – Insecticide, nematocide
29. Toxaphene	54. Sodium Arsenite – Insecticide, fungicide, herbicide, rodenticide
	55. Thallium (i) sulfate – Rodenticide, insecticide.

Although the GOL is working to control the use of dangerous pesticides, recent reports¹⁶¹ indicate that numerous banned substances are still readily available and in regular use, including in the programme region. Although Lao PDR does not produce pesticides, they are readily available as imports, primarily from China, Vietnam, and Thailand. This poses another problem, since instructions for the use of the substances (incl. protection measures required for persons applying

¹⁶¹ "Pesticides: A Cause for Concern" Compiled By Sopavanh Rassapong, LURAS, November 2016; and "Illegal Pesticide Trade in the Mekong Countries: Case Studies from Cambodia and Lao PDR" CEDAC, SAEDA and PANAP, 2013. The Sustainable Agriculture and Environment Development Association (SAEDA), formerly SAF (Sustainable Agriculture Forum), works to support vulnerable communities by promoting sustainable agriculture, increase capacity and awareness to safeguard the environment. SAEDA's projects focus on three main areas of intervention: Sustainable Agriculture, Chemical Pesticide Risk Reduction, and Biodiversity Conservation.

the pesticides), are printed in foreign languages that are not known to the local farmers. In some cases, the recommended personal protective equipment (PPE) is inappropriate for the Lao climate. These reports indicate that users are also largely unaware of the health and environmental risks of inappropriate agro-chemical use. Furthermore, since Lao PDR does not produce these chemicals, it also does not have an appropriate process for disposing of wastes generated from emptied pesticide containers. Similarly, there are no currently approved methods for cleaning chemical spills and land and water areas contaminated by pesticides.

While there is limited information on the exact use and prevalence in the programme region, stakeholders consulted often noted that there was some use associated with crops such as maize, however did not report any negative impacts. The only exception was with banana plantations, where some of the villages consulted knew of other villages who had members of their community come down with illnesses (noting these people were often employed in the direct application of agrochemicals, and often without any protective equipment).¹⁶²

The Lao Agricultural Commercialization Project's ESMF¹⁶³ found it difficult to generalize on fertilizer application rates identified during their field work. However, they noted that the "overuse of fertilizer in Lao PDR is not a prevalent issue at present." They noted herbicides are applied in 1-2 applications per cropping season, especially for maize.¹⁶⁴ For rice production (paddy rice) they found that while fertilizers were not common, that insecticides are commonly used for high-yield rice varieties (Methyl parathion and Diazinon). However, they noticed that main issues are due to inappropriate use, and inappropriate container management. For vegetable production they noted that some herbicides and pesticides are used (esp. Lannate 90-Methomyl, Sevin 85%, Thiamethoxam, Bydin 24%, Cypermethrin, Chlorpyrifos, Abamectin, and Sulfur). They further noted that the *"improper use of pesticides and other chemicals in agricultural production, including those for preservative purposes, has been a significant limiting factor to the competitiveness of agricultural products in Lao PDR."*¹⁶⁵ LACP's ESMF further mentions that agrochemical use is increasing, but is often below recommended dosages (with exceptions for certain crops such as bananas). Nonetheless, it notes limited awareness about appropriate agrochemical application, as well as banned substances and their associated health and environmental impacts. Thus, it is evident that there is a strong need for further awareness raising and capacity building on agrochemical use, including appropriate practices, health and environmental risks, and banned substances.

Livestock

Large livestock – especially cattle – have importance in the upland farming systems as a local "savings bank." Buffalos are also present in the uplands; for some of the upland ethnic groups they have symbolic (wealth) or cultural importance and are not meant for ploughing. Small livestock such as pigs, goats/sheep and poultry (small livestock are generally raised by women) also

¹⁶² Such trends were visible when visiting local villages near banana plantations, where it was possible to see some people spraying agrochemicals in shorts, sandals and a t-shirt – without any safety equipment.

¹⁶³ World Bank 2017

¹⁶⁴ Including Glyphosate-Isopropylammonium, Paraquat Dichloride, 2, 4-D Dimethylammonium, Atrazine, and Acetochlor.

¹⁶⁵ World Bank 2017, p. 55.

form an important part of the farming system. If large livestock are the savings bank, then small livestock are more of a current account – easily sold (or eaten) as per regular needs. Cattle are traditionally, and still today, allowed to graze freely in local, forested areas, while goats and pigs are also normally allowed to graze freely except during the main agricultural season. Free grazing by livestock also has implications for forest regeneration.

Table 25. Livestock Keeping by Province in thousands Head

Province	Cattle		Buffalos		Sheep/Goats		Pigs	
	2016	2017	2016	2017	2016	2017	2016	2017
LNT	24	25	16	16	16	17	126	132
ODX	44	45	37	37	29	30	196	204
BKO	61	62	26	26	30	31	85	89
LPB	92	95	56	56	89	93	263	275
HPN	81	84	51	51	36	38	184	192
XBY	134	141	51	51	14	14	169	177
Totals	2452	2469	2253	2254	2230	2240	3039	3086

Table Notes: Note the high number of sheep/goats in LPB.

Source: Statistical Yearbook, 2017

Livestock's impact on forest regeneration was not identified as a major driver of forest degradation in the Northern provinces during the preparation of the ER-P and GCF programme. During a detailed assessment of the drivers of forest degradation during PRAP and ER-PD preparation. This is likely due to the relatively low population of livestock in the region and the scale of resulting degradation. Livestock production will not be a focus of the project. Support will focus on land use planning which involves the identification of improved livestock grazing areas. Production of fodder is included in the project's whitelist as sustainable agricultural practice to be promoted. Such practices promoted can contribute to strengthened resilience of agro-ecosystems, reduced erosion and soil degradation, improved soil organic carbon sequestration, reduced forest degradation due to free grazing, improved animal health, and reduced impacts on biodiversity.

Rural finance

In 2019, a Mapping Study on Rural Finance in Lao PDR was conducted by Task Force on Rural Finance (TFRF) under the Sub-Sector Working Group on Rural Development (SSW G-RD). The study identified rural areas that are underserved in terms of financial services. It was found that most of the poorest areas do not have sufficient access to formal financial services. Ethnic groups are particularly affected as they tend to live in remote areas without access to markets and roads. In rural areas, many communities have access to finance through local village banks. These are often Donor-supported (GIZ, the World Bank, SDC and Lux Dev), aiming at reducing poverty. Donor-supported village development funds exist in more than 1200 villages throughout the country. However, it is indicated that better donor-harmonization is needed to address the risk of overserving some areas, while others remain strongly underserved. The people living in rural areas depend on semi-formal (village banks, village funds) and informal financial services

(black money lenders, unlicensed pawn shops, friends, family members). Formal sector structures (banks, microfinance institutions, saving and credit Unions, insurance, mobile money agents, leasing companies and licensed pawn shops) are mostly restricted to urban areas.

The Financial Inclusion Roadmap 2018–2025 provides a comprehensive framework and direction for enhancement of financial inclusion: “1) to assist excluded groups to get access to financial services; 2) to improve the formal services outreach and transform informal financial service provision to be more formal and regulated; and 3) deepens financial inclusion for the included population through improved efficiencies and better product availability and value”.

5.3.5.2 Triggered safeguards and policies

Programme activities in the agriculture sector under Component 2 trigger PS 1 (Assessment and Management of Environmental and Social Risks and Impacts), PS 3 (Resource Efficiency and Pollution Prevention), PS 4 (Community Health, Safety and Security), and PS 6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources), primarily due to potential negative impacts from improper agrochemical use. Biodiversity risks may also occur due to the unanticipated expansion of agricultural activities onto forested land. Land use planning promoted by the project, building the foundation for agricultural activities, trigger PS 5 (Land Acquisition and Involuntary Resettlement). Risk considerations and potential mitigation measures are discussed in Section 5.3.1 Socio-economic conditions.

5.3.5.3 Risk considerations and potential avoidance/ mitigation measures

The ES risk for PS4 and PS 1 is medium, whereas the risk for PS 3 and PS6 is considered low. The following sub-sections will provide more information on the key risk considerations, and preliminary insight into key avoidance and mitigation measures. Moreover, promoted agricultural practices to be supported under Project 2 are assessed in terms of specific risks and potential mitigation measures.

Promotion of Agricultural Practices (PS 1, 3, 4 and 6)

The project is envisioned to have largely positive impacts on biodiversity by supporting forest restoration, and improved management of forest and agricultural lands. Promoted agricultural practices are all considered “good agricultural practices” and are expected to often have positive environmental impacts (e.g., reduced soil erosion, improved soil quality, etc.). Many of the proposed practices will also work with shifting cultivation systems, aiming to improve yields sustainably through best practices that improve rotation periods, reduce soil loss, and have other benefits.

The projects negative impact on biodiversity is assessed as low. The project will not work with large concessions. However, the loss of residual biodiversity at small-scale cannot be ruled out when changing rotation agriculture into other agricultural production systems. Further impacts on ecosystem health and biodiversity could result from inappropriate agrochemical use, although the project will neither procure nor promote agrochemical use (described in above in greater detail).

As described above some agricultural practices to be promoted by the project bear certain risks: The cultivation of common upland crops, especially Maize and Cassava (listed as Priority 2 Agricultural Practice on the whitelist) induces a risk of monocropping and inappropriate use of agrochemicals, and the generation of small amounts of solid and liquid wastes in the production process, posing a risk to biodiversity and causing land and soil degradation. The establishment of new paddy fields (listed as Priority 1 Agricultural Practice on the whitelist) bears the risk of smallholder switching to unsustainable practices in the long-term (e.g., Faster crop rotations and reduced fallow periods for soil regeneration) leading to loss of soil fertility and weed infestation. Moreover, the establishment of rubber plantations with intercropping (listed as Priority 1 Agricultural Practice on the whitelist) or without intercropping (Priority 2) poses a risk of unsustainable land use practices if not accompanied with adequate extension services.

The project will take adequate measures to addresses these risks:

- Promotion of multi-cropping approaches, such as Maize and Cassava intercropping with soybean/mung bean
- Provision of adequate training for trainers and extension support to local farmers to increase crop productivity (such as rice, maize and cassava), reduce production costs, improve soil conditions, reduce soil erosion, and increase soil organic carbon
- Promotion of agrochemical-free agriculture through the application of good agricultural practices, when possible. Bio-controls will be promoted. Awareness raising and training on agrochemicals and agricultural inputs, including risks to human health and the environment (also see section below on Agrochemical use)
- Improvement of agricultural extension services to increase long-term productivity of agricultural land, preventing smallholders dropping back to unsustainable practices.
- Development of financial mechanisms that combine public and private capital in order to promote private sector investment in climate projects, ensuring long-term sustainability of investments and decreasing dependency from development cooperation finance.
- Capacity building and awareness raising on best practices to enhance biodiversity and enable forest landscape restoration. This will also include awareness raising on ecosystem services, and sensitive flora and fauna to ensure their protection.
- The participatory land use planning conducted in the frame of the project will ensure that existing biodiversity, ecosystems, ecosystem services and cultural heritage are safeguarded
- The development and application of guidelines in consultative processes together with potential investors, farmers and communities to enable biodiversity to recover, ensuring best practices for sustainable forest management, waste and pollution management, and forest landscape restoration
- Implementation of regular monitoring of land use changes, and when necessary, site-specific impact assessments on biodiversity and/or ecosystems.
- Promotion of cooperation with actors with a track record on corporate social responsibility. This could include screening investors interested in working with the project to see if they have appropriate environmental and social governance policies, and records of accomplishments in place.

- Establishment of exclusion and eligibility criteria for screening agro-MSMEs (see Project Operations Manual in Annex 21 of the FP) and inclusion of waste management in business development plans, if applicable

Agrochemical use (PS 1, 3 and 4)

As described above, the use of agrochemicals in programme-promoted annual cropping, and plantations can result in negative social and environmental impacts (triggering PS 1, 3, 4 and 6). The programme focuses on the development of deforestation-free agriculture based on good agricultural practices, and is expected to generate mostly positive environmental and social impacts (e.g. reduced soil erosion and sedimentation, increased resilience to flooding, improved yields). The programme promotes good agricultural practices, which will likely result in reduced or more responsible agrochemical use. However, the programme may also promote agricultural value chains where agrochemicals are often used (e.g. herbicides, or pesticides), where farmers may continue to use agrochemicals to help them increase yields and overcome production barriers. The Lao Agricultural Project's ESMF notes that the "improper use of pesticides and other chemicals in agricultural production, including those for preservative purposes, has been a significant limiting factor to the competitiveness of agricultural products in Lao PDR. Farmers are not well informed about banned herbicide/ pesticides, while enforcement to control providers is weak and limited."¹⁶⁶

Understanding the potential risk that agrochemicals pose, the programme has been designed to limit adverse impacts. For one, the programme will not directly procure agrochemicals. It will also not support investments attributed with particularly negative environmental and social impacts (i.e., bananas, see Annex 8 for the program's exclusion list).

The programme is not expected to cause adverse and unprecedented social and environmental impacts, as it promotes good agricultural practices that aim to limit environmental and social impacts while increasing yields and supporting local livelihoods. It is also expected to increase awareness and build capacities on agrochemical use, promoting the responsible use and close monitoring of agrochemicals.

Best practices for managing pesticides are available and will be included in the ESMP (incl. guidelines from FAO, and a pesticide management plan prepared for the ERPD's Environmental and Social Management Framework. Potential measures to avoid and mitigate negative impacts due to agrochemical use are as follows (see Annex 10 for more detailed information):

- Follow the Lao Pesticide Law, and the Pesticide Management Plan (PMP) developed for the ER-PD's ESMF (in line with the World Bank safeguard on pest management, that notes (among other information) prohibited agrochemicals, and promotes awareness raising on pesticide safety procedures (see Annex 10). The PMP is informed by the Decree on Pesticide Management, No 258 /GOV, 24 August 2017, the Regulation on the Control of Pesticides in Lao PDR (2014), as well as guidelines on Integrated Pest Management (IPM) provided by the

¹⁶⁶ WB LACP ESMF, p. 51.

Food and Agriculture Organization of the United Nations (FAO). Capacity building, awareness raising, and support for villagers, farmers, partners and trainers/ extension staff on environmental and human health hazards attributed to agrochemicals, as well as practices for the responsible use of permitted agrochemicals (i.e., pesticide safety procedures).

- Promotion of agrochemical-free agriculture through the application of good agricultural practices, when possible. Bio-controls will be promoted.
- While the programme will not directly procure agrochemicals, agrochemicals in use in the programme area must be properly stored, used and monitored. The responsibility for such measures would lie under DoA. Best practices in the PMP and FAO guidelines will be provided.
- Promoted agrochemicals will be preceded by a thorough risk assessment, including the identification of adequate measures to reduce health and environmental risks to acceptable levels
- Quantities of agrochemicals promoted will be based on an accurate assessment of actual requirements to prevent overuse or accumulation of stockpiles.
- Appropriate application equipment and protective gear will be provided in adequate quantities when agrochemical use is promoted by extension agents, unless it is explicitly confirmed that equipment and suitable safety attire is sufficiently available
- Continued consultations and socio-economic monitoring at the village level throughout programme implementation will also allow stakeholders to raise concerns and support active programme monitoring enabling a quick response to potential negative impacts or concerns.
- The management use and disposal of agrochemicals must be monitored throughout the programme, and protocols must be in place to deal with potential negative social and/or environmental impacts. Such information is covered in the Pesticide Management Plan developed for the ER-PD's ESMF.

Occupational health and safety (OHS) in forestry (PS 2)

The working conditions in the agricultural sector are poor, characterized by informal and family work. Therefore, labor standards at agri-MSMEs can be assumed to be low. While it is not the focus of the project to improve working conditions in the agricultural sector, it can be assumed that the business development support and capacity development will have a positive side-effect on working conditions. The adherence to national labor law and regulations will be included in the grant agreement with every MSME received funding through the Matching-Grant Fund. Yet, the monitoring and enforcement of these regulations would go beyond the scope of the project.

5.3.6 Unexploded Ordnance (UXO)

5.3.6.1 Baseline situation

Unexploded Ordnance (UXO) from the Second Indochina War (1964-1975) still contaminate some areas in Lao PDR, and can injure or kill people if they detonate. The Laotian Government, in cooperation with NGOs and the international community, has made significant efforts to clear contaminated lands, introduce preventive measures, and implement education and awareness raising activities.¹⁶⁷

In terms of national institutions, the Lao National Unexploded Ordnance Programme (UXO Lao), founded in 2006, conducts surveys to identify UXO contamination, clears land and undertakes risk education in affected areas. The Ministry of Labor and Social Welfare, the National Regulatory Authority for UXOs (UXONRA) and the Mine Action Sector in Lao PDR participate in a Mine Action & Unexploded Ordnance (UXO) Sector Working Group to ensure close cooperation with all concerned sectors, including the definition of standards and trainings for de-miners. The Government of Lao PDR introduced a Sustainable Development Goal Lao PDR/Goal 19: Lives Safe From UXO.

Together these institutions, NGOs and other international donors have made significant strides in reducing the number of UXO accidents significantly. In 2021, UXOs harmed 55 people in Lao PDR, killing 11 and injuring 44.¹⁶⁸ The majority of UXOs are in the South and Centre regions of Lao PDR. The GCF programme area in the North of Lao PDR is less affected.¹⁶⁹ One of the most effective preventative measures is improved access to information about where UXOs have been cleared, and where UXOs may still be present in the ground. The Provincial Governors Office and district authorities are making maps available for this purpose, which GIZ and other development partners make use of frequently (the Figure below depicts one of these maps). In case an area is not yet cleared, the programme can request clearance from the UXONRA, which requires approx. a 12-month planning window for any clearance work.

¹⁶⁷http://www.news.cn/english/asiapacific/2021-12/09/c_1310361527.htm.

¹⁶⁸ <http://www.the-monitor.org/en-gb/reports/2019/lao-pdr/casualties.aspx>.

¹⁶⁹ <http://www.nra.gov.la/uxoproblem.html>.

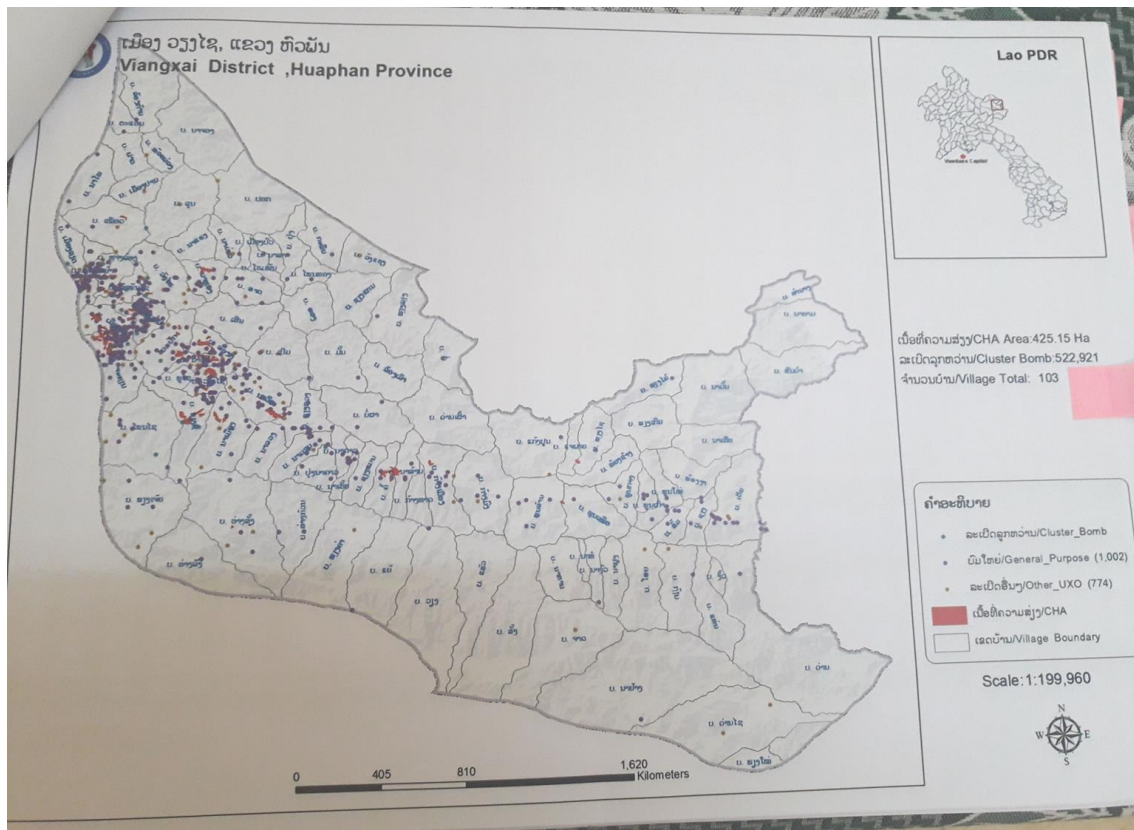


Figure 12. Photo of UXO map obtained from the authorities of Viengxai District in Houaphan Province

5.3.6.2 Triggered safeguards and policies

UXO can affect the health and safety of people involved in the project's agriculture- and forestry-related interventions (Components 2 and 3), and the project therefore triggers PS4 "Community Health, Safety, and Security", and GIZ's safeguards for Environment and Human Rights. Relevant project-related activities include forest work (e.g. harvesting timber and/or NTFPs), agricultural activities involving ploughing or digging, and other activities that require moving the ground.

5.3.6.3 Risk considerations

Across the country, UXO accident nowadays are rare (approx. 0.0006% probability in 2017).¹⁷⁰ The project operates in areas where, according to public records, UXO presence in the ground is rare and accidents have not occurred in recent years. The project team consulted development partners and government counterparts from the agriculture and forestry sector to cross check with public records and found no incidents in the years since 1968.¹⁷¹ Preventive procedures are in place, including district-level UXO maps and clearance maps. On the other hand, even if rare, UXOs accidents cannot be ruled out entirely, including after floods, landslides or other extreme weather events that affect the ground. The project's agriculture and forest-related activities sometimes require moving the ground (for example harvesting bamboo and

¹⁷⁰ Calculated using the reported number of incidents and national population statistics for 2017.

¹⁷¹ Based on consultations with senior staffs at the Department of Forestry, the most senior of which joined DoF in 1968.

other NTFPs, timber harvesting operations or ploughing). The project will therefore need to comply with preventive procedures put in place by the Lao PDR Government. Project sites need to be confirmed clear of UXO before any programme activities can be undertaken.

The risk is assessed as low to medium. Unintended negative impacts are rare, can be anticipated, and recognized best practices for prevention are readily available. However, the rare case of an accident cannot be ruled out entirely.

5.3.7 External risks in the project area

5.3.7.1 Existing external risks

Various external risks exist in the project area that need to be carefully monitored. This includes external risks to both people's livelihoods and to project goals that are already present in the project area or could manifest in the course of implementation. Many of these risks are identified in the ER-PD, PRAPs, draft SESA, draft ESMF and feasibility study.

The following lists the external risks of relevance. Most will be difficult for the project to influence and therefore mainly require monitoring during implementation including through the ESMP:

Policies, Law and Regulations, Governance

The following are external risks related to policies, the legal and regulatory framework, and governance:

- Ongoing delays in passing updated key legislation such as Land Law and Forest Law;
- Delays in adjustments to related legislation (meaning related to the not yet amended Land Law and Forest Law);
- Ongoing inconsistency between different parts of laws and regulations at different levels;
- Delays in land registration and titling, and/or priorities exclude mountainous areas in favor of plains and plateaus;
- Communal titles for larger village use areas, including forested areas, does not have a place in law and/or no guidelines to define it;
- Timber harvesting ban from production forests (including within village boundaries) continues, while non-commercial exploitation of village use forests regulations remain in force.
- Lack of official recognition for village forest/land use planning results (especially from other sectors or levels of government);
- Policy incentives to promote “forest friendly” climate smart agriculture lagging behind simple push to commodity agriculture;

- Compartmentalized hierarchies in government structures mean that regulations from one department or ministry do not translate into coordinated action on the ground involving other departments or ministries (including within same ministry);
- General relocation and village consolidation policies may continue in the short and medium term;
- Government is unable to provide adequate staff at district and cluster levels, especially to carry out more “labor intensive” participatory approaches;
- Government is unable to provide adequate forest law enforcement staff in key districts;
- Years of implementing commercialized agriculture “at any cost” has a strong institutional momentum that is difficult to change;

In addition, LPRP has recognized that corruption is a matter of serious concern in the country. The Transparency International Corruption Perception Index for 2021 puts the Lao PDR at rank 128 out of 180 with a score of 30 (out of 100). Among others, it represents a drain on badly needed government revenues. Various crackdowns have occurred, but it will be a long process to ensure that all regulatory and inspection frameworks are in place and functioning.

Land concessions and converting land into capital

Related to the GOL initiative of “turning land into capital,” larger scale investment projects in the form of concessions have sometimes triggered the physical relocation of villages and/or denied people access to communally used lands.¹⁷² Land alienation has been exacerbated in recent years by the awarding of concessions on local people’s customary lands. Concessions in the North include hydropower projects, the China-Lao Railway, mining (such as lignite in Hongsa District, XBY) and agricultural concessions (especially for rubber and bananas). A land concessions Fact Sheet (2014) for Luang Prabang showed that 25,407 ha had been granted for projects, of which 21,693 ha were for tree plantations. Additionally, it notes that 22% of the provincial land area had been granted for mineral exploration and prospecting (doesn’t mean it would result in concession projects).¹⁷³ Other investment projects in the context of Special Economic Zones (SEZs) may also expropriate people’s land. This raises access and control issues over lands that, while recognized as falling within a particular village’s boundaries, are actually controlled by outsiders.

During implementation of Project 1, an Investment and Relocation Survey was done in two provinces (Luang Prabang and Sayaboury). The survey found that there are 21 investment projects in 4 districts in Luang Prabang Province, and 18 investment projects in 3 districts in Sayaboury Province. The highest number of projects were related to road construction (14) followed by agriculture projects (8) and mining projects (5). Most project were funded by the Government of Laos (17), private companies (8) and individuals (5). Further studies will be conducted if required during implementation of Project 2.

¹⁷² There are decrees on compensation for those who have lost land to private or public projects, but in a country where formal land titles have barely reached the rural areas, ascertaining the value of appropriated land has led to low compensation amounts. Moreover, communally used land and bush fallows hardly come into the compensation equation at all.

¹⁷³ Centre for Development and Environment (CDE). Province Fact Sheet: Land Leases and Concessions, Luang Prabang 2014.

Concessions expropriate both productive, agricultural land and as mentioned, communal lands under forest, scrub or grasses. Expropriation of productive, agricultural land increases competition among local communities for remaining land and may push the “losers” of the competition to use land of marginal quality (too steep, poor soils, far from the village and/or road) or to become effectively landless. As cropping and cropland statistics show¹⁷⁴, flatland for agriculture is at a premium in the Northern provinces. Communal lands are, however, of equal importance to mid- and upland communities and their swiddens - forest – fallow landscapes. They are a resource for livestock grazing, for NTFP and firewood collection and, if necessary, may also provide small plots of land for cropping if agreed within the community. Over the past few years, one of the most frequently mentioned problem raised through the National Assembly Hotline has been land disputes.¹⁷⁵

While programme areas have been pre-screened for planned hydropower concessions, there is a risk that new concession areas may arise during programme implementation. This could include the awarding of concession land on areas that overlap with designated forest areas, including “forest areas on communal lands”. There is also a risk that new hydropower projects cause the relocation of villages (that could lead to additional deforestation), and flood productive agricultural lands. Construction of the Lao-China Railway is also expected to lead to additional relocations in Luang Namtha, Oudomxay and Luang Prabang, however the specific villages and areas for relocation are not unknown. Another risk is the expansion of other types of concessions (e.g. large-scale agriculture, tree plantations, and mining).

Understanding the challenges posed by concessions, various orders and decree have been put into a place that limit the granting of concessions. Prime Minister Order No. 13 placed a moratorium on new concessions for mining, rubber and eucalyptus plantations to allow for improving assessment processes to fully understand the potential social, environmental and economic impacts of such activities. It was extended in 2015 and lasted until 2018, with PMO number 9 and PMO number 8 replacing it (described in the following Table):¹⁷⁶

¹⁷⁴ According to ERPD statistics the six northern provinces have only 8.1% cropland (according to IPCC definition: lowland and current upland crops). The GOL has chosen not to include upland fallows as cropland, but rather as “regenerating vegetation,” meaning potential forest.

¹⁷⁵ A recent Vientiane Times article (26 December 2018) reported that the top three issues raised via the NA Hotline were bad roads, land disputes and illegal drug trade.

¹⁷⁶ PMO 08/2018, concerning the enhancement of mining-business governance in Lao PDR, recognizes the importance of the mining sector in contributing to the country’s socio-economic development. It continues to halt the consideration and approval of new investment projects that survey and explore for minerals and gold mining along rivers and land throughout the country until December 31, 2020, although certain exceptions are described in the order (e.g. select non-metal minerals for industry, non-metal minerals for construction, fuel minerals, liquid minerals, among various other exceptions). The order aims to improve the regulation of the sector and improve transparency.

Table 26. Overview of Government moratoriums on concessions

Order/ decree	Brief description
Prime Minister Order No. 13 (2012) on “Moratorium on new concessions for mining, rubber and eucalyptus plantations”	<ul style="list-style-type: none"> Placed a moratorium on new concessions for mining, rubber and eucalyptus plantations to allow for the assessment of potential social, environmental and economic impacts of such activities. The order was extended in 2015 and lasted until 2018, with PMO no. 09 (see below) and PMO no. 08 replacing it
Prime Minister Order No. 09 (2018) “Concerning the enhancement of governance in the use of concession lands for industrial tree plantation and the plantation of other crops within the country” [2]	<ul style="list-style-type: none"> Replaced PMO 13 (together with PMO No. 8 on mining) Activities banned in PMO 13 are relevant for the socio-economic development of the country and have substantial potential to attract both domestic and foreign investment in Lao PDR. Need for stricter governance, including improved inspection, evaluation and categorization of projects. The country must develop clear strategies and policies that promote development in these sectors aligned with the country’s vision for sustainable and green development. Plantation forests fall under two classifications: production forests and regenerated forests. Both classifications are required to comply with developed forest management plans under forest management contracts with three types of groups: collective forest management (established by a Land and Forest Land Allocation Committee and a village leader), family forest management, and business forestation management. Forest management contracts are governed by MAF. MAF must re-inspect and determine the policy, allocate and plan the use of agriculture and forestry lands in coherence with the local potentiality and ensure the use of land to go along the green and sustainable direction. MAF must take a leading role in transforming the order into specific legislation. In terms of the lease or concession of lands for investment in agricultural and forestry, government needs to divide the management levels, permit and encourage a clear monitoring and inspection.
Prime Minister Order No. 483 from March 27th, 2017	<ul style="list-style-type: none"> Ban on the establishment of new banana concessions and a plan to phase out banana production in the six Northern Provinces (Phongsaly, Luang Namtha, Bokeo, Oudomxay, Luang Prabang, and Sayabouri) and in Vientiane.

Source: Adapted from the Feasibility study

Another risk is deforestation due to infrastructure construction. Forest clearance for road construction have been closely interlinked in the past, where infrastructure investments are paid by

logging (i.e., turning trees into capital, see the photo below). Improved transparency and monitoring through the project will help to reduce this risk.



Figure 13. Photo of construction work

Figure Notes: Photo posted on Land Information Working Group website on 14/05/2018. The photo originates from an RFA article (08/05/2018) entitled “Families in Oudomxay Province First to Receive Compensation from Lao-China Railway” although the photo itself is from 2017. Background right of photo appears to show bush fallow partly lost to construction.

Investor Behavior

Although the GOL is working seriously to improve the business climate in the country, the Ease of Doing Business Report, (World Bank Group, 2019) places the Lao PDR at rank 154 out of 190 (in previous years it was ranked 154 and 141). In other words, the barriers and challenges for domestic businesses are still high, and the reform process is proceeding slower in Lao PDR compared to other countries. These challenges also encourage investors to use semi-legal and illegal means to get around the barriers.

This, in turn, may make some investors feel they have a carte blanche to ignore the government’s regulations on environmental protection for example. Investors operating outside of the regulatory framework create an unfair advantage over those who work within it. Foreign investors and traders from neighboring countries, sometimes flout laws and regulations, bypass district offices and act with too much impunity at village level. Domestic investors and traders do the same, sometimes in cooperation with local officials who do not yet fully understand the Party’s directions and codes of conduct. The nascent regulatory framework on doing business, whether foreign direct investment or domestic investment, will still require steady improvements over the next years. The government, however, is starting to crack down on investors who ignore environmental protection laws.

Cropping Disasters: Natural and Manmade

- Natural disasters such as pest plagues (rats, insects, crop diseases¹⁷⁷) wipe out harvests;
- Weather events (ex. extreme cold in 2016, drought, hurricanes and flooding) destroy crops, fields, homes;
- Boom and bust cropping cycles in areas of mono-cropping can wipe out people's capital, increase debts and poverty if a "bust" comes suddenly.

Climate Change

Climate change projections for the Mekong region as a whole, including the project area, based on a range of different scenarios, models and geographical scales, agree that the Mekong sub-region is predicted to experience a temperature rise of between 0.01°C and 0.036°C per year. Seasonal precipitation patterns will likely change, pointing to increased precipitation although significant risks of drier conditions and a longer dry season also exist, and increased incidences of extreme weather events such as typhoons

Climate-induced risks to the project

The ADB CRVA examined risks from both climate change and current climate variability. The findings suggest the following potential impacts of climate change on the programme area:

- Temperature increased
- Annual precipitation signals both for increase and decrease in different seasons (signals for increase in more studies)
- Shifts in seasons therefore;
- Agricultural productivity decreased, existing food scarcity increased
- Annual runoff increased, dry season runoff increased and therefore;
- Potential for increased flooding (not quantified)

The consulted studies do not warn of climate-induced risks for forest ecosystems. Research suggests that (tropical) forests are generally rather resilient to climate change,¹⁷⁸ although deforestation and forest degradation exacerbates their vulnerability to climate change. However, this topic may be under-researched – including in Lao PDR. The projections for Lao PDR indicate some potential future stressors for forest ecosystems such as seasonally reduced precipitation or increased drought, which could suggest a higher risk of more wildfires, changes in species composition or loss of biodiversity. Nevertheless, it remains generally uncertain, how the forest ecosystems especially in Northern Lao PDR will be affected.

¹⁷⁷ It was recently reported, for example, that a fungal disease, "fusarium wilt," has badly affected banana plantations in different parts of Lao PDR. See <https://apsjournals.apsnet.org/doi/10.1094/PDIS-08-17-1197-PDN>.

¹⁷⁸ For example: <https://www.nature.com/news/tropical-forests-unexpectedly-resilient-to-climate-change-1.12570>.

Risk assessment

The overall risk for agriculture and forests in the context of this project will likely be low, because the literature found climate impacts related to rain and water until mid-century and end-century to be considered weak.¹⁷⁹

In addition, the project is not expected to generate unintended negative impacts that increase GHG emissions or exacerbate the vulnerability of local people or ecosystems. The project is expected to positively contribute to climate change mitigation and adaptation, through reducing emissions from deforestation and forest degradation, and increasing the resilience of local livelihoods and ecosystems. Its agriculture support in general does not contribute to expanding agriculture, but improves skills, promotes climate-resilient agriculture practices, agricultural diversification and efficiency for improving the use of existing agricultural lands, and generating additional incentives for agri-MSMEs to invest in climate-resilient and deforestation practices and related value chains. Sustainable Forest Management (SFM) and Forest Landscape Restoration (FLR) will not contribute to diminishing resilience or adaptive capacity. They are expected to strengthen the resilience of ecosystems and the provision of vital ecosystem services (e.g., riverbank stabilization and improved flood control, reduced sedimentation). The project further has the potential to promote:

- The integration and consideration of climate information and risks in land-use planning and village forest management planning to reduce the exposure and strengthen the adaptive capacity of communities and economic activities
- Connectivity between habitats to increase the resilience of migratory species and ecosystems as part of FLR
- Restoration of degraded forests, and improved forest management considering the important role of forests in providing vital ecosystem services (e.g. carbon sequestration, protection from floods, micro-climate buffering, food provision, among others)
- Forest fire prevention practices mainstreamed within village forest management: The Village Forest Management and Implementation Manual” (technical manual) has a section on “Forest fire monitoring and control” and part of the forestry work done by the villagers will be to prevent and control forest fires.
- FLR and SFM in National Protected areas and National Parks to strengthen the resilience of these key areas for biodiversity protection.
- Comprehensive communication and exchange of information about topics of relevance for land users, policymakers and the broader public to understand the purpose and benefits of REDD+, climate change, climate risks and vulnerability and best practices for climate risk reduction in the agriculture and forestry sectors, and the need for behavioral change of business-as-usual land use
- Climate-informed village forest management planning using a landscape approach, taking into account multiple land uses, climate risk and risk reduction measures, and benefits across the project area.

¹⁷⁹ Climate Service Center Germany (2015): Climate-Fact-Sheet Cambodia – Laos. Updated Version.

In addition, the following adaptation action options were identified:

Forest ecosystems:

- Include climate-induced stressors in forest monitoring including national forest inventories.
- As part of management plans, forest landscape restoration activities, and improved protected area management promoted by the programme under Component 3, include wildfire management measures
- Promote establishing corridors between ecosystems in order to support connectivity and natural resilience (part of FLR).
- Support protection and sustainable management of forested watersheds.

Agriculture:

- Support to dry-season irrigation schemes, in Component 2 in partnership with ADB
- Capacity building and training on sustainable water harvesting techniques and reducing water needs through crop mix in partnership with ADB, FAO, and IFAD.
- Promotion of diversification in agriculture (opposed to increasingly prevalent monoculture land-use in the Northern provinces), and promotion of climate-resilient agricultural practices.
- The programme can promote risk mitigation processes, including, for example, reducing shifting cultivation and increasing vegetative cover on slopes and in upland areas in order to help reduce erosion and sedimentation that contribute to riverbank cutting and riverbed rise downstream, as well as landslides in steep areas.
- Capacity building for farmers on sustainable integrated pest and disease management, climate risk and risk reduction practices
- Land use planning can help improve land use practices, including reducing exposure to risk (e.g., identifying high-risk areas for landslides, flooding, etc.), and can support the planning, adoption and monitoring of sustainable land use processes that can help reduce risk (for example, increased forest cover can reduce the risk of flooding, landslides or wildfires in certain contexts). This will be strengthened under project 2 through the development of a climate change adaptation supplement for the PLUP 2.0 process, and mainstreaming climate change adaptation throughout all component and activities.
- Regular and comprehensive monitoring conducted within the framework of the programme at local level, including with various ethnic groups in order to benefit from their knowledge, can lead to early detection, follow-up and the identification of suitable management practices/adjustments as necessary.

Avoiding and mitigating maladaptation risks

Measures aiming at increasing the adaptive capacity of local populations to climate change are generally intended to have positive impacts on local livelihoods. However, adaptation measures

bear the risk to have negative side-effects (e.g. on neighbouring groups not directly targeted by the adaptation measures) or may even increase climate vulnerability in the long run due to short-term planning. In those cases, adaptation practices result into “maladaptation”.

Research identifies different ways in which development projects were found to cause maladaptation¹⁸⁰:

- **Adaptation measures can reinforce existing vulnerability and inequalities caused by the distribution of decision-making authority:** For instance, an adaptation project promoting agricultural development only for those owning land, while ignoring landless people, could end up further marginalizing those landless groups. Another example could be an adaptation fund aiming at providing financial support to local smallholders but coming with a bureaucratic process for registration, resulting in the exclusion those with low levels of education, resources and administrative capacities. Therefore, the risk of elite capture and inequalities in decision making structures, available resources and capacities need to be considered.
- **Adaptation can redistribute vulnerability with positive impacts at project site while creating negative impacts elsewhere:** Here a common example would be a hydroelectric dam and forest protection policies to regulate floods in lowlands, limiting the access to land and forest resources or mountain peoples living upstream. Consequently, adaptation measures need to consider potential landscape level impacts and should not focus exclusively on the intervention site.
- **Adaptation measures can create new risks and sources of vulnerability:** For example, promoting irrigation measures in agricultural production in areas that experience drought may cause positive short-term results. Yet, climate change will continue to curb water availability and may increase climate change vulnerability in the long run. Moreover, these measures can create a false sense of security from climate change induced impacts.

Causes for maladaptation in the context of development projects can often be found in poor activity design rooted in a lack of knowledge of the local social and ecological situation. Therefore, this risk can be addressed by careful stakeholder consultations and engagement in project design and implementation, considering or even addressing inequitable power distribution in the targeted areas. A thorough knowledge of local stakeholders, marginalized groups and elites, *“going beyond tried and tested networks to ensure that the most powerful people are not suppressing any voices”* is therefore key to prevent negative impacts of adaptation measures. Last but not least, the planning of adaptation measures should go beyond the project’s lifetime and consider long-term impacts of climate change.¹⁸¹

Proposed agricultural adaptation practices to be promoted by the project will be screened concerning their “maladaptation risks”. The investments proposed by the project are proven within

¹⁸⁰ Adapted from: Siri Eriksen et al, Adaptation interventions and their effect on vulnerability in developing countries: Help, hindrance or irrelevance?, World Development, Volume 141, 2021, p. 3-6. Available online: <https://doi.org/10.1016/j.worlddev.2020.105383>.

¹⁸¹ Adapted from: Schipper, E. Lisa F., Maladaptation: When Adaptation to Climate Change Goes Very Wrong, One Earth, Volume 3, Issue 4, 409 – 414. Available online: <https://doi.org/10.1016/j.oneear.2020.09.014>.

tested and recommended due to their climate-resilient properties and sustainable characteristics. Substantial guidance (e.g., extension sheets) has been developed for DAFO staff and Farmers to identify the most suitable crops and land use activities for the local context and environment (i.e. site-species matching), which will help ensure adequate matching of suitable investments with the local priorities of villagers. This process will be further strengthened under Project 2 due to additional capacity building and guidance for government staff (DAFO, PAFO) and local villagers on climate change, climate risk and vulnerability and best practices to strengthen climate resilience.

During the preparations of Project 2, a Climate Risk and Vulnerability Assessment has been conducted, indicating major climate risks and vulnerabilities in the project region, which has informed project design.

In order to ensure stakeholder participation during project design, consultations have been conducted at national, provincial and village levels. In general, stakeholders found the project is well fit for the national context and needs, and the strengthened focus on adaptation was well received. Sustained stakeholder engagement during project implementation will help ensure suitable planning, and tailored matching of suitable climate-resilient practices with local ecosystems and the priorities of local communities and will further enable active management in case there are unintended adverse impacts. For continuous stakeholder participation during project implementation, respective safeguard documents have been developed, including the ESMP, the Stakeholder Engagement Plan and the Ethnic Groups Development Plan (EGDP). Moreover, participatory approaches, such as the Participatory Land Use Planning (PLUP) form integral elements of the project. The inclusion of poor and marginalized groups is ensured through project indicators and a thorough M&E system.

Vector-borne diseases

A high number of vector-borne diseases is endemic in Lao PDR, these include Dengue and Malaria. It was found that vector-borne diseases pose a growing threat to the Mekong region, including Lao PDR. Economic growth factors have been found to exacerbate transmission of vector borne diseases, which include heterogeneous development, rapid urbanization, increased migration (especially rural-to-urban migration), rapid land-use change, and urban poverty. A study by Christofferson RC et al (2020) finds that “Human settlement and primary forest clearance patterns; the development of dam, drainage, and agricultural irrigation schemes; and, generally, greater exploitation of natural resources are all drivers influencing patterns of disease distribution and incidence”.¹⁸² The project foresees to promote sustainable land use patterns and the restoration of the forest landscapes, therefore it works against common negative side-effects of economic growth, such as transformation of land into monoculture, deforestation or forest clearing and aims to decrease rural poverty, thereby addressing rural-to-urban migration. As an outcome, it is not expected that the project area will be at risk of increasing outbreaks.

¹⁸² Christofferson RC, Parker DM, Overgaard HJ, Hii J, Devine G, Wilcox BA, et al. (2020) Current vector research challenges in the greater Mekong subregion for dengue, Malaria, and Other Vector-Borne Diseases: A report from a multisectoral workshop March 2019. *PLoS Negl Trop Dis* 14(7): e0008302. <https://doi.org/10.1371/journal.pntd.0008302>.

5.3.7.2 Mitigating and monitoring external risks

The risk level posed by factors external to the programme is both significant, and difficult to mitigate, due to the externality. Just as there are deforestation “hot spots,” some of the external risks are location specific, and do not necessarily mean “blanket” risks. Nonetheless, the degree of systemic external risk is significant and they may interact negatively with unintended negative impacts of the programme. Therefore, as part of the ESMP, the programme should regularly monitor and assess site specific external risks. Some of the external risks may be mitigated through intensive policy dialogues.

The programme management team will include a qualified staff member responsible for monitoring the impact of the programme and implementation of the Environmental and Social Management Plan (ESMP), including climate change related risks.

5.4 Information gaps that require attention

As the sections above show, much forest related data are available for the ER programme area, but the necessary socio-economic data are available only at provincial level, if at all and based on sources such as the Population and Housing Census, the Labor Survey and Statistical Yearbooks. Thus, there are some important information/data gaps that will require filling so that the programme may work with a reasonable socio-economic baseline. A baseline is imperative for various monitoring purposes, including monitoring of external risk and managing safeguards. Moreover, according to the Indigenous People Policy, monitoring records must also be kept of FPIC results. Obviously, a forest cover baseline and monitoring systems are at hand.

Much of the gap-filling will have to be done as the programme begins implementation in the selected districts. Some of the more important gaps are as follows:

Economic aspects/ investments and implications thereof

There is too little clear information at district level regarding the current, planned and/or approved investment and/or private sector engagement in the selected districts (partly available in the PRAPs). This information is crucial for two main reasons: (a) effect on land/forest access, use and control and livelihood security (concessions), and (b) what type of agricultural land use is likely with the crops promoted, including structuring of current value chains in the area (and what can be influenced). During implementation of Project 1, an Investment and Relocation Survey was done in two provinces (Luang Prabang and Sayaboury, see Info Box 2). Further studies will be conducted if required during implementation of Project 2.

Gendered livelihood analyses and situation of women of different ethnic groups

No updated and/or district specific data available from official sources. A separate analysis has been conducted in the framework of the gender assessment and gender action plan as part of the programme preparation process.

Village consolidation and/or relocation

This information may be checked at District level and in the Provinces. Two types of village movements should be checked for: administrative and investment project-related. This should also include investigations as to whether land only might be affected when it comes to investments. During implementation of Project 1, this information had been screened prior to the start of project activities. The survey identified two villages that might had to be relocated:

- Lornng Village, Xieng Ngern District, Luang Prabang Province
 - 3 offices had reported that there was relocation/resettlement (District Natural Resources and Environment Office, District planning and Investment office, DAFO)
 - There was an urban development project and a railway construction project
- Huay song Village, Hongsa District, Sayabouri Province
 - 2 offices had reported that there was relocation/resettlement (District Natural Resources and Environment Office, District Public Work and Transportation Office).
 - There was the Huay Song Village Relocation project and urban development project in Huay Song Village.¹⁸³

The project concluded to select two other villages for project implementation in order to ensure sustainability of activities. Similar screenings shall be conducted in the three additional provinces under Project 2.

Credit facilities

Credit facilities available to farming households in each of the districts by source and an estimate to what extent they are actually used. Statistics are available on the number of small and medium enterprises with access to financing (24.7% and 46.7% of small and medium enterprises, respectively),¹⁸⁴ and access to finance was ranked as the main barrier to growth for these businesses. In 2019, the “Mapping Study on Rural Finance Coordination and Provision in the Lao PDR”¹⁸⁵ has been commissioned by the Task Force on Rural Finance (TFRF) under the Sub-Sector Working Group on Rural Development (SSW G-RD). The study provides insights into the distribution of rural finance institutions, identifies different forms of available finance facilities, and identifies underserved areas and provides recommendations on how to address the lack of available finance. This study served as a basis for the financial assessment in the context of the feasibility study for Project 2.

5.5 Comparison of SESA results with the ESIA

A strategic environmental and social assessment (SESA) was conducted for Lao PDR’s Emissions Reduction Program by the World Bank (see Annex 12). The SESA was conducted utilizing a process including the following elements:

¹⁸³ GCF Project 1 Internal Survey Documentation “Investment and Relocation Survey for I-GFLL”.

¹⁸⁴ World Bank 2014 – Small and Medium Enterprise Access to Finance Project.

¹⁸⁵ “Mapping Study on Rural Finance Coordination and Provision in the Lao PDR” commissioned by the Task Force on Rural Finance (TFRF) under the Sub-Sector Working Group on Rural Development (SSW G-RD), 2019. Internal document.

- 1) iterative diagnostic work on socio-economic, environmental and institutional aspects of REDD+ readiness, including assessing existing capacities and gaps to address identified environmental and social issues; }
- 2) consultations with different stakeholders, identifying any possible stakeholder gaps;
- 3) identifying and confirming the environmental and social safeguards (World Bank Operational Policies potentially triggered by REDD+ activities during the implementation of the PRAPs).

The SESA process also drew on lessons learnt from past projects implemented in Lao PDR, particularly those that were supported by the World Bank such as the Sustainable Forestry for Rural Development Project (SUFORD).

As described above, this ESIA was based on a similar process – albeit with a focus on GIZ and GCF safeguards policies. Nonetheless, as described in Chapter 5 – these safeguards and standards are closely aligned with each other. The main difference is that the SESA had a substantially different scale and timeframe than the ESIA for the proposed programme.

The following Table provides a summary of the main findings of the SESA, including risks and challenges as well as potential solutions and mitigation strategies, and compares them with the ESIA. It further includes a brief description of how potential solutions and mitigation measures have been integrated into the design of the GCF programme. The two assessments came to similar conclusions, and their recommendations have been integrated into program design.

Table 27. Comparison of SESA with ESIA and Programme

Topic	Risks and/or challenges identified in SESA	Potential Solutions/ Mitigation from SESA	Included in the ESIA/ ESMP/ Programme?
Land	Little to no recognition of customary or community property rights for agriculture or forest land.	Changes to policies, laws and regulations governing forest and land; Assist local communities to have more awareness and understanding of forest laws and improve land tenure security	Yes – Participatory land use planning and improved tenure security (Activity 1.2.2), Law enforcement and monitoring (Activity 1.2.1), capacity building support to improve awareness of legal and regulatory framework, risks and challenges, as well as opportunities and rights (cross-cutting).
		Change policies, laws and regulations to give more recognition to local communities' common property rights and management;	This activity has been completed under Project 1. Therefore, the former activity 1.3 (i.e. from Project 1) will no longer be implemented since the support to necessary revisions of the regulatory framework has already been covered under Project 1.
	Slow and difficult allocation of land to communities, individuals, households (HHs).	Land allocation and recognition of a rural land title –this is long term solution	A new guideline on Participatory Land Use Planning was developed by Project 1 - called "PLUP 2.0". Implementation started and will be continued under Project 2. Department of land to support with developing and implementing systematic land registration, based on the PLUPs developed. Additional support is needed from the government for formal land allocation, however the programme supports communities to obtain a crucial first step in obtaining secure land use rights. There is a WB and KfW initiative to conduct nationwide land registration (GIZ will play a role as well). The GCF programme is providing crucial preliminary work in terms of Land Use Planning
	Inadequate upland production land (reducing with implementation of agriculture and forest zones around villages).	Improve participatory land use planning (PLUP) and SFM (but may introduce additional safeguard and gender issues)	Yes – PLUP (Sub-Activity 1.2.2.2), combined with technical and financial support for agriculture (Component 2) and climate change mitigation/adaptation action through forestry activities (Component 3). Close monitoring will help identify potential safeguard and gender issues. In addition, the program's gender action plan includes concrete measures to reduce risks

Topic	Risks and/or challenges identified in SESA	Potential Solutions/ Mitigation from SESA	Included in the ESIA/ ESMP/ Programme?
			and enable women to positively benefit from PLUP, SFM and other program activities. The programme's community development planning framework further provides concrete measures that will be implemented to closely monitor and mitigate risks, and enable men and women from diverse ethnic groups to benefit from the programme's activities.
	No participatory land use planning (PLUP).	Improve and standardize PLUP processes (currently these are very variable across provinces and districts)	Yes – Sub-Activity 1.2.2.2 implements PLUP in hotspot areas.
	Land conflicts between different parties.	Support for mediation, feedback and grievance redress mechanism	Yes – Support provided through the programme's grievance redress mechanism (see Section 7.5).
	Natural forest land no longer allowed to be allocated as concessions any parties except organizations.	Strictly limit allocation of concessions (already a stated Government of Lao objective but there are differences in different provinces) Improved PLUP agricultural and forest land zoning in upland areas so that farmers have adequate agricultural land of sufficient quality	Yes – Project 1 has supported the revision of the NDC and the REDD+ Actions Plans have been mainstreamed into provincial SEDPs. Project 2 will no longer implement this activity as it has been finalized.
Livelihoods and forest dependency	Food (rice) security remains problematic.	Much improved extension system required (but limited mechanisms, capacities);	Yes – Training module development, training trainers and extension agents (cross-cutting in components 1-3), PLUP to inform suitable land use activities (agricultural management planning – land zoning, etc.), monitoring of land use plans (Sub-Activity 1.2.2.2), and provision of technical support to enable the implementation of land use plans using sustainable and deforestation-free agricultural practices (Component 2),
	Ethnic group livelihoods highly land-dependent.	Models suitable for upland farming systems need to be developed with small ethnic farmers, especially;	Yes – Models to be developed for sustainable upland farming systems to be developed through participatory approaches together with smallholders (Components 2 and 3). Models and land use planning to be based on lo-

Topic	Risks and/or challenges identified in SESA	Potential Solutions/ Mitigation from SESA	Included in the ESIA/ ESMP/ Programme?
			cal conditions, and provide diverse options to be discussed with local communities based on the local context and conditions.
	Remote upland areas with few alternatives to current limited set of livelihoods activities.	Action research on value chain development with focus on uplands;	Yes – Activities within Components 2 and 3 to also develop alternate livelihood models and strengthen livelihood opportunities from sustainable natural resource management.
	Limiting access to forest land resources.	Increased support for forest co-management models so that small farmers continue to have adequate access to forested areas;	Yes – PLUP (Sub-Activity 1.2.2.2) to create clear land use plans based on a participatory and inclusive process, co-management promoted in Component 3, and Activity 2.1.3. Additional activities, such as law enforcement and monitoring (Activity 1.2.1), aim to also strengthen communities' role in monitoring and enforcement.
	No system of compensation for limiting or cutting off people's access to forest land resources.	Resettlement safeguard must also include compensation for limiting access to forest resources (i.e., NTFPs, cattle grazing areas, etc.); It will be necessary to identify sustainable income generation activities that enable affected persons to be at least no worse off as a result of limiting access to forest resources and ideally better off. Should be change in PLRs to assist local communities claim against forest owners and others that limit their access to needed resources;	Yes – PLUP promoted in a participatory and inclusive manner. Sustainable income generation and livelihood activities will be identified that aim to ensure affected persons benefit or at least are not worse off (components 2-3). Nonetheless, the programme proposes to follow the Resettlement Policy Framework developed for the Lao PDR Emission Reductions Programme (see Annex 13). A programme-specific grievance redress mechanism has also been developed, which will be communicated to all programme beneficiaries and stakeholders (see Section 7.5).
	Cash poverty among semi-subsistence small farmers.	Cash poverty intractable problem in the short run.	Yes – Provision of village-based grants for sustainable activities in target villages within the framework of Component 3. Co-investments and support for the implementation of Activity 2.1.3. Provision of capacity development and technical support. Activity 1.1.1 to

Topic	Risks and/or challenges identified in SESA	Potential Solutions/ Mitigation from SESA	Included in the ESIA/ ESMP/ Programme?
			strengthen finance opportunities for sustainable land management.
	Heavy reliance (rural and urban) on fire-wood.	Promotion of community woodlots with suitable species, promotion of alternative energy sources, fuel efficient stoves	Partial – Woodlots can be developed through Component 3. Fuel efficient stoves not covered within the programme.
		More awareness needed of NPAs so that they ensure biodiversity in their areas for local HHs;	Yes – NPA management (Activity 3.2.1) aims to raise awareness of the importance of NPAs, while also providing clear mechanisms for local communities to benefit from the sustainable management of NPAs (through voluntary co-management agreements).
Potential to benefit from forest land	Limited investment options for allocated forest land.	Change rules on large forest owners' re-allocation of land to communities (if poor quality, they have to co-invest with small holders, or it has to be of certain minimum quality before handover);	Partial – PLUP to strengthen recognition of local community rights (Activity 1.2.2.2), co-management within Components 2 and 3. Activity 2.3 from Project 1 to enable co-investments with private sector in degraded areas. Re-allocation of land to communities from large forest owners is linked to a larger political process, which goes beyond the scope of the programme. See previous comment on forthcoming WB, KfW project.
	Limited inputs of poor quality available (e.g. lack of good quality seedlings and other agricultural inputs).	Good quality seedlings must be certified by a competent seed certification. Ensure that directions of use for other inputs are in Lao language	Partial – Co-investments in seeds and other (non-chemical) inputs within Component 2, and seedlings for implementation of forest restoration provided in Component 3. Guidelines to be developed for various activities in Components 2 and 3 to be provided in Lao, and where necessary other local/ethnic languages.
	Policies, laws and regulations do not promote smallholder chances to benefit from forest.	Improve policies, laws and regulations	This activity has been completed under Project 1. Therefore, the former activity 1.3 (i.e. from Project 1) will no longer be implemented since the support to necessary revisions of the regulatory framework has already been covered under Project 1.

Topic	Risks and/or challenges identified in SESA	Potential Solutions/ Mitigation from SESA	Included in the ESIA/ ESMP/ Programme?
	Timber harvesting only allowed under limited circumstances.	Development of sustainable forest management models based on community-based forestry with simplified regulations;	This activity has been completed under Project 1. Therefore, the former activity 1.3 (i.e. from Project 1) will no longer be implemented since the support to necessary revisions of the regulatory framework has already been covered under Project 1.
Gender/ social exclusion	Women disadvantaged on access and use of land.	Any solution has to be long term, wanted by society and promoted by government (major challenge);	Partial – GAP includes various measures aiming to engage women in PLUP (Activity 1.2.2.2), law enforcement (Activity 1.2.1), training (cross-cutting), and village management structures (e.g. Component 3), among other programme activities. However, as mentioned, it is a long-term issue that needs to be integrated in the ongoing reviews of the forest and land laws (going beyond the scope of the proposed programme)
	Women's rights to land less secure than men's.	Whole issue of land titles in rural areas needs to be updated to reflect the current in-security as well as women's rights to land (included as part of the review of and improvement of the land and forest laws underway at present) but is clearly a long-term solution	
	Ethnic women have greater need for common property rights, especially related to forest.	Ensure that information is available in local languages and orally (use of radio and TV in local languages); where possible and practical. Some of the Mon-Khmer languages spoken by ethnic groups and the Hmong language do not readily lend themselves to written translation	
	Women's access to information less than men's.	More attention to targeting women by facilitating if deemed necessary separate consultations with village women facilitated by a female facilitator in the language of women's choice	
	Women's active involvement in consultations less than men's.	More attention to times of meetings	
	Poor persons (women and men) less likely to receive adequate information.	More attention to targeting and focusing on involvement of poor households	

Topic	Risks and/or challenges identified in SESA	Potential Solutions/ Mitigation from SESA	Included in the ESIA/ ESMP/ Programme?
Institutional framework	Extension services for forestry and upland agriculture very weak.	Long term programme to overhaul extension systems to reach uplands areas that are evidence driven and based on the specific needs of different localities;	Yes – Experts to support the development of training modules and training of trainers, and trainings to be implemented using various approaches aiming to integrate men and women from diverse cultural and education backgrounds, whilst also considering differing local needs, contexts and interests.
	Limited exposure to participatory approaches.	ODA required to impart participatory approaches/techniques and/or work with local applied social research institutes that either have a demonstrated track record in participatory approaches or have signaled their ability and willingness to be involved with such approaches;	Yes – all staff will be trained on gender, social inclusion and measures related to the effective engagement of members of diverse ethnic groups in trainings, and consultations. In addition, participatory approaches are at the core of the programme's activities where local villagers from diverse ethnic groups will play a core role in actively participating and shaping programme implementation (e.g. Participatory Land Use Planning, development and implementation of Village Forest Management Agreements, etc.). See the stakeholder engagement plan for Project 2 included in FP Annex 7.
	Limited staffing and budgets.	Staffing and budgeting another intractable issue (relates to larger civil service reforms, quotas, etc.);	Partial – Additional co-finance from the government of Lao PDR has been secured to provide key staff to support program implementation. The programme also aims to institutionalize trainings and capacity building to ensure consistent knowledge of staff, and ease with training and onboarding new staff to prevent the loss of knowledge and learning within government institutions. However, limited government budgets are unfortunately a reality in Lao PDR, and the program is unable to fully solve this challenge.
Consultation	How to do FPIC with adequate numbers of local communities, especially with ethnic	Training and involvement of students and youth (especially from ethnic minority groups	Yes – the consultations and stakeholder engagement processes aims to engage men and women from diverse

Topic	Risks and/or challenges identified in SESA	Potential Solutions/ Mitigation from SESA	Included in the ESIA/ ESMP/ Programme?
	people (no legal provision for FPIC in PLRs).	and especially of younger women) to help provide information and undertake at least some consultations;	ethnic groups, and age groups. CSOs and other institutions (LWU and LFND) will also play an important role in engaging diverse people in the programme.
		Always ensure translators are present at meetings with ethnic groups that do not speak Lao language	Yes – included in the costs of consultations, and in budget lines for information materials, guidelines, etc.
	REDD is seen as a risky approach. The overall approach of REDD+ itself makes consultations and FPIC difficult. Unclear performance related payments is not a realistic plausible way to convince smallholder farmers of any ethnicity or gender to participate.	Benefit sharing mechanism and plan were not clear at this stage, and there is little understanding at the village level. Inherent problem with the REDD+ approach	Benefit sharing mechanism and plan for the ER-Programme is available.
	CSOs in Lao are small and seldom include ethnic group among their staff and face operational difficulties resource constraints etc.	CSOs should be facilitated to participate in REDD+ (including capacity building for them), but only in limited areas	Yes – CSOs will be invited to participate in dialogue platforms, including representatives from the LEGT Lao CSO Core Committee, among others, who can bring long-standing insight to support local villages to sustainably manage land resources and strengthen local livelihoods.
		Train Lao women's unions to help facilitate women only meetings in the villages; Already happening training will help but quality is an issue.	Yes – included in within the Gender Action Plan
PLR Framework	No real definition of customary; little recognition of customary rights anywhere in policies, laws and regulations, and limited recognition of community rights.	Need to revise key policies, laws and regulations, and ensure that adequate implementation circulars are issued;	Partial – Project 1 supported revision of policies, laws and regulations, as well as strategies, guidelines, and other documents to ensure documents are gender and ethnically sensitive, and promote best practices for social inclusion and engagement. However, additional revisions are needed in the legal framework that extend beyond the scope of this project (affecting multiple sectors, and a much broader range of
	Little recognition of any special rights for ethnic groups and different socio-cultural relations to land and forest management; The new Land Law is expected to make good progress in recognizing customs and	Slow progress on adopting new land and forest laws.	

Topic	Risks and/or challenges identified in SESA	Potential Solutions/ Mitigation from SESA	Included in the ESIA/ ESMP/ Programme?
	improving rural land tenure security and providing titles to rural communities.		actors/stakeholders). It is a slow process, and difficult for the programme to mitigate this.
	Benefit sharing mechanism and BSP not defined or clear especially at village level.	Under preparation	Benefit sharing mechanism and plan of ER Programme are available
	Carbon rights not yet included in policies, regulations and laws.	Carbon rights required	No – The FCFP Readiness Support is working on a decision on carbon rights in conjunction with benefit sharing plans (ongoing). New Forest Law will also cover the issue of carbon rights.

An Environmental and Social Management Framework (ESMF) has been developed for the ER Programme, to accompany the SESA and support the operationalization of safeguards management (see Annex 12). The ESMF was carefully reviewed during development of the ESIA and ESMP for Project 2 in order to ensure alignment and consistency of the two documents.

In addition, a Resettlement Policy Framework was finalized for the Emission Reduction Programme, acknowledging that there are potential risks to livelihoods due to the programme's activities (as described in the previous sections). It is a comprehensive framework, which provides guidance to establish resettlement principles, organizational arrangements, funding mechanisms, eligible criteria, and monitoring and evaluation processes, along with a standalone involuntary process framework. It includes the following principles:

- Minimize negative or adverse impacts as much as possible
- Carry out land adjustment or compensation to improve or, at least, restore the programme income and living standards of programme-affected people/households.
- Ensure free, prior and informed consultation with program-affected people/households on land '*donation*',¹⁸⁶ land acquisition and compensation arrangements, and ensure the process is well documented; and
- Provide compensation, if applicable, for private assets at replacement rates, prior to the commencement of works.

The monitoring and evaluation of the implementation of the resettlement action plan will be maintained by DoF/MAF as described in the framework. The policy framework is attached as Annex 13.

¹⁸⁶ Donation of land or other assets (including restrictions on asset use).

6 ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT, MONITORING AND EVALUATION

The project is expected to have greater environmental and social benefits than adverse impacts. Potential adverse impacts are likely to be small to moderate, and site-specific/ localized. Such adverse unintended impacts must be identified at an early stage through activity and action screening, and appropriate avoidance, mitigation and management measures integrated into programme planning, implementation and monitoring.

6.1 Environmental and social risks and proposed mitigation measures

Risks and Mitigation Measures for Outcome 1: “Governance and the implementation of low-emission and climate informed planning is strengthened, and sustainable financing sources are accessed”

Table 28: Risks and Mitigation Measures for Outcome 1

Project Activity	Identified risks	Mitigation Measures
Output 1.1 Organizational structure and capacities of domestic (financial) institutions are strengthened to access, mobilize, manage, and monitor the use of climate finance from diverse public and private sources		
Activity 1.1.1 Climate change funding window and sustainable finance	<ul style="list-style-type: none"> • EPF: The first readiness grant supported the development of manuals for project management, strengthened fiduciary standards, environmental and social safeguards & gender and the M&E system was updated to meet GCF requirements. • The EPF will develop guidelines for managing matching grants to agri-MSMEs under Activity 2.2.1. See respective activity for safeguards risks and mitigation measures below. 	<ul style="list-style-type: none"> • “Strengthening the EPF’s Safeguards Capacity” is not mentioned as specific area of support in Project 2 (see Activity 1.1.1 in the Funding Proposal) and therefore the EPF’s Safeguards Capacity is not part of Project 2 ESMP.
Output 1.2 Participatory Village Land Use Plans are developed and are climate informed and integrate measures to strengthen climate resilience		
Activity 1.2.1 Law enforcement and monitoring	<ul style="list-style-type: none"> • Law enforcement activities may affect customary land-use or access to cultural heritage / places of spiritual importance, if not considerate of local realities or inappropriately restrictive • Vulnerable groups such as women and ethnic groups might not be adequately considered in law enforcement activities and monitoring if no precautionary measures are taken. 	<ul style="list-style-type: none"> • The EGDP foresees measures to respect customary use of lands and forests, territories and resources and rights related to cultural and spiritual heritage and values, traditional knowledge, resource management systems and practices, occupations and livelihoods, and ethnic groups’ institutions. • The ESMP includes adequate regulations to ensure that customary land-use is not restricted due to the programme. FPIC and PLUP will be implemented upstream to avoid the initiation of activities without being sure that all ethnic traditions, values and customary land use are respected. • Further, the ESMP requires meetings at a village level, with appropriate translators or ethnic language speakers, with village groups split by gender, to discuss potential impacts of project activities, both positive and negative, before the commencement of activities.

		<ul style="list-style-type: none"> The GAP will ensure that women are engaged in trainings and activities related to the Provincial Deforestation Monitoring System and law enforcement. This includes gender-responsive mechanisms for community monitoring.
Activity 1.2.2 Land-use planning and improved tenure security	<ul style="list-style-type: none"> No land acquisition, resettlement, or economic displacement is intended or expected by the project, but it cannot be completely ruled out that land-use planning activities reduce or deny access to land with unintended negative livelihood impacts. While the programme has been designed to benefit men and women from diverse ethnic groups in the programme area, unintended adverse risks may affect ethnic groups living in the project area (e.g. land use planning may conflict with customary land use). This risk is assessed as low. 	<p>The ESIA proposes adequate mitigation measures to reduce the remaining risk of unintended negative livelihoods impacts within the land use planning exercises:</p> <ul style="list-style-type: none"> Implementation of participatory land-use planning, based on proven best practices, and regular consultations to ensure an inclusive process that enables all village members to benefit from the programme. The ESMP foresees respective measures in ESMP Action 5 „Land Use Issues, Land acquisition and Involuntary Resettlement“. For all target villages, the land use plans are developed in a participatory manner and includes the free, prior and informed consent (see FPIC below) before activities start. This allows to detect and solve any issue that could arise. Generally, this exercise does not confer legal tenure unless put into new laws and regulations. Therefore, the project does not work directly on land titling and land tenure laws. Technical support through capacity development / trainings and extension agents following an inclusive approach to reach vulnerable groups such as women and ethnic groups. Project implementing partners will be trained on inclusive approaches, participatory land use planning (PLUP) and FPIC (ESMP Action 2). The GAP will ensure that PLUP teams will be trained on GESI to reflect the differentiated contexts, needs and priorities of men and women from diverse ethnic groups within villages. Application of FPIC in three phases, starting with an informatory meeting (FPIC 1), followed by awareness raising and consultation (FPIC 2) and concluded by a formal signing ceremony (FPIC 3), as regulated in ESMP Action 3. Ensure participation of women in FPIC process through GAP, requiring at least 40% women in FPIC 1-3 meetings. Development of new/revised guidelines on land use planning explicitly consider gender (included in GAP) An Ethnic Group Development Plan has been developed to promote social inclusion, provide a targeted approach for ethnic groups to benefit from the project's activities, and ensure the project does no harm.

		<ul style="list-style-type: none"> • All information on project activities will be made easily accessible, and in appropriate ethnic languages. Land use planning activities will also be conducted in appropriate ethnic languages, where translators can be made available if necessary. • A project level GRM has been put in place. The GRM guarantees that stakeholders are fully informed on how to register complaints, including full contact details for anyone to lodge a formal complaint.
	<ul style="list-style-type: none"> • The project operates in areas where, according to public records, UXO presence in the ground is rare and accidents have not occurred in recent years. Preventive procedures are in place, including district-level UXO maps and clearance maps. On the other hand, even if rare, UXOs accidents cannot be ruled out entirely, including after floods, landslides or other extreme weather events that affect the ground. 	<ul style="list-style-type: none"> • Project sites need to be confirmed clear of UXO before any programme activities can be under-taken. • The ESMP Action 7 „Health and Safety“ requires UXO checks to be conducted during village selection to avoid that any village with high UXO risk is selected. • The project will comply with national preventive procedures with regards to UXO put in place by the GoL. This means that project sites will need to be confirmed clear of UXO before any activities can be undertaken. Villages with high UXO risks are not selected to be part of the project.
	<ul style="list-style-type: none"> • During project preparation and consultation, no cultural heritage places, building or monuments were identified in the project area (i.e. where access could become an issue). Nonetheless, residual uncertainty remains. 	<ul style="list-style-type: none"> • If objects of cultural heritage are uncovered by the project, the procedures described in the Lao PDR Emission Reduction Programme’s ESMF will be followed, as described in Section 4.3 “Chance Finds Procedure”, part of Chapter 4 “Potential Impacts and Mitigation Measures” (see Annex 12 ESMF)).
Activity 1.2.3: Knowledge management, FPIC, safeguards and gender	<ul style="list-style-type: none"> • The activity is cross-cutting and will ensure that activities concerning FPIC, safeguards and gender are implemented according to the instruments developed for the project (ESIA, ESMP, GAP, EGDG) 	<ul style="list-style-type: none"> •

Risks and Mitigation Measures for Outcome 2: “Vulnerabilities of villagers are reduced and their livelihoods are improved by being able to engage in climate resilient, deforestation free value chains and access to markets”

Table 29: Risks and Mitigation Measures for Outcome 2

Project Activity	Identified risks	Mitigation Measures
Output 2.1 Villagers are trained by capacitated government staff and enabled to produce sustainable, climate resilient and deforestation free agricultural and agroforestry products, strengthening their access to sustainability-oriented markets		
Activity 2.1.1 Promotion of sustainable, climate informed and deforestation free agricultural practices and technologies	<ul style="list-style-type: none"> • Promoted agricultural practices are all considered “good agricultural practices” and are expected to often have positive environmental impacts (e.g., reduced soil erosion, improved soil quality, etc.). • Loss of residual biodiversity at small-scale cannot be ruled out when changing agricultural production systems. • Some agricultural practices to be promoted by the project bear certain risks (e.g.: Maize and Cassava induce risks of monocropping and inappropriate use of agro-chemicals, new paddy fields or rubber plantations bear the risk of smallholders switching to unsustainable practices in the long-term. • 	<ul style="list-style-type: none"> • Promotion of multi-cropping approaches, such as Maize and Cassava intercropping with soybean/mung bean • Provision of adequate training for trainers and extension support to local farmers • Development of financial mechanisms that combine public and private capital in order to promote private sector investment in climate projects (see Activity 2.1.2) • Capacity building and awareness raising on best practices to enhance biodiversity and enable forest landscape restoration. • The PLUP process will ensure that existing biodiversity, ecosystems, ecosystem services and cultural heritage are safeguarded
	<ul style="list-style-type: none"> • Further impacts on ecosystem health and biodiversity could result from inappropriate agrochemical use, although the project will neither procure nor promote agrochemical use. • The upscaling of production of funded MSMEs can lead to an increased production of waste and pollution. • There is a risk of lacking labor and occupational health and safety standards at the MSMEs. 	<ul style="list-style-type: none"> • The project will follow the Lao Pesticide Law, and the Pesticide Management Plan (PMP) developed for the ER-PD’s ESMF that prohibits agrochemicals, and promotes awareness raising on pesticide safety procedures. The adopted version can be found in Annex 10 of the ESIA. Furthermore, the project will promote of agrochemical-free agriculture through the application of good agricultural practices, therefore the use of chemical agricultural input will not be promoted. • The business and investment plans to be developed by the MSMEs to be eligible for funding will include information on the management of waste and pollution during production. A link to sustainability will have to be clearly demonstrated for consideration for accessing a matching grant. • The funding agreements for accessing a matching grant will require the observation of national labor laws and regulations by the Agri-MSMEs. The World

		Bank Environmental, Health and Safety (OHS) Guidelines will be applied proportionate to the risk and as adequate to the scope of the project.
	<ul style="list-style-type: none"> There is the risk of exclusion of marginalized and vulnerable groups, such as women and ethnic groups from the development of deforestation free agricultural practices and technologies. 	<ul style="list-style-type: none"> The EGDP will ensure fair representation of ethnic groups, women, men, in the processes of promoting deforestation-free agricultural practices and technologies. IPP expert is to create special measure for poorer/landless HH to gain access to business information, including off-and-on farm activities and provide long-term business development vision through capacity development and pro-poor strategies. The Gender Action Plan includes measures to sufficiently include women in the development of sustainable agricultural practices, including quotas for trainings (e.g., business capacities, financial literacy), and for the participation in PSAP meetings and related trainings. The project's target is that 50% of the beneficiaries adopting improved and/or new climate-resilient livelihood options are female.
Activity 2.1.2 Investments in sustainable climate informed and deforestation free agricultural practices and agroforestry	<ul style="list-style-type: none"> There is the risk of exclusion of marginalized and vulnerable groups, such as women and ethnic groups from the Village Forestry and Agriculture Grants (VFAG) 	<ul style="list-style-type: none"> The GAP introduce quotas for the participation of women in the VFAG set up and committees (at least 40% female participation) The EGDP will ensure that ethnic group members are represented in VFAG committees. It will further ensure that representatives of the ethnic groups are included and consulted with regarding potential private sector investments.
	<ul style="list-style-type: none"> If no precautionary measures are taken, there is a risk that the project may unknowingly cooperate with business partners that knowingly or unknowingly are engaged in unethical practices related to land use. This is for investors in the matching grants which might result in attempts of land-grabbing. 	<ul style="list-style-type: none"> The Feasibility study developed a set of eligibility criteria and foresees the development of "Business Partner screening" tools which will be used with every single potential "Matching-Grant" investing company. Passing the screening process is required before any agreement is developed with the project. The screening will assess potential risks of unethical practices and tenure security and exclusive respective businesses from participation. Further, the use of funding from matching grants will be constrained by an exclusion list (as per IFC Performance Standards) and by a positive list of categories and uses (e.g., certification of sustainability, quality and GMP). A link to sustainability will have to be clearly demonstrated in the business and investment plan that will be submitted for consideration for accessing a matching grant.
	<ul style="list-style-type: none"> Investments can lead to increasing production and therefore pose a risk for pollution and 	<ul style="list-style-type: none"> The business partner screening is done to safeguard a number of issues: negative impacts on biodiversity, no use of chemicals, social responsibility. The

	waste production depending on the scale of operation.	screening involves a self-assessment by the MSME, which mentions among other questions the "types of wastes produced in regular operation" and the availability of "environmental and health and safety permits". The second section is an open "confirmation by local authorities" regarding the known history/behavior of the company relative to ESS. If waste production is an issue, waste management will be included in the business development plans.
	<ul style="list-style-type: none"> The project will promote deforestation free agriculture. Therefore, the risk of deforestation and a negative impact on biodiversity due to agricultural expansion is assessed as low. 	<ul style="list-style-type: none"> Agricultural practices will be promoted on agricultural land only, not deforestation will be promoted to gain land for agricultural purposes. The project will improve monitoring of deforestation risks as it supports the development of Provincial Deforestation Monitoring Systems (PDMS) that will speed up the detection of deforestation and improve monitoring and law enforcement. Project 1 supported the revision of standard operating procedures, provided trainings on Provincial Deforestation Monitoring Systems (PDMS), and supported the implementation of PDMS in 3 provinces (Houaphan, Sayabouri, Luang Prabang). Activities are planned to be continued under Project 2.
Activity 2.1.3 Sustainable rural infrastructure watershed management	<ul style="list-style-type: none"> Activity 2.1.3 is fully co-funded by ADB. It builds on the ongoing ADB initiative, "Sustainable Rural Infrastructure and Watershed Management Sector (SRIWSM)" project and the "Partnerships for Irrigation and Commercialization of Smallholder Agriculture (PICSA) funded by IFAD. Safeguards are covered by the ADB initiative. 	<ul style="list-style-type: none"> The activity focuses on watersheds in addition to PLUP and VFMP, as promoted by project 2. This includes capacity building and training on sustainable water harvesting techniques and reducing water needs through crop mix. The yearly on-site monitoring of the implementation of the Annual Operational Plans will allow to assess that the relevant measures are properly in place. Yet overall the ADB co-funded activities are monitored through a separate system.
Activity 2.1.4 Implementation of benefit sharing plan for sustainable, climate-informed and deforestation free agriculture	<ul style="list-style-type: none"> Activity 2.1.4 builds on the Lao ER-Programme (GFL), the FCPF-ERPA and implementation of the associated approved BSP. This activity is exclusively financed using World Bank co-finance. Safeguards are covered by the FCPF-ERPA initiative. See also Table 25. containing a comparison of SESA (conducted by FCPF-ERPA) with ESIA (conducted by Project 2). 	<ul style="list-style-type: none"> Actions have been undertaken to seek the convergence of the GCF funded Project 1 and the FCPF-ERPA to enhance their efficiency and effectiveness. These coordination actions will be continued under GCF Project 2 and include the use of "joint" implementation arrangements for steering and management.
Output 2.2 Agri-micro, small and medium enterprises (MSMEs) are capacitated, and have improved incentives and access to finance to invest in marketing and processing for locally sourced deforestation free and climate resilient agricultural products		

Activity 2.2.1 Catalysing private sector investments in sustainable climate-informed and deforestation free value chains	<ul style="list-style-type: none"> • The project does not contribute to expanding agriculture, but improves skills, promotes climate-resilient agriculture practices, agricultural diversification and efficiency for generating additional incentives for agri-MSMEs to invest in climate-resilient and deforestation practices and related value chains. • Yet, the MSMEs are characterized by poorly equipped enterprises that focus on low value raw products and depend on monocropping systems without sufficient quality management. This creates the need for suitable due-diligence criteria to be developed that ensure sustainable financing but also enable the participation of poorly equipped enterprises. Moreover, a monitoring of private sector agri-MSMEs is needed to ensure sustainably sourced products. 	<ul style="list-style-type: none"> • Establishment of exclusion and eligibility criteria for screening agri-MSMEs (see Project Operations Manual in Annex 21 of the FP). • Promotion of cooperation with actors with a track record on corporate social responsibility. This could include screening investors interested in working with the project to see if they have appropriate environmental and social governance policies, and records of accomplishments in place.
	<ul style="list-style-type: none"> • Vulnerable groups, such as ethnic groups or women, could be excluded from the MSME matching grant system if no precautionary measures are taken by the project. 	<ul style="list-style-type: none"> • The Gender Action plan formulates a number of measures to ensure sufficient inclusion of women and female-owned enterprises. These includes a quota of at least 30% of supported agri-MSMEs to be women-led, business skill development activities targeting female entrepreneurs and the integration of gender aspects into the overall MSME screening process. • The EGDP will ensure that representatives of the ethnic groups are included and consulted with regarding potential private sector investments. It will further monitor and regularly report on the number of ethnic men and women, and number of ethnic groups who access the agri-MSME matching grants.

Risks and Mitigation Measures for Outcome 3: “Sustainable management, protection and rehabilitation of forest ecosystems is improved”

Table 30: Risks and Mitigation Measures for Outcome 3

Project Activity	Identified risks	Mitigation Measures
Output 3.1 Village Communities are trained by capacitated government staff and have the financial resources to implement sustainable (village) forest management plans that contribute to REDD+ and strengthen the resilience of forest ecosystems and the livelihoods that depend on them		
Activity 3.1.1 Village forest management	<ul style="list-style-type: none"> There is a risk that women are not adequately included in village forest management activities and related benefit sharing arrangements. 	<ul style="list-style-type: none"> The gender action plan established a quota of at least 40% women as recipients of “Cash For Work” for Village Forest Management activities. Guidelines for the creation of local village forest management committees will be gender-responsive to ensure the accessibility for women and the poor. The GAP foresees a quota for Forest Management Committees that consist of at least 30% women. Women will be actively included in the formation of community-based patrolling groups. The project will support women led groups by capacity development and awareness raising. The objective is that at least 30% of the patrolling groups are women-led.
	<ul style="list-style-type: none"> Sustainable Forest Management and Forest Landscape Restoration will not contribute to diminishing resilience or adaptive capacity. Instead the project has the potential to increase resilience and climate change adaptation. The VFMP (and PLUP) approaches raise awareness on, and promote restoration of degraded areas and establishing corridors between ecosystems in order to support connectivity and natural resilience (part of FLR). There is a risk of maladaptation if local conditions and needs are not adequately considered. Forest management activities bear a low risk of introducing invasive species, pests or diseases to the local forest areas and therefore threatening local biodiversity. 	<ul style="list-style-type: none"> Management plans for village forests (VFMP) and protected areas are developed, the management plans shall include adaptation measures, e.g. improved fire prevention measures (fire breaks), fire control or FLR measures with adaptive native species. The risk of mal adaptation will be addressed by conducting Climate Risk and Vulnerability Assessment in a participatory manner, further, capacity development will be promoted on climate risk and vulnerability for local communities. Best practices will be promoted that have been trialed and tested in the project region. For natural restoration in VFM the use of native species will be promoted. Within protection and conservation forests, only native tree species will be promoted if any planting is to occur. The selection of species will be based on the principle of site-species matching, which ensures that promoted species have suitable characteristics given the environmental and bio-geophysical conditions. Natural regeneration has priority over assisted regeneration, but of course it is dependent on specific site conditions.
Activity 3.1.2 Implementation of benefit sharing plan for sus-	<ul style="list-style-type: none"> Adequate mechanisms need to be put in place to ensure that vulnerable groups have access to the benefit sharing mechanisms implemented by the project 	<ul style="list-style-type: none"> The project will incorporate measures towards poorer and vulnerable groups in the implementation plan ensure equal access to project benefits. Concerning safeguards arrangements, see Activity 2.1.4

tainable forest management (SFM) and forest landscape restoration (FLR)	<ul style="list-style-type: none"> • Activity 3.1.2 builds on the Lao ER-Programme (GFLL), the FCPF-ERPA and implementation of the associated approved BSP. • Through World Bank co-financing, this activity will sustain the implementation and results of activities under component 3 of GCF Project 2, with specific linkages to activities 1.2.1 on land use planning and 3.1.1 on the development and implementation of Village Forest Management Plans. 	
Output 3.2 National Protected Area (NPA) management plans are revised and communities are enabled and actively engaged in implementing village forest conservation agreements in NPAs that enable sustainable forest management and forest conservation		
Activity 3.2.1 National protected area (NPA) management	<ul style="list-style-type: none"> • Project activities in NPAs and national parks will need to closely monitor potential adverse impacts on biodiversity. • Lack of awareness of NPA and biodiversity protection at household level • 	<ul style="list-style-type: none"> • Project 2 will further strengthen climate change awareness and include an enhanced emphasis on climate risk and vulnerability and resilience building within forest management plan development, implementation and monitoring processes for protected areas. • As part of management plans, forest landscape restoration activities and improved protected area management promoted by the programme include wild-fire management measures. • The project will ensure capacity development of project staff and partner staff on sustainable village forest and national protected area management. • The ESMP foresees mitigation measures concerning adaptation risks in Action 8. This includes measures on external risks such as wildfire management, droughts, flooding and landslides and changes in biodiversity. •
	<ul style="list-style-type: none"> • It needs to be ensured that vulnerable groups equally benefit from project measures, such as Village conservation agreements (VilFoCA) promoted under this activity. • 	<ul style="list-style-type: none"> • The activity aims to raise awareness of the importance of NPAs, while also providing clear mechanisms for local communities to benefit from the sustainable management of NPAs (through voluntary co-management agreements, including VilFoCA). • Active engagement of ethnic men and women in capacity building, the development of land use plans and the implementation of the land use plan and other project supported measures (such as VilFoCA). The EGDP monitors the engagement of ethnic groups in forest management, including VFM and VilFoCA.

	<ul style="list-style-type: none"> • There is a risk that NPA management activities and law enforcement affect access to national parks and local livelihoods if not precautionary measures are taken. • 	<ul style="list-style-type: none"> • The NPA activities will be 100% of community based project activities implemented that can demonstrate participation in the FPIC process, with broad consent being achieved from the community: In particular, activity 3.2.1 will support adaptation mainstreaming within NPA planning and management (Sub-Activity 3.2.1.1), the revision of management plans for NPAs, scaling up participatory and cooperative processes for law enforcement and governance of NPAs (including community-based enforcement and monitoring facilitate through law enforcement action plans, Sub-Activity 3.2.1.2), identification and mapping of villages within and adjacent to NPAs, and the participatory development and implementation of village forest conservation agreements (Vil-FoCA) in 'guardian villages' (Sub-activities 3.2.1.3 and 3.2.1.4). This will built on lessons learned and best practices from Project 1. •
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6.2 Environmental and Social Management Plans (ESMP)

According to the GCF definition, an ESMP is a document that *“contains a list and description of measures that have been identified for avoiding adverse environmental and social impacts, including, where appropriate transboundary risks and impacts, or minimizing them to acceptable levels, or to mitigate and compensate them”*.¹⁸⁷ ESMPs should be integrated into the overall planning, design, resourcing and execution of the GCF-financed activities.

6.2.1 ESMP content

ESMPs should build on the ESIA and develop a detailed plan for the avoidance, mitigation and/or management of potential risks. The elements of the proposed ESMPs are as follows:

- Introduction
- Overview of programme standards and safeguards
- Potential unintended negative impacts and external risks (link to ESIA)
- Landscape-specific baseline information, potential risks and opportunities
- Roles and responsibilities of institutional implementation partners to implement ESMP
- Guidance for ESMP implementation
- Environmental and social team – composition, roles and responsibilities
- Capacity building strategy to support the implementation of ESMPs
- ESMP budget and timeframe
- Table of detailed actions to be implemented (objectives, description/ instructions, addressed potential unintended negative impacts, timeframe, programme and counterpart inputs (staff, operational costs, etc.), roles and responsibilities, targets)
- Reporting and adaptive management

Under normal circumstances, an ESMP should reflect a representative area or sample of the overall planned programme area. Given the diverse conditions, as described above, the initial ESMP process should be conducted more on a pilot basis at a few sites. Further, ESMPs would have to be done on a case by case basis until the programme has a more representative data set together than could then be used for a comprehensive baseline. It is further recommended that:

- Site selection should focus on priority village clusters, whilst ensuring a representative mix of ethnic groups;
- Site selection should include both on-road and off-road (or poor road) sites;
- Separate consultations in local languages (at a minimum with translation) with women a must;

¹⁸⁷ GCF Environmental and social policy, page 2. Available online here: <https://www.greenclimate.fund/documents/environmental-social-policy>.

A team of multi-disciplinary experts is needed to support the development of ESMP, as well as the capacity building, training, implementation, monitoring, and reporting needed for ESMP implementation. The process will be formalized through a series of annual training workshops at provincial and district level that will support capacity development and provide the DPMU and PPMU with the technical skills needed to implement the actions.

6.2.2 Environmental and social risk screening of actions

GIZ will continuously supervise and monitor the ESMP implementation and its effectiveness and efficiency in order to learn and be able to adapt the actions or underlying assumptions and approaches throughout the project.

Category B programmes / projects do not require specific arrangements for internal reporting as category A programmes / projects do under GIZ's safeguards and gender management system. However, for GCF programmes / projects, GIZ per default uses an internal reporting arrangement between the programme / project team and a GCF supervision unit based at head office. This reporting will be conducted on an annual basis and enable GIZ-internal supervision of compliance with ESMP implementation, among other issues. GIZ will also report annually to the GCF on ESMP implementation in annual progress reports, and other contractual arrangements between GIZ and GCF. GIZ will further ensure that the project does not implement activities that are listed in the IFC or Programme Exclusion List (see Annex 8).

7 COMMUNICATION AND STAKEHOLDER ENGAGEMENT

7.1 Stakeholder engagement and consultation in programme development

Based on Lao PDR's National REDD+ Programme, stakeholders are defined as actors within the following five major groups: government, local communities, civil society, private sector and development partners.¹⁸⁸ Stakeholder engagement is seen as a central element to supporting the design of the GCF programme. During the development of Project 1, stakeholders have played an important role in providing inputs and feedback on programme design, and have validated the proposed project. In addition, extensive engagement with stakeholders has been conducted for the elaboration of the ER-PD, and the National REDD+ Programme, as well as other related programmes/ projects (e.g. CliPAD, SUFORD, ICBF, etc.), which has laid a strong foundation for the elaboration of GCF programme.

Additional consultations were held to support the development of Project 2 in 2022, in which a total of 543 participants attended (30% women). Consultations were held with the stakeholders at the national, province, district, and village level. Diverse consultation formats were applied during the elaboration of the funding proposal including one-on-one meetings, workshops, local village meetings and focus group discussions.

The Stakeholder Engagement Plan provides an overview of stakeholder consultations conducted i) during ER-PD preparation and within the framework of the National REDD+ Programme, ii) during the GCF programme development phase (Project 1), and iii) during the GCF Project 2 development phase.

7.2 Stakeholder engagement and consultation in programme implementation

Stakeholder engagement will be continued throughout the implementation of the GCF programme (Project 1 and 2) and is described in further detail in the Stakeholder Engagement Plan. A stakeholder engagement strategy has been designed with the following objectives:

- To ensure there are opportunities for stakeholders to provide feedback, ask questions and raise concerns
- To ensure information sharing and disclosure
- To establish a culturally appropriate mechanism for filing complaints and grievances
- To foster strong programme-stakeholder relationships, including at the village level
- To ensure meaningful consultation and promote social acceptability of the programme

¹⁸⁸ "For the National REDD+ Programme, stakeholders are considered to fall into five major groups – Government, local communities, private sector, civil society, and development partners." – ER-PD 2018, p. 32.

The social engagement strategy will focus primarily on stakeholder engagement with stakeholders that are not a part of the project implementation arrangements and management units.

7.3 Free, prior, and informed consent (FPIC)

For all activities implemented with villagers at the local level (e.g. land use planning and activities within Components 2 and 3), participation is voluntary and based on the principle of FPIC. FPIC agreements will be made with all participating villages prior to the implementation of interventions. PPMUs will mobilize specialized capacity, targeting the district and *kumban* levels, regarding training on FPIC principles and practices, and ensuring FPIC principles are appropriately applied for the programme's consultations. They will further be trained on gender and social inclusion, to promote the participation of diverse stakeholders, including women and members of different ethnic groups.

Info Box 5: Good practice Principles for FPIC

4. It is essential to develop a **good understanding of the local culture**, including factors such as social organisation and consultation systems, before engaging in FPIC. This could involve conducting targeted anthropological research, including training and maintaining "local ethnographers" who could be teachers, students, or other community members.
5. **Information** provided should be as independent, comprehensive, and accessible as possible: this may imply translation into local languages and use of audio-visual materials.
6. Agreements should be **written and notarised**, in addition to the traditional form of recognition, and there should be video or photographic record of the process.
7. Free prior and informed consent should not be understood as a one-off, yes-no vote or as a veto power for a single person or group. Rather, it is a **process** by which indigenous peoples, local communities, government, and companies may come to **mutual agreements** in a forum that gives affected communities enough leverage to negotiate conditions under which they may proceed and an outcome leaving the community clearly better off.
8. Methodologies used in the consultation process need to be informed by knowledge of village **social organisation**. In this respect, the consultation process might be described as a system for finding a system that is sensitive to the cultural setting.
9. Consultation is also a **feedback loop**. Information that emerges from the process in continually fed back into the process always evolving and adapting to a changing situation as villagers become more competent and confident in their abilities and capacity.
10. The structure of the consultation process must be **flexible** so that it can be carried out in culturally appropriate ways. The flexibility should imply that the process

Source: ER Programme ESMF

The FPIC process to be conducted under Project 2 will follow the procedures as implemented under Project 1. FPIC was applied under Project 1 based on the FPIC Guideline originally developed for the GIZ CliPAD project. The GIZ CliPAD project has supported the development and implementation of FPIC curriculum with the LFND as a preliminary step for village forest management (VFM). They developed a guideline to support with the FPIC process for village forest management planning, where three main FPIC phases were identified. This concept was transferred to the GCF Programme (under project 1) and foresees three subsequent consultations (FPIC 1-3). FPIC 1 is used for disseminating information and should be held after completing PLUP. The outcomes of FPIC 1 should be the minutes of consultation describing the key content and an agreement as evidence and reference for future procedure. FPIC 2 is organized after the Village Forest Management Plans are drafted, in order to make sure that its regulations are known to and agreed on by the community. The (so-called) FPIC 3 constitutes of a signing ceremony of the plan.

Under Project 1, the following processes have been implemented and will serve as role models for Project 2:

- All the District FPIC Teams have been established and trained on FPIC 1 concepts and practice along with the related gender and ethnic requirements for the first step of FPIC process. Training for provincial level staff on FPIC 2 and 3 processes has been carried out. Training of District FPIC teams on FPIC 2 and 3 processes has been completed in three provinces..
- FPIC 1 consultation meetings with villagers were completed with a positive result in all 170 villages, reaching 16,328 participants (almost 100 participants in average per village), of which 54% were women. One of the 170 villages (Namai, Phonthong district, Luang Prabang province), that had initially accepted to join the project during FPIC 1, decided to opt out of Project 1 at a later stage during community meeting on VFAG. This highlights the fact that villages have the freedom to opt out of Project 1, even after initial consent has been given.
- Implementation was carried out by the Lao Front for National Development (LFND) and Lao Women's Union (LWU), which are independent entities within the Lao state, separate from the executive. Thereby it is ensured that Project Owners (= the executive) would not try to influence villagers to join the project.
- Fair representation of ethnic minorities in FPIC 1 was ensured. The comparison between ethnic composition of the target villages' population and the ethnic composition of the participants show highly similar ratios. (With LaoLoum / Khmou / Hmong / "other ethnic groups" representing respectively:
 - 48% / 23% / 13% / 16% of the villages' population and
 - 47% / 25% / 11% / 17% of the FPIC participants
- Participation of women in FPIC 1 was ensured and Focus Group Discussion were held for men and women separately.
- Anonymity in FPIC 1 consultations was ensured in all aspects, allowing villagers to freely speak up.

A detailed description of the programme's FPIC process is provided in the Ethnic Groups Development Plan in Annex 6d of the Funding Proposal.

7.4 Grievance redress mechanism

A grievance mechanism has been developed to acknowledge and address any negative impacts or complaints that arise as a result of the GCF programme (Project 1 and 2). Any grievances should be analyzed and mitigated as quickly as possible to avoid any tensions or conflicts. The grievance mechanism is cost-effective as it is integrated into the institutional mechanism of the programme.

The objectives of the grievance redress mechanism are to:

- Provide affected people an avenue through which they can voice their concerns and dissatisfactions;
- Create a platform in which stakeholders and village members can freely raise concerns and complaints to be effectively addressed;
- Demonstrate to programme stakeholders and villages that they play an important role in programme design and implementation;
- Follow up and report on efforts to take corrective action.

7.4.1 Existing feedback and grievance redress mechanisms in Lao PDR for REDD+

Under the national REDD+ policy framework, all stakeholders have the right to make requests, claims, complaints and requests for justice in accordance with the social and environmental safeguard measures and conditions; and transparency with respect to information, the distribution of benefits and responsibilities, legal and customary rights and participation in activities and processes.

Existing feedback and grievance redress mechanisms have been developed within the context of the National REDD+ policy framework and ER-PD process in Lao PDR. Such mechanisms have undergone detailed assessments and consultations within their respective processes.

The existing Lao PDR national Feedback and Grievance Redress Mechanisms (FGRMs) consist of several alternative mechanisms for registering grievances and feedback and seeking redress. The type of grievance mechanism applied depends on various key considerations described in the following Figure.

Table 31. Overview of feedback and grievance redress mechanisms applied for REDD+ in Lao PDR

Type of Grievance Mechanism	Key Considerations
Traditional, customary complaint resolution processes	<ul style="list-style-type: none"> Traditional dispute resolution mechanisms vary by ethnic group and are used to settle disputes based on customary law and traditions. E.g. Hmong are socially organized into clans and traditionally disputes are settled by the (male) clan elders. Other ethnic groups have different arrangements.
Village mediation units	<ul style="list-style-type: none"> Village mediation units are comprised of village authorities, including members of the local chapter of the Lao Front for National Development, and also may include customary leaders. They often deal with issues of land and family disputes among the villagers, such as divorces. If the dispute involves outsiders, or the village leadership, then resolution must be sought at a higher level.
Judicial system	<ul style="list-style-type: none"> Through national, provincial and regional courts together with law enforcement authorities This mechanism often is utilized when land rights are involved Six different government law enforcement agencies are involved in enforcement of forestry-related laws and in bringing cases to the Public Prosecutor. The lead agency in enforcement of the Forestry law and the Wildlife and Aquatic Law is the Department of Forest Inspection (DoFI, under MAF).
Administrative system of Government	<ul style="list-style-type: none"> E.g. Going from the village to the relevant district office to the relevant provincial office, to the national ministry E.g. Going to the district Justice Office, Department of Home Affairs, then the Justice Department at the Ministry of Justice and, ultimately, the Central Cabinet
Party system	<ul style="list-style-type: none"> Complaints can be registered with the Lao Women's Union or Lao Front for National Development, then they can be filed at the central party cabinet The Lao Front has a legal mandate for awareness-raising, conflict resolution and promoting participation of all ethnic groups, and has representation at all levels of government from central to village-level.
Legislative system	<ul style="list-style-type: none"> With appeals to the Provincial Assembly or National Assembly

Source: Adapted from ER-PD 2018, p. 199-201

The following Figure provides an overview of these mechanisms and key considerations for identifying which mechanism is the most suitable for the grievance (thematic topic, and level of government). Accordingly, programme-related claims and complaints can be proposed, considered and resolved according to traditional customs, administratively, legally or legislatively according to the case in hand, and in accordance with the Law on Claim and Complaint Resolution. All stakeholders are able to file grievances and complaints through these official channels, as noted in the country's ER-PD and National REDD+ Programme.

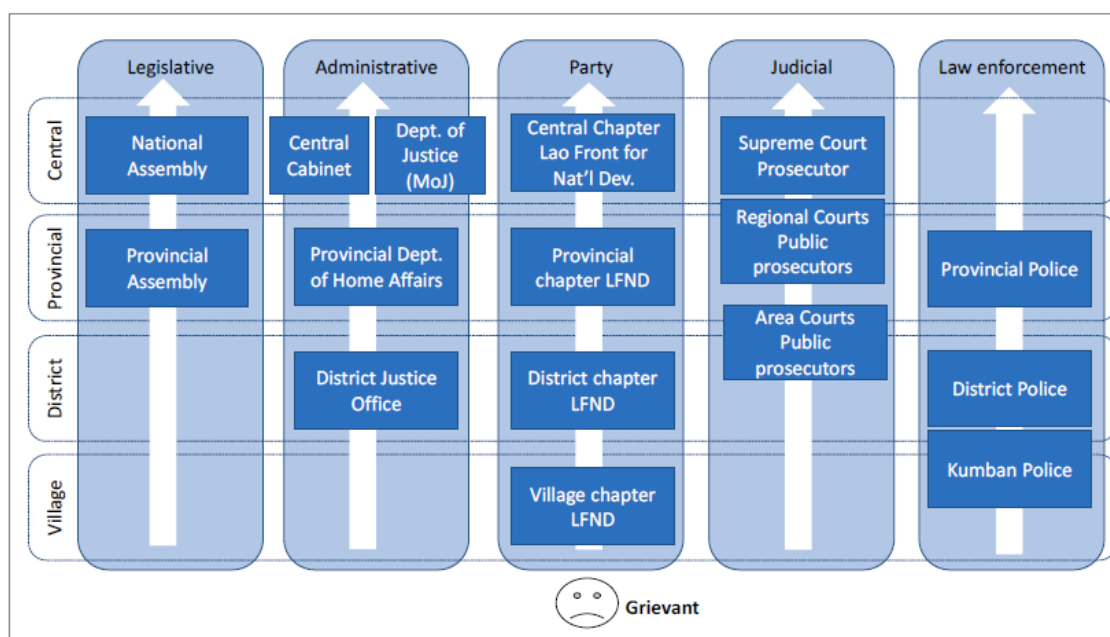


Figure 14: Options for grievance redress under REDD+

Source: ER-PD 2018, p. 201

The resolution of REDD+ claims and complaints must be consistent with the policies and laws of the Lao PDR and the relevant international conventions. The process must ensure the protection and promotion of the rights and interests of those affected by REDD+ activities. Improvements of the livelihoods of REDD+ stakeholders will be promoted with independence, transparency, equality, fairness, and neutrality. The various stages (of complaint resolution) must be recorded, including the participation and consultation of the relevant parties.

Implications and recommendations for the proposed GCF programme

As described above, there are grievance and redress mechanisms in Lao PDR mainly available within a single village, i.e., either customary mechanisms such as councils of elders or the Village Mediation Unit (VMU). In single ethnic group villages, a council of elders, or similar, may comprise the VMU. Villagers are, however, at times discouraged from seeking judicial or administrative redress beyond their villages. They are rewarded instead for *not* bringing cases to the district authorities or to a sub-provincial court by being declared a “*Ban Pot Kadi*,” meaning a “case free village.” While the VMUs are seen by villagers of all ethnic groups as useful for solving local disputes and are widely used, the remit of a VMU does not extend to conflicts involving outsiders (such as concessionaires).¹⁸⁹

¹⁸⁹ See the Ministry of Justice Guidelines on VMUs, 2010. Both the Land Law and the Forestry Law mention the possibility of administrative redress, but not with any independent mechanism included.

Local communities have limited access to justice beyond village level mechanisms. The concept of an independent or neutral ombudsman's office has yet to be established in Lao PDR. However, local people do make use of the National Assembly (NA) Hotline when it is in session. Nonetheless, the Constitution (Article 41,) provides Lao citizens with the right to lodge complaints and petitions with relevant State organizations; a Law on Petitions (2005) allows for written submissions.¹⁹⁰

The ERPD 2018 foresees that existing mechanisms will be used for grievance redress. Considering the gaps and weaknesses in these mechanisms, including inadequate access of all ethnic groups, and especially of women, to the justice system, there will be a need to establish a programme-based grievance redress mechanism. This has precedence in the Lao PDR with the Nam Theun 2 hydropower dam and its Resettlement Implementation Period (RIP; now ended). The Poverty Reduction Fund also has established a programme-based GRM as per World Bank requirements.

7.5 GCF programme grievance redress mechanism

The resolution of claims and complaints arising from the GCF programme is based on existing grievance and redress systems developed for REDD+ in the country (described above) and has been developed under Project 1. It will continue to be applied under Project 2 implementation. The following description of the mechanism refers to the System Description of the Grievance Redress Mechanism.¹⁹¹

A programme-specific reporting mechanism to the NPMU, PPMU and/or DPMU, and the PPMU includes the Project Safeguards Team to ensure the monitoring and fulfilment of safeguards for programme implementation. Whenever a grievance is filed, a report on the grievance will be produced by the person receiving the grievance, utilizing a standard template. As a first step, the grievance is to be discussed within the project structure (i.e. with DPMU, PPMU, NPMU or PSC). If it is not possible to address the grievance within the project structure, the grievance will be forwarded to the grievance redress mechanism according to the National Feedback and Grievance Redress Mechanisms (NFGGRMs), starting from VMU and handed on through the district, the provincial levels, in very rare cases up to the respective People's Provincial Assembly (PPA) or the National Assembly (NA). All safeguard specialists and designated district officers will be trained on the grievance redress mechanism, as well as best practices to promote gender equality and social inclusion in a culturally appropriate manner.

The mechanism has been designed to address any complaints or grievances regarding the programme. It is designed to ensure that no individual or group are financially impacted by making a grievance or complaint. Any cost that may be associated with the preparation or issuance of a legitimate complaint or grievance (e.g., engaging a qualified person to assist the complainant)

¹⁹⁰ The Law was amended in 2015, approved by Presidential Decree in 2016, but an English version doesn't appear to be available to check if submissions still must be in writing or may also be delivered orally.

¹⁹¹ Implementation Governance, Forest Landscapes and Livelihoods (I-GFLL): Grievance Redress Mechanism. System Description. Version 1, June 2021.

will be covered by the grievance mechanism (and has been integrated in the budget). Special efforts will be made to ensure the grievance redress mechanism is available for all people, and that women, ethnic groups or vulnerable persons and/or entities have equal access and bear no negative repercussions for filing any complaints or grievances.

The designed structure allows grievances to flow through an internal process from the district level until the national level, where more issues are expected to be addressed. Concerns should be addressed at the closest appropriate level (i.e., at district, provincial, etc.). Whenever a grievance is filed, a report on the grievance utilizing a standard template will be provided to the Project Safeguards Team will oversee the process, maintain a record of all grievances filed, report on grievances filed and ensure they are adequately addressed. Stakeholders should first use the GRM process as developed and implemented by the programme. As final option, grievant may use the GRM process by the GCF itself (i.e., GCF Independent Redress Mechanism, <https://irm.greenclimate.fund/>).

Special attention will be put on equal access of women and men as well as to enable access for ethnic groups and other vulnerable groups to the GRM. The introduction of the GRM is done during FPIC 2, in which approximately half of the village population is participating, out of which 44% are female. To reach a wide audience, GRM Posters contain visualization of the different GRM mechanisms (phone, through implementors, through Village Mediation Units (VMU)), making them understandable to illiterate people, which over-proportionally are female. Moreover, each of the three GRM mechanisms can be used by villagers who only speak local languages; especially the VMU, which consists of people from the same village, but also the hotline for which translators would be engaged by the Safeguards Team, in the situation of an incoming non-Lao call incoming.

Info Box 7: CSOs role in supporting the programme's grievance redress mechanism

CSOs will play an important role in programme implementation, including through participation in capacity building events and trainings, awareness raising, and in supporting community outreach. They will further serve as key organizations to facilitate communication between local communities and the programme management units.

CSOs in the target provinces and districts will be trained on the programme's grievance redress mechanism, and provided with informational brochures with contact information. This will ensure that they are familiar of the mechanism, key phone numbers and can support local villages / villagers to understand the grievance redress mechanism, and to file complaints and grievances.

The main steps of the programme's grievance redress mechanism are aligned with the steps identified for the ER-PD grievance mechanism, and are described in the Table below.

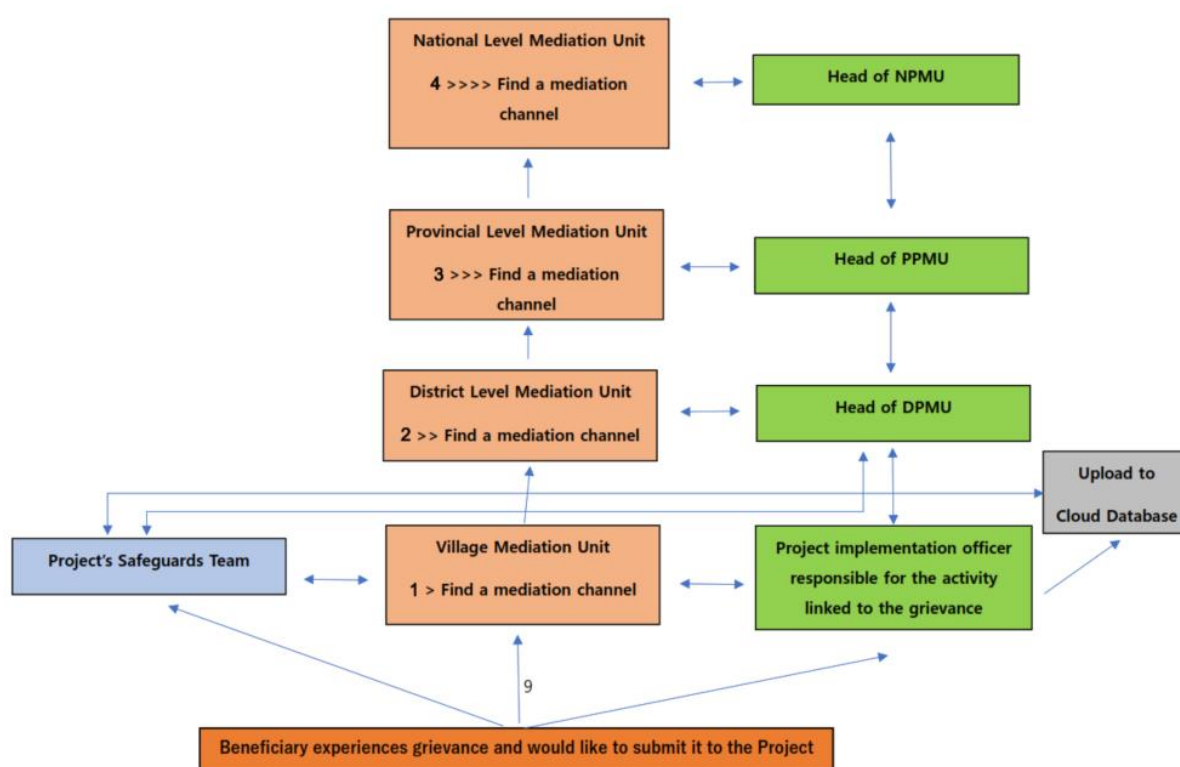
Table 32: Overview of the main steps within the programme-level grievance redress mechanism

Grievance Redress Mechanism Steps	Description
1. Receive and register grievance	Stakeholders submit their grievances through the available grievance channels as described above. All grievances are registered by the receiving entity using a standard template (see chapter below). All grievances filed must be clearly documented and securely stored in the I-GFLL cloud database with limited access to the Safeguards Team.
2. Acknowledge, assess, and assign	The Safeguards Team must acknowledge receipt of the grievance to the grievant. As part of an internal assessment process the Safeguards Team must outline into the available template, how the grievance will proceed, assess the eligibility of the grievance, and assign organizational responsibilities to propose a response to the grievance.
3. Propose a response	The entity responsible for proposing a response (as assigned by the Safeguards Team in step 2), will then propose options to the complainant and any other related parties to address the grievance. This could include: i) direct organizational response/ action, ii) stakeholder assessment and engagement, iii) referral to a different mechanism (e.g. judicial grievance mechanism), or they could decide that the grievance is ineligible (see “Criteria for Eligible Grievances and Exclusions”).
4. Agreement on response	Based on the responses proposed in step 3, the Safeguards Team and/or other entities involved to resolve the grievance will meet with the complainant and other related parties and try to reach an agreement that is acceptable to all parties. A meeting with the grievant should be prepared within 10 days.
If complainant agrees on response, refer to step 5, if not, refer to step 6	
5a. Implementation of response	The Safeguards Team will assign a relevant officer to oversee the implementation of the response to the grievance, monitoring its progress and the effectiveness of the response. All grievances filed must be reported to the NPMU using a standardized template, including information on the status of all grievances.
5b. Grievance resolved and successfully closed	If the response is successful, the grievance will be resolved and closed. The grievance report to the NPMU will be finalized and submitted by the responsible project officer, noting that the grievance has been successfully resolved and has been closed.
5c. Grievance not resolved	If the response is not successful, the project officer responsible for overseeing and monitoring the response will review the response to be implemented (step 6).
If complainant does not agree on response (step 4)	
6. Review	If no response can be met, the responsible safeguard specialist/project officer will review the grievance with the safeguards representative at the NPMU. Together they will determine whether to revise the approach and propose other alternative responses, refer the grievance to another system (e.g. legislative, administrative, party, judicial, law enforcement, customary), or close out.
7. Grievance referred	Pending the result of the grievance review, grievances that cannot be resolved within 1 month from the acknowledgement of the complaint will be either referred to a different system or closed out. All grievances, including grievances that cannot be resolved, will be documented using a standard template, and reported to the NPMU safeguard representative.

Source: Implementation Governance, Forest Landscapes and Livelihoods (I-GFLL): Grievance Redress Mechanism. System Description. Version 1, June 2021.

The programme-level grievance mechanism is presented below. Grievances can be filed through three channels: The Village Mediation Unit (VMU) is the regular village-based structure to address grievances. VMUs are required to report any grievances related to the Programme to the Safeguards Team. Equally are implementors asked to forward grievances to the Safeguards Team through the Cloud Database (as part of the regular reporting). Thirdly, a hotline is established, which allows grievants to directly contact the Safeguards Team 24/7. As soon as grievances have reached the Safeguards Team, they are evaluated (on a weekly basis) for their eligibility.

Through the mechanism, grievances can be filed at the: (1) village, (2) district, (3) provincial, and (4) national level. In addition to the proposed programme-specific mechanism, grievances can be filed through other mechanisms presented in the previous sub-section, as identified within the National REDD+ Programme and ER-Programme. More detailed information on customary complaint/ grievance mechanisms in the context of the project is provided in the Ethnic Groups Development Planning Framework.



Source: Implementation Governance, Forest Landscapes and Livelihoods (I-GFLL): Grievance Redress Mechanism. System Description. Version 1, June 2021.

Informal and customary grievance review

Customary practices of different community, ethnic and religious groups to manage conflicts have been integrated into the formal grievance mechanism. In some instances, grievance cases have been addressed in an informal manner by local communities under the direction of community or traditional leaders. The head of the DPMU, PPMU or NPMU (depending on where the

grievance is filled), will consider the opinions or recommendations of leaders from any informal redress mechanisms before making any decisions.

Grievance resolution

Once a grievance has been addressed and the party that filed the grievance has accepted the solution, an agreement should be signed by all involved parties. Records of all grievances made and addressed should be preserved in order to ensure continued compliance and a transparent grievance review mechanism.

Dissemination and awareness raising for the grievance redress mechanism

As the grievance mechanism is instated in order to provide a platform for concerns to be voiced by any party, it is important that the method in which grievances can be made is effectively distributed to all stakeholders and community members within the programme area. Information regarding the grievance redress mechanism will be distributed to all stakeholders and communities through:

- Programme multi-stakeholder events (FPIC consultations, workshops, etc.)
- Information sessions and village meetings, including the provision of information both orally and through informative materials
- Brochures regarding the programme's grievance redress mechanism (produced in Lao and local languages), distributed to diverse stakeholders including CSOs
- Included as part of other communication material that is designed and distributed during programme implementation.

Reporting to the GCF

The Project is committed to transparency and accountability concerning complaints, while also protecting the confidentiality of those involved. To this end, from 2021 its annual report includes a brief section documenting the introduction process of the GRM and will, as filed grievances come in, report on the number and nature of complaints received and how they were resolved. Identifying details of individuals will not be included.

8 INDIGENOUS PEOPLES POLICY AND SOCIAL INCLUSION

8.1.1 GCF's Indigenous People's Policy and its implications for the project

There are important implications for the project and its management by virtue of it having triggered the GCF's Indigenous Peoples¹⁹² Policy (hereafter Policy in this section). GCF's policy was approved by the Board in March 2018 (Decision B.19/11). Some of its most important clauses and requirements are repeated here to familiarize more stakeholders with these requirements.¹⁹³

The Policy is GCF's recognition that:

"The economic, social and legal status of indigenous peoples frequently limit their capacity to defend their rights to, and interests in, land, territories and natural and cultural resources, and may restrict their ability to participate in and benefit from development initiatives and climate change actions. In many cases, they do not receive equitable access to project benefits, or benefits are not devised or delivered in a form that is culturally appropriate, and they are not always adequately consulted about the design or implementation of activities that would profoundly affect their lives or communities."

Its main objective is as follows:

"To provide a structure for ensuring that activities of GCF are developed and implemented in such a way that fosters full respect, promotion, and safeguarding of indigenous peoples so that they (a) benefit from GCF activities and projects in a culturally appropriate manner; and (b) do not suffer harm or adverse effects from the design and implementation of GCF-financed activities."

The onus is on AEs and executing entities to prove in a documented and transparent way that they are adhering to the objective of the Policy. It reminds AEs that they *"are responsible for compliance with all applicable laws, including the laws, regulations and standards of the state(s) in which the activities are located, and the obligations of the state(s) directly applicable to the activities under relevant international treaties and agreements"*. Thus, compliance must reflect both domestic laws and the standards of the human rights, and other treaties to which the State has acceded.

The Policy has eight guiding principles, including FPIC, enhancing rights to land, respect for the principles of the human rights treaties, ILO 169 and UNDRIP, respect for traditional knowledge and livelihoods systems, and to facilitate access by indigenous peoples to GCF funds.

¹⁹² It is worth reiterating here that the GCF uses a broad definition of IP, and is not concerned about local terminologies. Moreover, *This Policy applies whenever indigenous peoples are present in, have, or had a collective attachment or right to areas where GCF-financed activities will be implemented. This includes indigenous peoples who, during the lifetime of members of the community or group, have lost collective attachment to distinct habitats or ancestral territories in the programme area because of forced severance, conflict, government resettlement programmes, dispossession of their land, natural disasters, or incorporation of such territories into an urban area.*

¹⁹³ The Policy in its entirety is available at GCF's website.

GCF's recognition of Indigenous People's rights has resulted in a number of stringent measures encompassed in the Policy which shall be implemented where indigenous peoples (in Lao PDR – the non-Lao-Tai ethnic groups) are present. The Policy allows:

“GCF to anticipate and avoid any adverse impacts its activities may have on indigenous peoples' rights, interests and well-being, and when avoidance is not possible to minimize, mitigate and/or compensate appropriately and equitably for such impacts, in a consistent way and to improve outcomes over time. It goes on to assert (p. 6) that the application of this Policy will not be limited by the absence of legal recognition or identification of indigenous peoples by a state. It will also not be limited by the legal status of titling of indigenous lands, resources and territories.”

One of the more important definitions of the Policy relates to *“involuntary resettlement.”* It is defined as the:

“physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, including those that lead to loss of income sources or other means of livelihood), or both, caused by project-related land acquisition or restrictions on land use”.

Germane for this project is the possibility of economic displacement caused by restricting ethnic people's use of bush fallows for future upland cultivation. At the same time, should this happen, people will have to be compensated for the losses in a manner agreeable to them.

Another of the GCF Policy objectives in relation to land states:

“To promote and respect indigenous peoples' rights to own, use, develop and control the lands, territories, and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those that they have otherwise acquired.”

This, of course, relates to respect for ethnic people's management of lands and resources, including their traditional knowledge in this management.

While a process-oriented FPIC is a given, the Policy also requires *meaningful consultation* which is defined as:

“a two-way process, that: (a) begins early in the project planning process to gather initial views on the project proposal and inform project design; (b) encourages stakeholder feedback, particularly as a way of informing project design and engagement by stakeholders in the identification and mitigation of environmental and social risks and impacts; (c) continues on an ongoing basis, as risks and impacts arise; (d) is based on the prior disclosure and dissemination of relevant, transparent, objective, meaningful and easily accessible information in a timeframe that enables meaningful consultations with stakeholders in a culturally appropriate format, in relevant local language(s) and is understandable to stakeholders; (e) considers and responds to feedback; (f) supports active and inclusive engagement with project affected parties; (g) is free of external manipulation, interference, coercion, discrimination, and intimidation; and (h) is documented and disclosed.”

Further iteration of “meaningful consultation” is provided here:

“The AEs will be responsible for ensuring that the communities affected or potentially affected by the activities are properly consulted in a manner that provides them with opportunities to express their views on all aspects of the activity and allows the AEs to consider and respond to their concerns. In ensuring the meaningful and effective consultation and participation of the affected communities and vulnerable populations, the AEs will align their processes to best practices and standards and will make publicly available the relevant information on the activities according to the requirements of the GCF Information Disclosure Policy and this Policy.

Where there are potential impacts on indigenous peoples, AEs with indigenous peoples will prepare an IPP or, if specific activities or locations have not yet been determined, an IPPF. The scope and scale of the IPP or IPPF will be proportionate to the potential risks and impacts of the project. The IPPF will include a description of the processes and plans so that specific activities meet the requirements of this Policy and the GCF Environmental and Social Policy and ESS standards, including provisions for the development and implementation of site-specific IPPs that meet the requirements of this Policy. The IPPF and IPP will complement the social assessments of the project and programmes proposed for GCF financing and provide guidance on specific issues related to addressing the needs of the affected indigenous peoples.”

The GCF’s Indigenous Peoples Policy provides the following guidance for programmes/ projects where beneficiaries include both indigenous and non-indigenous peoples:

“When indigenous peoples are not the only beneficiaries of the activities proposed for GCF financing, the planning documents and procedures may vary in form and presentation and will meet the requirements of this Policy regardless of form and presentation. The accredited entities will design and implement the GCF-financed activities in a manner that provides affected indigenous peoples with equitable access to project benefits. The concerns or preferences of indigenous peoples will be addressed through meaningful consultation, including a process to seek and obtain their free, prior and informed consent and documentation will summarize the consultation results and describe how indigenous peoples’ issues have been addressed in the design of the GCF-financed activities. Arrangements for ongoing consultations during implementation and monitoring will also be described.

*The accredited entities will prepare a time-bound plan, such as an IPP, setting out the measures or actions proposed. In some circumstances, a **broader integrated community development plan** will be prepared, addressing all beneficiaries of the GCF-financed activities and incorporating necessary information relating to the affected indigenous peoples. A community development plan may be appropriate in circumstances where other people, in addition to the indigenous peoples, will be affected by the risks and impacts of the GCF-financed activities, where more than one indigenous peoples group is to be included, or where the regional or national scope of a programmatic project incorporates other population groups.”*

Given the diverse programme beneficiaries involved in, it was decided to develop an “Ethnic Groups Development Planning Framework” (ESIA Annex 3) for the GCF Programme, which served as basis for the Ethnic Groups Development Plan elaborated for Project 2 (FP Annex 6d).

8.1.2 Consultation of ethnic groups in PRAP and ER programme development

Concerning consultations in the context of designing PRAPS and the ER Programme, a broader consultation process has taken place, in which men and women from diverse ethnic groups participated (see Figure below). Consultations with ethnic groups were further conducted to support GCF programme development and are described in greater detail within the Ethnic Group Development Planning Framework developed for the programme. In the process of Project 2 development, further consultations with ethnic groups have been conducted, which are described in greater detail within the Ethnic Group Development Plan elaborated for Project 2 (see Funding Proposal Annex 6d).

No	Ethnic Groups	Six Northern Provinces (ER Program Area)					
		HP	LPB	XAY	LNT	BK	ODX
Lao-Tai Ethno-Linguistic Family							
1	Lao	✓	✓	✓	✓	✓	✓
2	Tai	✓	✓	✓	✓	✓	✓
3	Lue		✓	✓	X		
4	Nyouan (Luman, Yuan)		✓	✓	✓	✓	
5	Nyang (Ngang)				✓		✓
6	Tai Nue				✓		
Mon-Khmer Ethno-Linguistic Family							
7	Khmu	✓	✓	✓	✓	✓	✓
8	Pong (Phong)	✓					
9	Xing Moon	✓					
10	Moy	✓					
11	Thene		✓				
12	Bidh				✓		
13	Lamet				✓	✓	✓
14	Sam Tao				✓	✓	
15	Akha				✓	✓	✓
16	Prai			X			
Hmong-Mien Ethno-Linguistic Family							
17	Hmong	✓	✓	✓	✓	✓	✓
18	Emien	✓	✓	✓	✓	✓	✓
Sino-Tibetan Ethno-Linguistic Family							
19	Phou Noy		✓		✓	✓	✓
20	Ho		✓		✓	✓	✓
21	Sila				✓		
22	Lahu					✓	
23	Lanten				X		
Total: total in LFNC figures (total with PRAP additions)		8	11	7 (or 8)	16 (or 18)	12	10

X: Additional groups noted in the PRAP work. In Xayaboury were also Luman and Yuan, but they are in the same ethnic groups as Nyouan.

: Ethnic groups being consulted during the PRAP *kumban* consultations.

Figure 15. Composition of Ethnic Groups in the ER Programme Area

Source: ER Programme Document Annex 1

8.1.3 Requirements for site-specific ethnic group development plans

Many of the ethnic groups present in the project area meet the eligibility criteria of World Bank's and GCF's indigenous peoples, which can be identified by the following characteristics:

- Self-identification as members of a distinct indigenous social and cultural group and recognition of this identity by others;
- Collective attachment to geographically distinct habitats, ancestral territories, or areas of seasonal use or occupation as well as to the natural resources in these habitats and territories;
- Customary cultural, economic, social, or political systems that are distinct or separate from those of the mainstream society or culture; and
- A distinct language or dialect, often different from the official language or languages of the country or region in which they reside. This includes a language or dialect that has existed but does not exist now due to impacts that have made it difficult for a community or group to maintain a distinct language or dialect.

In line with the GCF policy, an Ethnic Groups Development Planning Framework was developed to ensure that ethnic groups in the project's targeted areas are fully informed, consulted, and provided with adequate and legitimate opportunities to actively participate in project design and the determination of project implementation arrangements, operation, as well as the project's closure. It provides a framework to manage the potential unintended environmental and social negative impacts associated with project's activities. This will enable different ethnic groups to receive the projects' benefits in a culturally appropriate manner, and to allow for meaningful and inclusive consultations to take place throughout programme implementation.

Based on the experience of Project 1, a Ethnic group Development Plan was elaborated during the preparation of Project 2. Where ethnic groups are present, special action is needed to safeguard their social and economic status, and to avoid restricting their capacity to assert their interests and rights in forests, land and other productive resources.

8.1.4 Recommendations for conducting an ethnic group development plan

While the GCF Indigenous Peoples Policy is rigorous in its requirements, it also provides AEs with opportunities to access funds from the GCF to enhance the meaningful participation of women and men of different ethnic groups. Some rough suggestions for the programme design, based partly on the GCF list of measures in the various policies, are outlined here.

"AEs may include technical or financial support as part of the GCF-financed activities for the preparation of plans, strategies or other activities intended to strengthen consideration and participation of indigenous peoples in the climate change actions that are consistent with the mandate of GCF. This may include a variety of initiatives designed, for example, to

- (a) strengthen local legislation to establish recognition of customary or traditional land tenure arrangements;*
- (b) address the gender, socio-economic divisions and intergenerational issues that exist among indigenous peoples;*
- (c) protect traditional knowledge through intellectual property rights;*
- (d) strengthen the capacity of indigenous peoples to participate in development planning or programmes;*
- (e) strengthen the capacity of government agencies providing services to indigenous peoples; and*
- (f) foster the meaningful inclusion and participation of indigenous women and other marginalized groups, such as persons with disabilities."*

The GCF Indigenous Policy states *"Where the activities proposed to be financed by GCF may require the establishment of legally recognized rights to lands and territories, the accredited entities, working with the states and the affected indigenous peoples, will prepare a plan to ensure the legal recognition of such property rights in accordance with applicable law and obligations of the state directly applicable to the activities under relevant international treaties and agreements, customs, traditions and land tenure systems of the indigenous peoples."*

The following recommendations should be considered when developing ethnic group development plans:

Development Planning

- Strong efforts to push forward communal (or cooperative) land titles where it is appropriate for ethnic communities, especially for village use forest.
- Working along the lines of (a) in the GCF list above, advocate not only for REDD+ integration in development planning, but also for the development gains that will be had from further supporting ethnic groups with communal titling and relaxed regulations on village use forests.

Capacity Building Measures related to Ethnic Groups

- Following from (d) above, the programme should devise capacity building measures for women and men of different ethnic groups so that they can engage better with the programme and potentially facilitate their own FPIC processes based on improved knowledge of their rights.
- Following from (e) above, devise capacity building measures for government staff (and volunteers) to improve knowledge, attitudes and practices towards ethnic groups (also related to gender sensitivity).

CSO Involvement

- CSOs, even though with limited capacities, should be supported for their engagement in assisting with facilitation processes and FPIC in selected villages. Sponsoring ethnic group youth (especially young women) to have the possibility of internships with CSOs may be a

way to help people to work together for improved communication. Young people of ethnic groups should also be offered paid internships with the programme management units.

Action Research (leading to changes in approach on some activities)

- Action research with selection of local people in different areas to understand traditional landscape management systems better and incorporate some of these elements wherever possible in FLR concepts.
- Action Research on agro-biodiversity in the traditional upland systems should be conducted, in order to use the knowledge gained for extension promotion (creation of small seedbanks, for example, seed exchange fairs and the like, noting that women have the largest role to play in seed management).
- Action research leading to improved management of NTFPs (includes learning from local communities how they manage).

ANNEX 1: SELECTED REFERENCES

1. GOL Publications by Organization

Lao Statistics Bureau

Labour Survey, 2017

Lao Social Indicators Survey, 2017

Reports of the Population and Housing Census 2005 and 2015

Statistical Yearbooks, 2016 and 2017

MAF

Forestry Strategy to 2020

Agricultural Strategy to 2025

Community Engagement Manual (SUFORD-SU)

PLUP Manual, 2010

REDD+ Readiness Documents: ERPD, draft SESA, draft ESMF, PRAPs

SUFORD-SU Community Engagement Manual

MPI

8th NSEDP

Lao Gazette

Various laws, decrees, orders

Gazette is online at:

<https://www.laoofficialgazette.gov.la/>

2. Northern Laos Emission Reductions Payments Project

Environmental and Social Management Framework (ESMF), can be accessed here:

<http://documents.worldbank.org/curated/en/361551588068269303/Environmental-and-Social-Management-Framework>

Resettlement Policy Framework (RPF) can be accessed here: <http://documents1.worldbank.org/curated/en/377481588071123406/pdf/Resettlement-Policy-Framework.pdf>

Strategic Environmental and Social Assessment (SESA) can be accessed here:

<http://documents1.worldbank.org/curated/en/244611588069185418/pdf/Strategic-Environmental-and-Social-Assessment.pdf>] Annex 11 - Strategic Environmental and

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3. Green Climate Fund

Environmental and Social Policy

Gender Policy

Indigenous Peoples Policy

Board Decisions

4. Academic and/or Grey Literature

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Fujita, Y. & K. Phanvilay (2008): Land and Forest Allocation in Lao People's Democratic Republic: Comparison of Case Studies from Community-Based Natural Resource Management Research, *Society & Natural Resources: An International Journal*, 21:2, 120-133

Gebert, R. and Luangkhot, N. (2009): *At the Crossroads: Poverty, Gender and Ethnicity Issues in the Northern Uplands of Lao PDR*. SDC.

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ANNEX 2: ETHNIC GROUPS BY PRE-SELECTED DISTRICT

Province	District ID	District Name	Lao-Tai	Mon-Khmer	Tibeto-Burman	Hmong-lumien	Not Stated
Luangnamtha	301	Namtha	40.7	24.1	15.1	18.6	1.4
Luangnamtha	303	Long	18.2	4.1	69.0	7.5	1.1
Luangnamtha	304	Viengphoukha	14.1	62.9	18.2	3.4	1.5
Luangnamtha	305	Nalae	17.3	81.6	0.2	0.0	0.9
Oudomxay	401	Xay	25.0	49.7	6.3	17.9	1.0
Oudomxay	403	Namor	15.7	53.5	10.7	19.1	1.0
Oudomxay	404	Nga	21.4	57.9	0.1	19.6	1.0
Oudomxay	405	Beng	29.4	55.6	0.3	13.4	1.2
Bokeo	501	Huoixai	37.7	35.5	2.9	22.1	1.7
Bokeo	503	Meung	19.7	9.5	63.1	6.8	0.9
Bokeo	504	Phaoudom	18.9	71.0	0.0	8.8	1.2
Bokeo	505	Paktha	32.8	36.3	0.2	29.9	0.8
Luangprabang	602	Xiengngeun	20.8	60.4	0.1	16.3	2.4
Luangprabang	603	Nan	53.4	36.4	0.3	8.8	1.0
Luangprabang	608	Phonxay	10.5	63.7	0.0	25.1	0.7
Luangprabang	610	Viengkham	10.9	77.7	0.0	10.8	0.6
Houaphan	701	Xamneua	47.8	16.9	0.1	33.8	1.4
Houaphan	703	Huim	49.9	45.4	0.0	3.8	0.7
Houaphan	704	Viengxay	70.1	10.5	0.1	18.0	1.2
Houaphan	705	Huameuang	16.5	61.0	0.0	21.5	0.9
Houaphan	706	Xamtay	47.8	1.7	0.0	49.6	0.9
Houaphan	707	Sopbao	59.3	5.0	0.0	34.7	0.8
Houaphan	710	Sone	37.2	18.6	0.0	43.5	0.7
Sayabouri	801	Xayabury	62.7	20.9	0.5	14.1	1.8
Sayabouri	803	Hongsa	50.2	35.0	0.0	9.2	5.5
Sayabouri	806	Phiang	69.9	11.9	0.3	16.8	1.2
Sayabouri	807	Parklai	94.6	1.4	0.1	2.5	1.5
Sayabouri	810	Thongmyxay	97.8	1.2	0.0	0.0	0.9

Table Notes: Highlighting to show where different ethnic groups are in a clear majority. Palaungic are subsumed under Mon-Khmer.

Source: Dataset from Population and Housing Census, 2015.

ANNEX 3: GIZ CLIMATE CHANGE SAFEGUARD

Climate Change Related Risks

This section examines:

- a. Climate change-related risks to the programme, its desired impacts, and its beneficiaries
- b. Unintended negative impacts on the resilience or adaptive capacity of people, ecosystem, or physical assets
- c. Potentials for improving adaptive capacity or resilience

The programme aims to reduce greenhouse gas emissions originating mainly from deforestation and forests degradation. To this end, it seeks to introduce comprehensive changes toward sustainable management practices in land-use in six Northern provinces of Lao PDR (formally Lao PDR), including sustainable forest management, community-based forestry, forest landscape restoration, good agricultural practices and deforestation-free agriculture. Therefore, the two systems of concern for assessing climate change related risks are forest ecosystems and agricultural systems, and indirectly the population living in and off these systems. The programme does not support activities related to physical infrastructure.

Key literature sources for climate change related risks and vulnerabilities in Lao PDR are:

- Lao PDR's Second National Communication to the UNFCCC
- ADB (2016) Climate Risk and Vulnerability Assessment "LAO Northern Rural Infrastructure Development Sector Project – Due Diligence for Additional Financing"
- Climate-Fact-Sheet (2015): Cambodia - Laos
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- IPCC (2014). Climate Change 2014, Impacts Adaptation and Vulnerability Part B: Regional aspects, p1335. Geneva www.ipcc.ch

The National Adaptation Plan (NAP) and the Third National Communication (NC3) were still in the early phases of preparation at the time of writing this assessment and could not be taken into account.

In its Second National Communication to the UNFCCC, Lao PDR identifies itself as an LDC with limited adaptive capacities that is highly vulnerable to climate change impacts. Within Lao PDR, poor and marginalized groups disproportionately face climate risks, among them temperature increases and erratic rainfall, given that they are more exposed to such changes and generally have a lower capacity to adapt given their reliance on the immediate environment.

Recent climatic changes:

The annual mean temperature in Southeast Asia consistently increased from 1970-2010. From 1951 to 2000, mean annual temperatures increased by 0.1 to 0.3°C per decade in Lao PDR. Historical analyses also reveal increased seasonal (2,046 mm/year) and annual (2,741 mm/year) rainfall rates. These trends are due to increased frequency of extreme rainfall events. Probability analyses reveal that monthly rainfall events with more than 600 mm precipitation have increased while those with 300-500 mm precipitation have decreased in the same time period. During the last century, a slight delay has been observed in the rainy season, indicating that rainfall variability and uncertainty remains a “critical issue”. Other studies indicate that the dry season is becoming longer, and that climate change will result in increasing droughts, especially within the dry season.

From 1966-2009, about three-quarters of national disasters were climate-related (flood 50%, storm 14%, drought 14%). The frequency of natural disasters has increased from once every two years before 1992 to once per year or even twice per year after 1992. The country is considered to have a high risk of river flooding, landslides, cyclones and wildfires, a medium risk for extreme heat, and a low-risk for water scarcity.

Projected climatic change:

Climate change projections for the Mekong region as a whole, including the programme area, based on a range of different scenarios, models and geographical scales, agree that the Mekong sub-region is predicted to experience a temperature rise of between 0.01°C and 0.036°C per year. Seasonal precipitation patterns will likely change, pointing to increased precipitation although significant risks of drier conditions and a longer dry season also exist, and increased incidences of extreme weather events such as typhoons

Ad a): Climate-induced risks to the programme:

The ADB CRVA examined risks from both climate change and current climate variability. The findings suggest the following potential impacts of climate change on the programme area:

- Temperature increased
- Annual precipitation signals both for increase and decrease in different seasons (signals for increase in more studies)
- Also shifts in seasons therefore;
- Agricultural productivity decreased, existing food scarcity increased
- Annual runoff increased, dry season runoff increased and therefore;
- Potential for increased flooding (not quantified)

The consulted studies do not warn of climate-induced risks for forest ecosystems. Research suggests that (tropical) forests are generally rather resilient to climate change.¹⁹⁴ But this topic may be under-researched – including in Lao PDR. The projections for Lao PDR indicate some potential future stressors for forest ecosystems such as seasonally reduced precipitation or increased drought, which could suggest a higher risk of more wildfires, changes in species composition or

¹⁹⁴ <https://www.nature.com/news/tropical-forests-unexpectedly-resilient-to-climate-change-1.12570>.

loss of biodiversity. However, it remains generally uncertain, how the forest ecosystems especially in Northern Lao PDR will be affected.

Ad b): Unintended negative impacts

None anticipated. The programme support on agriculture generally does not contribute to expanding agriculture, but improves skills, diversification and efficiency for using existing agricultural lands. Sustainable Forest Management (SFM) and Forest Landscape Restoration (FLR) will not contribute to diminishing resilience or adaptive capacity.

Risk assessment:

The overall effects for agriculture and forests will likely be low, because the literature found climate impacts related to rain and water until mid-century and end-century to be considered weak (see Climate Fact Sheet).

Ad c): Potential opportunities to address climate change

The programme has the potential to promote:

- The integration and consideration of climate risks in land-use planning to reduce the exposure of communities and economic activities
- Flood and drought-resilient crops and varieties through agricultural capacity building/ trainings to increase the adaptive capacity of farmers.
- Connectivity between habitats to increase the resilience of migratory species and ecosystems as part of FLR

Adaptation Options

The following adaptation action options were identified to improve the resilience of the programme's activities to climate change, and avoid environmental and social risks that could increase the vulnerability of ecosystems and local people to climate change:

For forest ecosystems:

- Consideration of climate-information and climate risk and vulnerability in PLUP, and VFM planning
- Include climate-induced stressors in forest monitoring including national forest inventories.
- As part of management plans, forest landscape restoration activities, and improved protected area management promoted by the programme under Component 3, include wildfire management measures
- Promote establishing corridors between ecosystems in order to support connectivity and natural resilience (part of FLR).
- Support protection and sustainable management of forested watersheds.

For agriculture:

- Consideration of climate-information and climate risk and vulnerability in PLUP, and PSAP investment plans
- Support to dry-season irrigation schemes, in Component 2 in partnership with ADB
- Capacity building and training on sustainable water harvesting techniques and reducing water needs through crop mix in partnership with ADB, FAO, and IFAD.

- Promotion of diversification in agriculture (opposed to increasingly prevalent monoculture land-use in the Northern provinces) within the PSAP.
- Inclusion of flood and drought-resilient crops and varieties. This can mainly be applied for
- The programme can promote risk mitigation processes through integrated PLUP and participatory planning for sustainable agricultural and forest management, including, for example, reducing shifting cultivation and increasing vegetative cover on slopes and in upland areas in order to help reduce erosion and sedimentation that contribute to riverbank cutting and riverbed rise downstream, as well as landslides in steep areas.
- Capacity building for farmers on sustainable pest and disease management
- Land use planning can help improve land use practices, including reducing exposure to risk (e.g., identifying high-risk areas for landslides, flooding, etc.), and can support the planning, adoption and monitoring of sustainable land use processes that can help reduce risk (for example, increased forest cover can reduce the risk of flooding, landslides or wildfires in certain contexts). This will be further strengthened by measures aimed at strengthening climate change adaptation under Project 2.
- Regular and comprehensive monitoring conducted within the framework of the programme at local level, including with various ethnic groups in order to benefit from their knowledge, can lead to early detection, follow-up and the identification of suitable management practices/adjustments as necessary.

The programme team should include a qualified staff member responsible for monitoring the impact of the programme and implementation of the Environmental and Social Management Plan (ESMP), including climate change related risks.

ANNEX 5: SUMMARY OF E&S PS AND GIZ SAFEGUARDS TRIGGERED

The following Table provides a summary of the standards and safeguards triggered by the programme, which are described in greater detail in Chapter 5.

Overview of safeguards and performance standards triggered by the programme

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
PS1: Assessment and Management of Environmental and Social Risks and Impacts	Yes	Medium	<p><u>ES risk:</u> Category B projects are required to have a project-level ESMP for its entire duration. The project will need to:</p> <ul style="list-style-type: none"> - Plan and budget for qualified human resources to support the implementation of the ESMP as well as monitor and continuously adapt the ESMP implementation in close cooperation with partners and stakeholders in Lao PDR - Establish a mitigation hierarchy (anticipate, avoid; minimize; compensate or offset) - Ensure that regular dialogues and consultations take place including at local level - Establish appropriate communication and redress mechanisms <p><u>Risk assessment:</u> The ES risk associated with implementing the ESMP is assessed as medium. Generally, the programme will mainly have positive social and environmental impacts, but if not managed adequately, it can have unintended negative impacts (UNIs or ES risks) in the context of working with ethnic groups, land-use planning, influencing regulated and customary land-use, and in the agricultural sector for example with herbicides and pesticides. The ESMP implementation risks can readily be addressed, and best practices are available. The programme's long duration of 7 years and its concept allows for participatory, consent-based and adaptive approaches that the programme can test in a selected site before scaling up activities to other target areas. The programme will follow the Pesticide Management Plan developed for the ER-PD (see Annex 10 for more detailed information).</p> <p><u>Potential measures:</u></p>

¹⁹⁵ Applicable are GCF/B.07/11 dated 2014 and including the ESS at Annex III and GIZ Sustainability Policy with associated Safeguards.

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<ul style="list-style-type: none"> - Budget for and hire a dedicated ES team consisting with an adequate number of ES specialists including sufficient qualifications to manage the different ES risks identified for the programme (in particular stakeholder engagement, indigenous peoples, environmental, safety and health, ESMP implementation, monitoring and learning) <ul style="list-style-type: none"> - Follow the Pesticide Management Plan developed for the ER-PD. This includes the following measures (see Annex 10 for more detailed information): <ul style="list-style-type: none"> ○ Prohibition of dangerous pesticides (non-eligibility list) ○ Emphasis on training staff, and disseminating information on agrochemical use including, among others: <ul style="list-style-type: none"> • The risks and dangers of agrochemical use; • Identification of prohibited/ banned substances, key government regulations and available resources; • Safety measures; • Low-risk non-chemical alternatives to address common issues (e.g., good agricultural practices to reduce soil nutrient depletion and/or erosion, integrated pest management practices, etc.); • Monitoring agrochemical use. <p>(Associated GIZ policy/safeguard: GIZ Sustainability Policy)</p>
PS2: Labor and Working Conditions	Yes	Low	<p><u>ES risk 1:</u> Labour and working conditions for staffs directly employed under the programme are not up to the standards</p> <p><u>Risk assessment:</u> The ES risk is assessed as low. Programme staff will be in capacity building, advisory and management positions. As with other GIZ programmes in Lao PDR, proper HR policies are in place</p>

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p>since 1993, when Germany commenced its cooperation with Lao PDR. The policies are in line with GIZ standard operating procedures and apply for all staff directly engaged with the programme by GIZ.</p> <p><u>Potential measures:</u></p> <ul style="list-style-type: none"> - Provide access to information that is clear and understandable, regarding rights under national labor and employment law and any applicable collective agreements, including rights related to hours of work, wages, overtime, compensation, and benefits upon beginning the working relationship and when any change occurs - Hire, train and promote women and members of ethnic groups where possible - Develop safety operational procedures for all programme activities that may pose risks to people or equipment (see PS4 for additional details) including for GoL partners and other stakeholders involved in programme implementation - Organize training on safety procedures - Require medical certificates to ensure staff are fit to work in various work conditions of the programme - Under no circumstances will child labour be allowed - First Aid Kits will be available at all times - Use of personal protection equipment will be mandatory and adequate trainings will be provided - Drinking water and sanitation facilities will be available to workers whenever possible <p><u>ES risk 2:</u> Forest workers sustain injury during cutting operations</p>

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p><u>Risk assessment</u>: The risk is assessed as low. Staff directly employed by the programme will not be involved in cutting operations. Forest workers may work for the GOL or on other contractual arrangements financed indirectly through grant funding from the programme in the context of promoted sustainable forest management activities (Component 3). The type of works may include maintenance cuttings and final harvesting of timber. Official records of accidents of forest workers were not available or obtainable. Consulted partners indicated low numbers of incidents in recent years. Best practices and occupational health and safety (OHS) guidelines are available for forest workers and can be applied by the programme</p> <p><u>Potential measures</u>:</p> <ul style="list-style-type: none"> - Staff supporting the implementation of activities related to forest management to be trained on OHS good practices, protocols and equipment (including protective equipment) - Train programme beneficiaries on relevant OHS practices involved with the establishment of forest plantations and sustainable forest management - Support the procurement of safety equipment including cut-resistant pants and protective goggles that should be used by beneficiaries to reduce risk. <p>(Note: Existing gender dynamics and inequalities are described in gender assessment and action plan)</p> <p>(Associated GIZ policy/safeguard: Safeguard Human Rights)</p>
PS 3: Resource Efficiency and Pollution Prevention	Yes	Low	<p>Risk assessment: The risk is assessed as low. While the use of chemical fertilizers and pesticides is not promoted by the project, the use can still not be fully excluded as they are commonly used to boost production. Crop processing facilities can generate small amounts of solid and liquid wastes due to their small scale of operation.</p>

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p>Potential measures:</p> <ul style="list-style-type: none"> - Follow the Lao Pesticide Law, and the Pesticide Management Plan (PMP) developed for the ERPD's ESMF (in line with the World Bank safeguard on pest management, that notes prohibited agrochemicals) and promotes awareness raising on pesticide safety procedures (the PMP has been adopted by the ESIA and attached in Annex 10). - Promotion of agrochemical-free agriculture through the application of good agricultural practices, when possible. Bio-controls will be promoted. - Inclusion of management of waste and pollution during production should be included in the business and investment plans developed by Agri-MSMEs supported by the project. - Continued consultations and socio-economic monitoring at the village and Agri-MSME level throughout program implementation <p>(Associated GIZ policy/safeguard: Safeguard Environment and Climate Change Mitigation, see below for details))</p>
PS4: Community Health, Safety, and Security	Yes	Medium	<p><u>ES risk 1</u>: Potential use of pesticides/herbicides in programme-promoted annual cropping and plantations can have negative health impacts on exposed people.</p> <p><u>Risk assessment</u>: The ES risk is assessed as medium. The programme promotes agricultural activities that may require limited use of herbicides or pesticides, such as maize and cassava, but mainly focuses on supporting deforestation-friendly, predominantly diversified agriculture and agroforestry and good agricultural practices. Best practices for managing pesticides are available and will be included in the ESMP (including guidelines from FAO and a pesticides management plan prepared for the ERPD ESMF). The programme excludes supporting crops that require intensive use of potentially</p>

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p>harmful substances and that are currently prohibited in Lao PDR through a national moratorium, such as bananas, because dangerous misuse and use of banned substances happened in the past.</p> <p><u>Potential measures:</u></p> <ul style="list-style-type: none"> - Continued consultations and socio-economic monitoring at village level throughout the programme - Blacklisting support to selected crops where extensive negative impacts from agrochemicals are widely documented (i.e. bananas) - Capacity building and awareness raising for villagers, farmers, partners and trainers/ extension staff on the hazards and responsible use of pesticides - The programme will not support the direct procurement of agrochemicals - Promoted agro-chemicals will be preceded by a thorough risk assessment, and the identification of adequate measures to reduce health and environmental risks to acceptable levels - Quantities promoted will be based on an accurate assessment of actual requirements to prevent overuse or accumulation of stockpiles. - Appropriate application equipment and protective gear will be provided in adequate quantities when agro-chemical use is promoted by extension agents, unless it is explicitly confirmed that equipment and suitable safety attire is sufficiently available - All users will be trained to ensure the responsible use of agrochemicals, and awareness of the potential harmful social and environmental impacts - Proper storage will be ensured in accordance with international guidelines (e.g. FAO's Guidance Document for Pest and Pesticide Management in Field Projects)

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p><u>ES risk 2</u>: Unexploded Ordnance (UXOs) from the Second Indochina War still are present in some parts of the programme area and can affect the health and safety of people involved in the programme activities.</p> <p><u>Potential measures</u>:</p> <ul style="list-style-type: none"> - Perform mandatory “UXO checks” before agriculture and forestry related measures take place as well as after extreme weather events (e.g. floods, land-slides): UXO checks should include for example (a) clarification with village/district/provincial authorities to confirm current clearance/status of UXO, (b) impact assessments based on historical bombing data or latest UXO district maps through the NRA/UXO provincial offices as well as on the Information Management System for Mine Action (IMSMA); see http://www.nra.gov.la/imsmadatabase.html, and (c) consultations with local population - Assign clear responsibilities for UXO checks, for example: The mandatory “UXO check” for each target village will be a task of the Provincial REDD+ Task Forces (Steering Committee), who will delegate it to the District Programme Management Units (DPMU) and the Provincial Programme Management Units (PPMU) for following up. Only after a confirmed check is done as a precondition for the implementation of programme activities and no harm can be expected, the Environmental Protection Fund (EPF) can release related and planned funds. - Require documented confirmation of clearance of UXOs from village/district/provincial authorities before approving funding for implementation partners through EPF - Applying NRA UXO guidelines and other standardized resources available online at http://www.nra.gov.la/resources.html - Working with local population and guides, who know the area - Integrate UXO issue as a general topic into Farmer-Field-Schools courses (Agriculture Sector) and Village Forest Management Planning processes (Forest Sector)

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<ul style="list-style-type: none"> - If needed, clearance of UXOs can be initiated through the Government's National Unexploded Ordnance Programme (UXO Lao or international NGOs) through proved and trained approaches (systematic and technical survey, detection of UXO with metal detectors, removal and destruction) or alternative land plots or other forms of cultivation must be identified - Community-based Mine Risk Education activities to offer people knowledge and alternatives for living and working safely in mine/UXO contaminated areas (available online at http://www.nra.gov.la/resources.html) <p>(Associated GIZ policy/safeguard: Safeguard Conflict & Context Sensitivity, Safeguard Human Rights, Safeguard Environment, Safeguard Climate Change Adaptation, see below for details)</p>
PS 5: Land Acquisition and Involuntary Resettlement	Yes	Medium	<p><u>ES risk:</u> The programme may contribute to changed or reduced or denied access to land through some activities (for example participatory land-use planning and management plans for different forest types) resulting in unintended negative livelihood impacts.</p> <p><u>Potential measures:</u></p> <ul style="list-style-type: none"> - FPIC processes to be initiated and maintained throughout the lifetime of the programme with all participating villages, affected ethnic groups and other stakeholders prior to the implementation of any activities - Land-use planning as well as developing or changing management plans to be conducted in participatory manner with local stakeholders always, taking into account the inclusion of ethnic groups and gender balance - Regular dialogues and meaningful consultations at local level to identify emerging problems - Programme grievance mechanism to deal with any complaints and issues that may arise as a result of the programme; include national grievance mechanisms (for example citizens' hotline to

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p>National Assembly members) in programme communication; ensure with guidelines, policies or laws of Lao PDR</p> <p>To be seen together with the GCF Indigenous Peoples Policy in which the definition of “involuntary resettlement” also includes denial of access to land. The ESMP will need to address this in detail under a dedicated ESMP Action (see PS7 and PS8).</p> <p>(Associated GIZ policy/safeguard: Safeguard Conflict & Context Sensitivity, Safeguard Human Rights, see below for details)</p>
PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Yes	Low	<p><u>ES risk 1:</u> Promoting timber plantation and permanent agriculture may contribute to reducing biodiversity.</p> <p><u>Risk assessment:</u> The programme’s negative impact on biodiversity is assessed as low. The programme will not promote the expansion of agriculture or timber plantations. However, loss of residual biodiversity at a small scale cannot be ruled out if changing rotation agriculture to permanent agriculture.</p> <p><u>Potential measures:</u></p> <ul style="list-style-type: none"> - As part of the participatory land use planning, ensure existing biodiversity, ecosystems and ecosystem services are safeguarded and sufficient room for regeneration is available - Cooperate with potential agri-MSMEs on site-specific impact assessments - Make available best national and international practices to inform activities - Monitoring of land-use changes and, when necessary in case of concern, site-specific impact assessments on biodiversity or ecosystems - Train stakeholders about ecosystem services, to be aware of sensitive flora and fauna and to apply best practices for their protection

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p><u>ES risk 2:</u> Programme activities could lead to (increased) use of pesticides, herbicides and other chemicals, which could have negative impact on biodiversity and natural resources</p> <p><u>Risk assessment:</u> The ES risk is assessed as low. The programme promotes agricultural activities that may require limited use of herbicides or pesticides, such as maize and cassava, but mainly focuses on supporting deforestation-friendly, predominantly diversified agriculture and good agricultural practices. Best practices for managing pesticides are available and will be included in the ESMP (including guidelines from FAO and a pesticides management plan prepared for the ERPD ESMF). The programme excludes supporting crops that require intensive use of potentially harmful substances and that are currently prohibited in Lao PDR through a national moratorium, such as bananas, because dangerous misuse and use of banned substances happened in the past. Overall the impact on biodiversity will be very limited, site-specific, can be anticipated, and is readily manageable through available best practices.</p> <p><u>Potential measures:</u></p> <ul style="list-style-type: none"> - Continued consultations and monitoring at village and landscape level throughout the programme - Blacklisting support to selected/banned crops where extensive negative impacts from agro-chemicals are widely documented (i.e. bananas) - Capacity building and awareness raising for villagers, farmers, partners and trainers/extension staffs on the impacts of chemicals on biodiversity and responsible use of pesticides - The programme will not support the direct procurement of agrochemicals - Promoted agro-chemicals will be preceded by a thorough risk assessment, and the identification of adequate measures to reduce environmental risks to acceptable levels

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<ul style="list-style-type: none"> - Quantities promoted based on an accurate assessment of actual requirements to prevent over-use or accumulation of stockpiles. - Appropriate application equipment and protective gear will be provided in adequate quantities when agro-chemical use is promoted by extension agents, unless it is explicitly confirmed by DAFO Agriculture Unit that equipment and suitable safety attire is sufficiently available - All users will be trained to ensure the responsible use of agrochemicals, and awareness of the potential harmful social and environmental impacts - Proper storage will be ensured in accordance with international guidelines (e.g. FAO's Guidance Document for Pest and Pesticide Management in Field Projects) - Integrate knowledge about biodiversity conservation and ecosystem services into capacity building for stakeholders involved in trainings/ capacity development, land-use planning, and management plans for various forest categories - Awareness raising and trainings on the safe use of pesticides/herbicides through agricultural capacity building, extension and trainings - Trainings for local authorities involved in the programme on regulation and best practices to monitor and enforce the proper use of legal pesticides/herbicides in case such applications are inevitable as well as introduction of alternatives to pesticides and herbicides - Promotion of good agricultural practices, which in turn can reduce pesticide use or at least encourage responsible pesticide use - Awareness raising for farmers, traders and investors on the potential financial and marketing advantages of reducing or stopping the use of pesticides/herbicides (e.g. through the use of alternative agricultural practices, marketing of organic products, etc.) <p>(Associated GIZ policy/safeguard: Safeguard Environment, Safeguard Conflict & Context Sensitivity, Safeguard Human Rights, see below for details)</p>

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
<p>PS7: Indigenous Peoples</p> <p>GCF Indigenous Peoples Policy</p>	Yes	Medium	<p><u>ES risk:</u> Programme area has more people of the non-Lao-Tai ethnic groups than of the Lao-Tai in most of the selected districts.</p> <p>(Note that the GCF Indigenous Peoples Policy in some respects supersedes PS7 because of its broader scope and stringent clauses)</p> <p><u>Potential measures:</u></p> <ul style="list-style-type: none"> - Develop Indigenous Peoples Plan (IPP) or Community Engagement Plan and/or dedicated ESMP Action(s) for Indigenous Peoples in line with the associated GIZ policies listed below, providing the following information: <ul style="list-style-type: none"> (i) Programme area, components and activities and their potential impact on indigenous peoples (ii) Affected indigenous peoples and their locations (land, territories, resources, etc.) (iii) Vulnerable groups within the affected peoples (e.g. women and girls, the disabled and elderly, etc.) (iv) Summary of relevant legal framework – both national and international applicable to the programme context (v) From this and other relevant social and environmental assessments and mitigation measures, extract findings and recommendations pertaining to potentially adverse impacts to indigenous peoples, their lands, resources and territories, the details and associated time-lines for the planned measures to avoid, minimize, mitigate, or compensate for these adverse effects; description of measures to protect traditional knowledge and cultural heritage (vi) Description of participation, consultation and FPIC processes taking needs of indigenous peoples into account

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p>(vii) Capacity building - measures to strengthen the social, legal, and technical capabilities of government (national, provincial, local) and the affected indigenous peoples</p> <p>(viii) Grievance redress mechanism and procedures taking needs of indigenous peoples into account</p> <p>(ix) Institutional arrangements and roles and responsibilities for IPP or IP action implementation</p> <p>(x) Budget and timeline</p> <ul style="list-style-type: none"> - Ensure IP Action(s) and plans minimize, mitigates and enables the programme to compensate appropriately when programme activities impact on indigenous people's rights, regardless of whether there is a legal recognition of land titles, resources and territories - FPIC processes to be initiated and maintained throughout the lifetime of the programme - Ensure existing national laws related to ethnic groups are fully respected - The programme should identify and seek financing measures that specifically enable the most vulnerable ethnic groups to have better access to land, technical support for implementing good agriculture practices, sustainable land management (SFM, FLR, etc.), and green finance measures - Programme staff and trainers to include male and female representatives from diverse ethnic groups; positively target particularly vulnerable groups; all to receive training on gender equality and social inclusion within the context of the programme - Outreach, extension and technical support at the community-level, workshops and capacity building activities to be socially inclusive, aware of culturally diverse contexts and norms, and are to take into consideration local knowledge - Take into account local languages and indigenous customs for consultations and all communication and outreach activities

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<ul style="list-style-type: none"> - Where necessary, the programme should ensure the availability of translators (from within the community or externally as appropriate) to facilitate the dissemination of knowledge and information; translation to be provided for workshops, extension materials and other programme-related materials (e.g. videos, publications, etc.) - Particular attention to be paid to women, ethnic groups, illiterate people, and people with hearing or visual disabilities, people with limited or no access to internet and other groups with special needs; carry out the dissemination of information among these groups with the programme counterparts and local actors such as village and kumban leaders, producer associations, CSOs, Lao Women's Union, among others - Opportunities for collaboration with other stakeholders (e.g. CSOs) to be sought out to strengthen stakeholder outreach and the engagement of various ethnic groups and vulnerable households <p><u>Interpretation of the GCFS's Indigenous Peoples Policy:</u></p> <p>The GCF's Indigenous Peoples Policy provides the following guidance for programmes where beneficiaries include both indigenous and non-indigenous peoples:</p> <p><i>"When indigenous peoples are not the only beneficiaries of the activities proposed for GCF financing, the planning documents and procedures may vary in form and presentation and will meet the requirements of this Policy regardless of form and presentation. The accredited entities will design and implement the GCF-financed activities in a manner that provides affected indigenous peoples with equitable access to project benefits. The concerns or preferences of indigenous peoples will be addressed through meaningful consultation, including a process to seek and obtain their free, prior and informed consent and documentation will summarize the consultation results and de-</i></p>

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p><i>scribe how indigenous peoples' issues have been addressed in the design of the GCF-financed activities. Arrangements for ongoing consultations during implementation and monitoring will also be described.</i></p> <p><i>The accredited entities will prepare a time-bound plan, such as an IPP, setting out the measures or actions proposed. In some circumstances, a broader integrated community development plan will be prepared, addressing all beneficiaries of the GCF-financed activities and incorporating necessary information relating to the affected indigenous peoples. A community development plan may be appropriate in circumstances where other people, in addition to the indigenous peoples, will be affected by the risks and impacts of the GCF-financed activities, where more than one indigenous peoples group is to be included, or where the regional or national scope of a programmatic project incorporates other population groups."</i></p> <p>Given the diverse programme beneficiaries involved in the proposed programme, it was decided to develop a stakeholder engagement plan (see Annex 7 to the FP) and Ethnic Group Development Plan (FP Annex 6d).</p> <p>(Associated GIZ policy/safeguard: Safeguard Conflict & Context Sensitivity, Safeguard Human Rights, see below for details)</p>
PS8: Cultural Heritage	Yes	Medium	<p><u>ES risk:</u> There may be areas where people's access to exercising their cultural heritage, especially of an intangible nature, may be affected, if there is a change in land use, or if they are denied any access rights.</p> <p><u>Risk assessment:</u> Risk assessed as medium. During programme preparation and consultations, no cultural heritage places, buildings or monuments were identified in areas where the programme will be</p>

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p>undertaken and where access could become a problem. Still, residual uncertainty remains, therefore further investigation of places and practices of cultural and historic heritage significance will have to be done before activities are to be. The programme must work with communities to identify village areas of traditional or cultural significance. The programme must respect ancestral and spiritual land and forest use, and sensitivity to customary use of land by the community, especially ethnic groups, and ensure rights remain to conduct ritual ceremonies (often taking place in forests). In addition to this, the programme will have to preserve and respect indigenous knowledge, including traditional knowledge and use of medicinal plants whenever needed.</p> <p><u>Potential measures:</u></p> <ul style="list-style-type: none"> - National, regional and/or local museums will be consulted on any historical, indigenous or cultural heritage areas - All information on programme activities will be made easily accessible and in appropriate ethnic languages - Ensure that information dissemination campaigns make use of images, cartoons and drawings, as well as clear and simple language, to support the comprehension of those who are less literate - Consultations with stakeholders will continue throughout the programme implementation as local stakeholders and community members have a key role in the implementation and monitoring of the programme. This will ensure that stakeholders are at any time aware of the programme, its progress as well as any changes. This will also be used as a mechanism to identify any arising issues, including areas of traditional or cultural significance - For activities that will be undertaken in or near known areas of historic value a training on cultural heritage awareness to all involved will be provided

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<ul style="list-style-type: none"> - Application of the chance finds procedure developed for the ER Programme (see Annex 3 in the ESMF, included within Annex 12 of this document) <p>(Associated GIZ policy/safeguard: Safeguard Environment, Safeguard Conflict & Context Sensitivity, Safeguard Human Rights, see below for details)</p>
GIZ Sustainability Policy	Yes	n/a	Identical to PS1. See above for details.
GIZ Safeguard Environment	Yes	Medium	Identical to PS6 (low risk), PS4 (medium risk) and PS8 (medium risk). See above for details.
GIZ Safeguard Climate Change	CCM ¹⁹⁶ : No CCA ¹⁹⁷ : Yes	Low	<p><u>ES Risk:</u></p> <p>Climate change can potentially lead to:</p> <ul style="list-style-type: none"> - Temperature and annual precipitation increase - Dry season precipitation increase - Annual runoff increase - Dry season runoff increase - Potential for increased flooding (not quantified) and therefore: - Agricultural productivity decreased and; - Existing food scarcity aggravated <p><u>Risk assessment:</u> Climate change related risks to the programme are assessed as low, because:</p> <ul style="list-style-type: none"> - Impact on forests likely low - Impact in relation with precipitation and water availability on agriculture and food security likely low (CFS: “weak signals”)

¹⁹⁶ CCM stands for “Climate Change Safeguard: Mitigation of Greenhouse Gas emissions”.

¹⁹⁷ CCA stands for “Climate Change Safeguard: Adaptation to the Impacts of Climate Change”.

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p><u>Potential measures:</u></p> <p>For forest ecosystems:</p> <ul style="list-style-type: none"> - Include climate-induced stressors in forest monitoring including national forest inventories. - As part of management plans, forest landscape restoration activities, and improved protected area management promoted by the programme under Component 3, include wild fire management measures - Promote establishing corridors between ecosystems in order to support connectivity and natural resilience (part of FLR). - Support protection and sustainable management of forested watersheds. <p>For agriculture:</p> <ul style="list-style-type: none"> - Support to dry-season irrigation schemes, in Component 2 in partnership with ADB - Capacity building and training on sustainable water harvesting techniques and reducing water needs through crop mix in partnership with ADB, FAO, and IFAD. - Promotion of diversification in agriculture (opposed to increasingly prevalent monoculture land-use in the Northern provinces). - Inclusion of flood and drought-resilient crops and varieties. This can mainly be applied for rice, where ample experience exists in the region (esp. Thailand and Vietnam). For other supported cultivation plants, including cardamom and Non-Timber Forest Products, little research on climate risks was found to be available. The programme should undertake a more comprehensive stocktaking of the available research when it commences activities. - The programme can promote risk mitigation processes, including, for example, reducing shifting cultivation and increasing vegetative cover on slopes and in upland areas in order to help reduce

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p>erosion and sedimentation that contribute to riverbank cutting and riverbed rise downstream, as well as landslides in steep areas.</p> <ul style="list-style-type: none"> - Capacity building for farmers on sustainable pest and disease management - Land use planning can help improve land use practices, including reducing exposure to risk (e.g. identifying high-risk areas for landslides, flooding, etc.), and can support the planning, adoption and monitoring of sustainable land use processes that can help reduce risk (for example, increased forest cover can reduce the risk of flooding, landslides or wildfires in certain contexts). - Regular and comprehensive monitoring conducted within the framework of the programme at local level, including with various ethnic groups in order to benefit from their knowledge, can lead to early detection, follow-up and the identification of suitable management practices/adjustments as necessary. - The programme team should include a qualified staff member responsible for monitoring the impact of the programme and implementation of the Environmental and Social Management Plan (ESMP), including climate change related risks.
GIZ Safeguard Conflict & Context Sensitivity	No	n/a	Lao PDR is categorized as a green (=safe) country in both reference lists relevant to GIZ's Safeguard Conflict and Context Sensitivity, which are the BMZ Crisis Early Warning & General Overview of Countries with Risk Potential for GIZ. As per GIZ's S+G management system, an in-depth assessment is not necessary.
GIZ Safeguard Human Rights	Yes	Medium	<p>Lao PDR is Party to a number of core human rights instruments including the:</p> <ul style="list-style-type: none"> - International Convention on the Elimination of Racial Discrimination (ICERD) - Convention on the Elimination of Discrimination against Women (CEDAW) - Convention on the Rights of the Child (CRC) - International Covenant on Economic, Social and Cultural Rights (ICESCR)

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<ul style="list-style-type: none"> - International Covenant on Civil and Political Rights (ICCPR) - Convention on the Rights of Persons with Disabilities (CRPD) and - Convention against Torture and other Cruel, Inhumane or Degrading Treatment or Punishment (CAT). <p>Human rights context:</p> <p>Lao PDR has ratified a total of eight ILO Conventions, including five of the eight ILO core Conventions. During the Universal Periodic Review (UPR), a process which involves a review of the human rights records of all UN Member States, the national report for Lao PDR presents a range of rights issues faced at the national level, which are of relevance to GIZ's GCF programme. The range of issues includes outstanding challenges such as unexploded ordnance (UXOs), poverty levels, lack of awareness about human rights obligations, limited grassroots capacity and insufficient implementation of gender inequality policies as well as the need for further coordination among ministries. Also of relevance were national commitments in the field of cultural rights including an emphasis on heritage conservation. Discussions raised in the UN process and recommendations during the 2015 UPR, among other things, related to land and resource issues, forced disappearances, trafficking, ethnic minorities and indigenous peoples' rights and civil society space. General infringements in the natural resource management sector are affected by broader processes of political participation and decision-making, and a relatively restrictive environment for civil society organizations (CSOs). Also important is the relatively low overall capacity in terms of human rights standards and their implementation modalities. These are arguably further impaired by a restrictive CSO environment. It is clear that considerable attention in international human rights processes has concerned questions of land and natural resources, indigenous and ethnic minority communities, cultural rights and consultation measures. A new UPR is scheduled for 2020, and GIZ through its GCF programme can contribute towards the implementation of some of these national commitments through clearly identified activities.</p>

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p>The programme preparation team in its GIZ-internal ESS risk pre-screening have indicated a number of potential risks of unintended impacts due to the fact that the programme plans to operate in Northern Lao PDR where the population is potentially faced with the following human rights implications:</p> <ul style="list-style-type: none"> - Disadvantages in terms of access to (state) services, productive resources or sources of income - Restricted civic space and infringement of participation rights - Infringement of the rights of indigenous people to consultation and consent - Forced evictions or forced displacement - Infringement of fundamental labour rights - Forestry and agriculture are human rights-sensitive sectors in Lao PDR <p>Unintended human rights implications may occur in particular in the context of Activity 1.3 “Improved law enforcement and monitoring” and all activities under Component 3 “Implementation of sustainable forest landscape management and forest and landscape restoration (FLR)” because of a combination of factors: The programme works with underserved population groups and ethnic groups. The programme also supports the Government of Lao PDR in Participatory Land Use Planning (PLUP) as well as in forest supervision and law enforcement. PLUP and law enforcement may affect individuals or groups in the ways they are used to access and use land and/or natural resources. Furthermore, the programme promotes the participation of non-government stakeholders in decision-making over land-use. Stakeholders include cooperatives and village forestry associations, which is to a degree new and innovative in the context of Lao PDR and could potentially contribute to frictions or conflict (relevance and risk is likely low) for example between citizens and government officials. CSOs, even though low in number in Lao PDR, will participate in the programme’s Monitoring and Evaluation activities and potentially the programme’s Steering Structure.</p>

ES Policy/ Standard ¹⁹⁵ :	Triggered:	Risk Assessment:	Description of ES risk:
			<p>Human rights-relevant aspects have been examined under:</p> <p>PS2: Labor & Working Conditions (ES risk: low)</p> <p>PS4: Community Health, Safety & Security (ES risk: medium)</p> <p>PS5: Land Acquisition & Involuntary Resettlement (ES risk: medium)</p> <p>PS6: Biodiversity Conservation & Sustainable Management of Living Natural Resources (ES risk: low)</p> <p>PS7: Indigenous People (ES risk: medium)</p> <p>PS8: Cultural Heritages (ES risk: medium)</p> <p>In summary, the risk classification of GIZ's safeguard "Human Rights" is medium (as informed by related IFC Performance Standards).</p>
GCF & GIZ Gender Policy	Yes	n/a	Promotion of gender equality and gender equity must be applied as stated in the Policy. A separate Gender Assessment and Gender Action Plan addressed this in detail.
GCF Independence Redress Mechanism/GRM	Yes	n/a	Given the number of different ethnic groups, must be applied in a way suitable to their cultures and that ensures access to all people. Anonymity must be assured.

ANNEX 6: FPIC CONSULTATION ATTENDANCE FORMS

Source: "The guideline concerning the process of free prior informed consent (FPIC) under Climate Protection through avoided Deforestation in Houaphan Province"

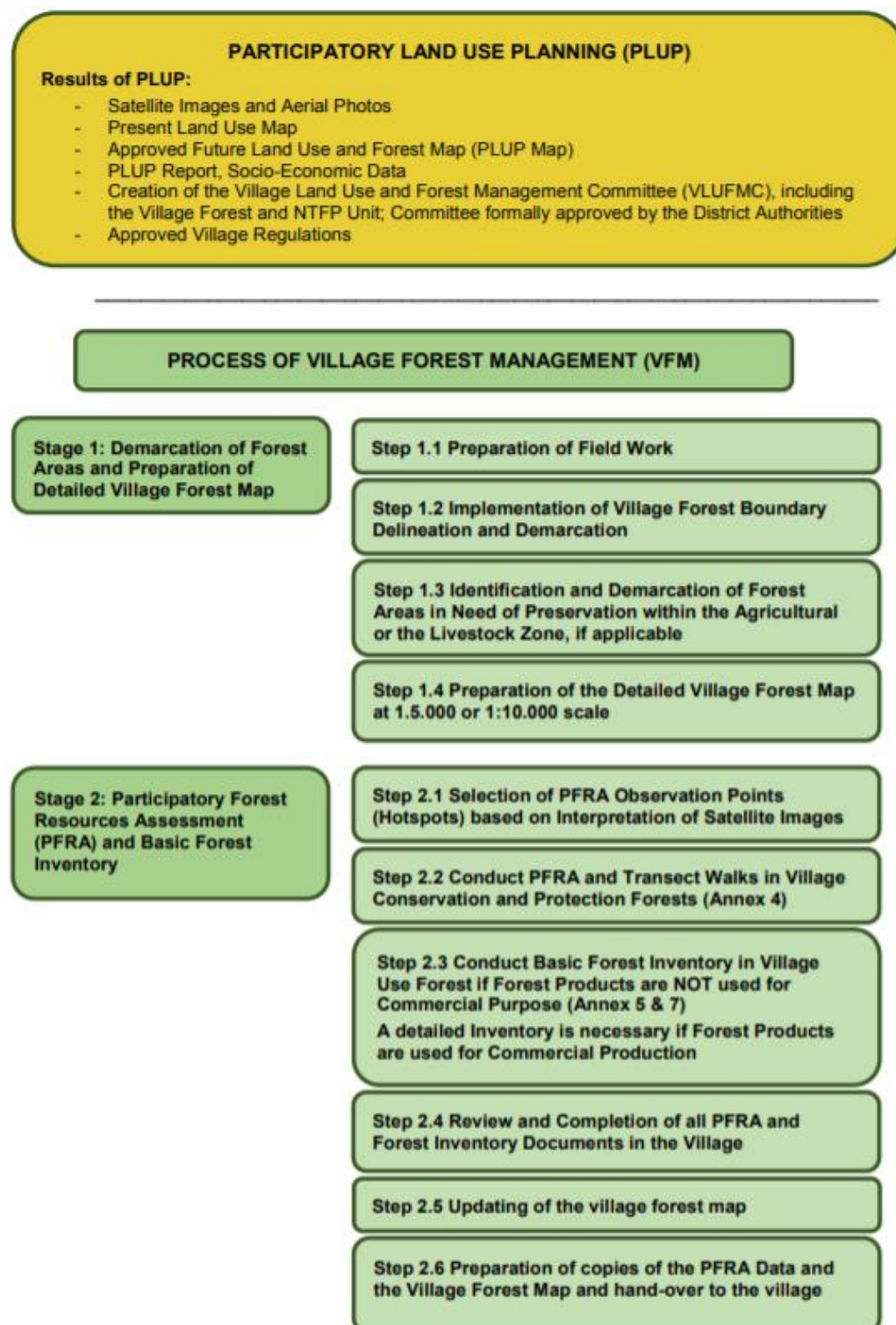
Registration form for people who attend the FPIC consultation in the village level

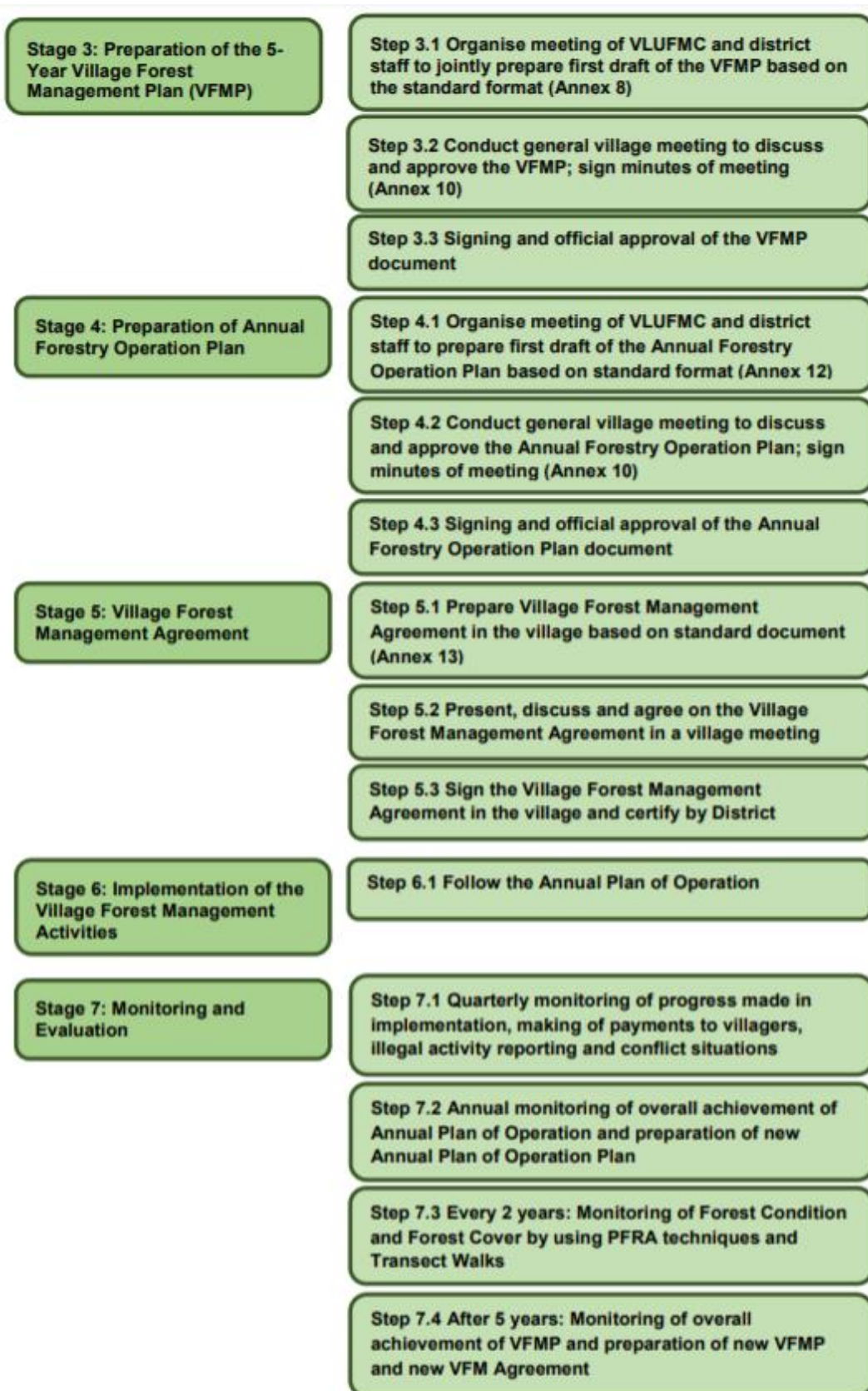
On date...../...../....., in Village....., District....., Province.....

No.	Names and surnames	Age	Sex	Ethnic group	Occupation	Phone number	Signature/finger print
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
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18.							
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20.							
21.							
22.							
23.							
24.							

ANNEX 7: ADDITIONAL INFORMATION, GUIDELINES AND DIAGRAMS

Summary diagram of all stages and working steps of VFM approach





Source: GIZ. 2016. VFM Planning Guideline. Available online: <https://www.giz.de/de/downloads/Village-Forest-Management-Planning-Guideline.pdf>.

ANNEX 8: IFC AND PROGRAMME EXCLUSION LISTS

IFC Exclusion List (2007)

The IFC Exclusion List defines the types of projects that IFC **does not** finance.

IFC does not finance the following projects:

- Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone depleting substances, PCB's, wildlife or products regulated under CITES.
- Production or trade in weapons and munitions.¹
- Production or trade in alcoholic beverages (excluding beer and wine).¹
- Production or trade in tobacco.¹
- Gambling, casinos and equivalent enterprises.¹
- Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where IFC considers the radioactive source to be trivial and/or adequately shielded.
- Production or trade in unbonded asbestos fibers. This does not apply to purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.
- Drift net fishing in the marine environment using nets in excess of 2.5 km. in length.

A reasonableness test will be applied when the activities of the project company would have a significant development impact but circumstances of the country require adjustment to the Exclusion List.

All financial intermediaries (FIs), except those engaged in activities specified below*, must apply the following exclusions, in addition to IFC's Exclusion List:

- Production or activities involving harmful or exploitative forms of forced labor²/harmful child labor.³
- Commercial logging operations for use in primary tropical moist forest.
- Production or trade in wood or other forestry products other than from sustainably managed forests.

* When investing in **microfinance** activities, FIs will apply the following items in addition to the IFC Exclusion List:

- Production or activities involving harmful or exploitative forms of forced labor²/harmful child labor.³
- Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals. Hazardous chemicals include gasoline, kerosene, and other petroleum products.

- Production or activities that impinge on the lands owned, or claimed under adjudication, by Indigenous Peoples, without full documented consent of such peoples.

* **Trade finance projects**, given the nature of the transactions, FIs will apply the following items in addition to the IFC Exclusion List:

- Production or activities involving harmful or exploitative forms of forced labor²/harmful child labor.³

Footnotes

¹ *This does not apply to project sponsors who are not substantially involved in these activities. "Not substantially involved" means that the activity concerned is ancillary to a project sponsor's primary operations.*

² *Forced labor means all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.*

³ *Harmful child labor means the employment of children that is economically exploitive, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health, or physical, mental, spiritual, moral, or social development.*

Programme Exclusion List

The following is the Programme Exclusion List, a list of activities that the programme will not support:¹⁹⁸

- Activities that result in a negative change to existing legitimate tenure rights
- Activities that result in the involuntary resettlement of households
- Activities that may increase greenhouse gases substantially
- Activities that support the clearing of native/ primary forests.
- Introduction of non-native species, unless they are already present in the vicinity or known from similar settings to be non-invasive, and the introduction of genetically modified plant varieties into a designated project area.
- New settlements or expansion of existing settlements outside the area defined by the PLUP or in any zone not gazetted for agriculture or habitation in the macro-zoning of the NPA
- Activities that create adverse significant impacts on local people, including ethnic groups, that are not acceptable to them, even with the mitigation measures developed in their participation
- The physical relocation and/or demolition of residential structures of household use.
- Activities resulting in significant damage or loss to cultural property, including sites with archeological (prehistoric), paleontological, historical religious cultural and unique natural values
- Construction of new roads, road rehabilitation, road surfacing or track upgrading of any kind inside natural habitats, and existing or proposed protected areas, and in general any construction expected to lead to negative environmental impacts.
- Forestry operations on land or in watersheds in a manner that is likely to contribute to villages' increased vulnerability to natural disasters
- Conversion or degradation of natural habitat and any unsustainable exploitation of natural resources, including NTFPs.
- Production or trade in wildlife products or any other product/ activities deemed illegal under Lao PDR laws, regulations, or international conventions and agreements, or subject to international bans.
- The production, processing, handling, storage or sale of tobacco or products containing tobacco
- Trade in any products with businesses engaged in exploitative environmental or social behaviour, or engaged in any unauthorized activities, especially related to natural resources.
- Crops that require intensive use of potentially harmful substances (see Table below) and that are currently prohibited in Lao PDR through a national moratorium (e.g. banana plantations)

List of banned agrochemicals in Lao PDR, June 2010

Insecticides and acaricides	Fungicides
1. Aldrin	30. Binapacryl
2. BHC	31. Captafol
3. Chlordane	32. Cycloheximide
4. Chlordimeform	33. Mercury and mercury compounds
5. Chlorfenvinphos	34. MEMC
6. Chlorthiophos	35. PMA

¹⁹⁸ Has been cross-checked with the exclusion criteria of the ESMF of the ER-PD (page 150, Checklist 1)

7. Cyhexatine	36. Selenium compound
8. DDT	Rodenticides
9. Dieldrin	37. Chlorobenzilate
10. Dimefox	38. Sodium fluoroacetate
11. Dinitroresol	Herbicides
12. Demeton	39. 2, 4, 5 –T
13. Endrin	40. Dinoseb
14. Endosulfan	41. Dinoterb acetate
15. Ethyl Parathion	42. Paraquat
16. EPN	43. Sodium chlorate
17. Heptachlor	Fumigants
18. Hexachloro cyclohex- ane	44. EDB
19. Leptophos	45. Ethylene oxide
20. Lindane	46. Methyl bromide
21. Methamidophos	Others
22. Methomyl	47. Arsenic compound
23. Methyl parathion	48. Calcium arsenate – herbicide, rodenticide, molluscicide, insecticide
24. Monocrotophos	49. DBCP – Nematocidide
25. Polychlorocamphene	50. Daminozide – Plant growth regulators
26. Phorate	51. Fluoroacetamide – Insecticide, rodenticide
27. Schradan	52. Oxamyl – Insecticide, acaricide, termiticide
28. TEPP	53. Phosphamidon – Insecticide, nematocidide
29. Toxaphene	54. Sodium Arsenite – Insecticide, fungicide, herbicide, rodenticide
	55. Thallium (i) sulfate – Rodenticide, insecticide.

Source: Annex 2 of the ESMF for the ER-PD (FP Annex 6c)

The programme will also not involve the procurement of agrochemicals. As some households may already use agrochemicals, trainings will also include components on awareness raising about environmental and social risks, alternatives (e.g. integrated pest management associated with good agricultural practices), and information on safety for agrochemical use. For more information refer to Annex 10 – The Pesticide Management Plan for the ER-PD, which this programme will also follow.

ANNEX 10: PESTICIDE MANAGEMENT PLAN

Note: The programme will follow the pesticide management plan developed for the ER-PD Annexure 2, which is described in the text below.

ER-PD Pesticide Management Plan¹⁹⁹

The Pesticide Management Plan (PMP) aims to provide basic knowledge to the national, provincial and district government, the REDD+ team, consultants, Kumban (KB) staff, village officials, private and public sector agencies with adequate guidance for effectively addressing the safeguard issues in line with World Bank's OP 4.09. The process will be implemented as part of the REDD+ programme and fully integrated into the subproject selection, approval, implementation, and monitoring and evaluation process. The REDD+ programme does not include procurement of pesticides, but the ESMF identifies key issues related to the existing use of pesticide and chemical fertilizers and identified mitigation measures required in relation to prohibited items, training, and guidelines on safe use and disposal of pesticides. The PMP will be applicable for all REDD+ activities related mostly to **Component 2 on agriculture and sustainable livelihoods development**. Agriculture is the default livelihood of the rural population and the most direct pressure on forests. As such, the ER Programme will offer direct measures for value chain integration, and agro-technological solutions for improved yields. Engaging the private sector for climate-smart and responsible investments is critical for ensuring sustainable decisions on land use. Activities under this component aim to support a private-public dialogue on REDD+ and climate-smart agriculture, and to directly invest in scalable models that sustainably engage with local communities including ethnic groups and supporting alternative livelihood options. Chemical based fertilizers and pesticides are currently being used in the project areas, particularly in instances where monoculture is practiced.

All responsible agencies at central, provincial, and local levels will be responsible for implementation of the PMP and ensuring full compliance, including keeping proper documentation in the project file for possible review by the World Bank.

This PMP document is considered a living document and could be modified and changed as appropriate. Close consultation with the World Bank and clearance of the revised PMP will be necessary.

Section I. Policy and Regulations

World Bank's safeguard policy on pest management (OP 4.09)

The policy requires projects involving procurement of pesticide to prepare and implement a Pest Management Plan to ensure that the handling, transportation, usage, disposal of pesticide be safe for both human and the environment. The REDD+ will not promote the procurement of any chemical pesticides or herbicides. However, if pest invasion occurs, small amount of eligible and registered pesticides in the project provinces is allowed if supplemented by additional training of farmers to ensure pesticide safe uses in line with World bank's policies (OP 4.09). And, given that the project is designed to promote the reduction in chemical pesticide and fertilizer use in existing farm land by enhancing sustainable farming practices, this simplified Pest Management Plan was prepared, along with a negative list. While the project will not procure and promote use of chemical pesticides and fertilizers, which are included in the non-eligibility list, it may be unrealistic to completely prevent all farmers from applying chemical inputs. Specifically, reha-

¹⁹⁹ Text copied from Annex 2 of the ESMF

bilitation of irrigation, building of small irrigation/agriculture production, and/or control of infestation of diseases may involve the use of pesticides, herbicides, and insecticides. To mitigate this potential impact, this simplified PMP has been prepared outlining clear regulations and procedures for management of pesticides and/or toxic chemical as well as providing knowledge and training on health impacts and safe use of pesticides and/or, when possible, promotion of non-chemical use alternatives such as organic farming.

The simplified PMP is informed by the Decree on Pesticide Management, No 258 /GOV, 24 August 2017, the Regulation on the Control of Pesticides in Lao PDR (2014), as well as guidelines on Integrated Pest Management (IPM) provided by the Food and Agriculture Organization of the United Nations (FAO).

Government regulation related to pest management

In March 2000, with support from Japan International Cooperation Agency (JICA) and Food and Agriculture Organization (FAO), the MAF established the Regulation number 0886/MAF and updated it on June 11, 2010 into Regulation 2860/MAF (Annex 3) on Pest Management in Lao PDR. The regulation was developed based on the WHO recommended Classification of Pesticide by Hazard and Guideline to Classification 1994-1995. The GoL had registered in January 2010 the companies who import pesticides, fertilizers and seeds into Lao PDR. The list of registered pesticides was adjusted in May 2010 based on the updated regulation. The regulation was uploaded to the Lao e-Gazette on July 11, 2014.²⁰⁰ The list of prohibited or banned pesticides is found at the end of this Annex. The Department of Agriculture (DoA) under MAF is mandated to oversee all pesticide use.

Section II. Key Issues and Mitigation Measures

Key issues related to use of pesticide and chemical fertilizer

The PMP is developed to support project community and a responsibility of all parties to support the implementation and proper applicability of the WB OP 4.09. Negative impacts from the use of pesticides and chemical fertilizers are expected to be minor and localized and could be mitigated during the planning and implementation of the project. Given that uses of pesticides and inorganic fertilizers are normal practices of some farmers, the REDD+ will promote IPM to avoid inappropriate use of them. However, it is important for MAF staff and local communities to understand the nature of such activities to encourage farmers to reduce the uses of pesticides and inorganic fertilizers. Implementation of subprojects related to increasing agriculture productivity (rice, corn and vegetables production) for commercialization as well as improving irrigation systems may lead to increase of pesticide, chemical, and fertilizer uses.

Actions for mitigation

The negative impacts from the use of pesticides and chemical fertilizers from REDD+ activities would be minor and localized and could be mitigated during the planning and implementation of the subprojects. During the consultation stage with villages, there are opportunities to enhance positive impact during the planning and selection of the subprojects. Below is a summary of the activities to be carried out during the planning and implementation of REDD+ subprojects on pest management.

a) Prohibition

To avoid adverse impacts due to pesticides, procurement of pesticides will not be promoted, and this has been included in the “non-eligibility list”.

²⁰⁰ http://laoofficialgazette.gov.la/index.php?r=site/listlegislationcp&agencies_id=3&old=0

b) MAF staff training

The REDD+ team will continue providing basic knowledge on alternative options for agriculture development and /or livelihood activities, including safe use of pesticides and other toxic chemicals. Budget would be allocated for project staff training to understand 1) overall policy on Pest Management (government and Bank policy); 2) basic knowledge on possibly negative impact on environmental and health from the use of pesticide and chemical fertilizer; and 3) basic knowledge on how to prevent these negative impacts including what are the prohibited items in the country for pesticide and chemical fertilizer, how to prevent or mitigate the negative impact from the use etc. (staff training could be done jointly with other topics). This training would be provided for subprojects that involve the use of fertilizer, pesticides, and/or toxic chemicals.

c) Provide knowledge to farmers

Prior consultation would be provided to project KBs. Pest management will be included as one topic for village consultation meeting at the KB. Both for agriculture infrastructure and livelihood support, training on pest management should be provided in the following areas:

- Pest management training: The objective is to provide basic knowledge to the target farmer on prohibited pesticides, the negative impacts of the use of pesticides and chemical fertilizers both on environmental and human health, and how to mitigate their negative impacts if there is a need for using them. It is also to inform farmers that, the GoL is not intended to support the use of any pesticides and chemical fertilizers in any agricultural productivity but promote conservation agriculture instead.

However, the country has experienced severe pest invasions, and could lead to the usage of pesticides and chemical fertilizers in some cases to limit losses and damages to the agriculture products. The procurement of pesticide and chemical fertilizer will not be funded under REDD+ budget except for the special circumstances of the insect invasion occurred and the proper training has been provided to farmers.

- Training on GoL regulations: The country is experienced in the use of pesticides and chemical fertilizers and learnt from its neighboring countries. The REDD+ will train target farmers on Regulation number 2860/MAF on Pesticide Management before any subprojects are implemented, subject to compliance with the Bank's safeguard policy OP 4.09 on Pest Management.
- Technical training: This training would aim at providing the target farmers to understand clearly the technical aspects of pesticides and skills in using them such as what are the eligible and prohibited items of pesticides in Lao, the level of negative impacts of each eligible item, how to use them, how to protect and minimize the negative impacts while using them, how to keep them before and after used etc. Thus, the trainers would be someone from PAFO or DAFO who is knowledgeable on this. REDD+ will finance the training cost and per diem and transportation cost for the trainers.
- Procurement, storage, and usage of pesticide: the REDD+ will not involve procurement of pesticides. That said, any pesticides currently used in the project areas would require proper storage and usage monitoring throughout the course of the REDD+, and this responsibility will lie fully with the DOA. The DOA should strictly follow with articles 18 and 19 of the MAF's regulation number 2860/MAF for procuring the pesticide; articles 20, 21 and 22 for transportation, storage and trans-boundary transportation of pesticides; and

articles 23 and 24 for the safety use of pesticide. The DOA or user may refer in addition to the article 25 and 26 for the storage and usage of pesticide.

- Continued monitoring of pesticide use: As part of the regular monitoring of project activity, the World Bank and REDD+ teams will continue to monitor changes in pesticides, insecticides and chemical fertilizers use in all project related activities. Programmes and trainings will be specifically amended to address any such changes.

Promotion of non-chemical agriculture

The REDD+ has been designed also to promote good agricultural practices and conservation of natural resources when possible. It is anticipated that linking the REDD+ agriculture activities with conservation agriculture techniques will be important for improving quality of life among farmers. Subprojects for REDD+ are still being determined, but for instances where subprojects are located in remote areas, the sustainable use of natural resources would be critical for farmers' livelihoods development and poverty reduction. If protected areas or critical natural habitats are located nearby, it is necessary to also take measures to minimize potential negative impacts and/or enhance positive impacts through community-driven processes. In this context, a "conservation agriculture technique" should be introduced for target communities, if and when applicable. During the planning process, actions will be carried out jointly between the REDD+ and DAFO to plan and train farmers.

Implementation arrangement and budget

(a) Planning and implementation

In close cooperation with PAFO, REDD+ staff at central level will be responsible for providing training to REDD+ staff at province and local level during the consultation and planning stage. Budget for training will be included in the subproject cost or capacity building as appropriate.

(b) Monitoring

REDD+ staff at local level will work with DAFO staff for the monitoring of the use of pesticide in target community including: a) ensure the procured pesticide is not in the non-eligibility list below; b) ensure procured pesticides are properly kept and transported to the target area; c) ensure training delivery to the user before distribution; and d) monitor compliance usage of pesticide according to the MAF's regulation number 2860/MAF. The World Bank and REDD+ team at central will carry out a joint Implementation Support Mission in every six months period to review the compliance. The World Bank will use its Pest Management Guidebook as a standard to monitor compliance of the use of pesticide procured under the project.

List of banned agrochemicals in Lao PDR, June 2010

Insecticides and acaricides	Fungicides
1. Aldrin	30. Binapacryl
2. BHC	31. Captafol
3. Chlordane	32. Cycloheximide
4. Chlordimeform	33. Mercury and mercury compounds
5. Chlorfenvinphos	34. MEMC
6. Chlorthiophos	35. PMA
7. Cyhexatine	36. Selenium compound
8. DDT	Rodenticides

9. Dieldrin	37. Chlorobenzilate
10. Dimefox	38. Sodium fluoroacetate
11. Dinitrocresol	Herbicides
12. Demeton	39. 2, 4, 5 –T
13. Endrin	40. Dinoseb
14. Endosulfan	41. Dinoterb acetate
15. Ethyl Parathyon	42. Paraquat
16. EPN	43. Sodium chlorate
17. Heptachlor	Fumigants
18. Hexachloro cyclohexane	44. EDB
19. Leptophos	45. Ethylene oxide
20. Lindane	46. Methyl bromide
21. Methamidophos	Others
22. Methomyl	47. Arsenic compound
23. Methyl parathion	48. Calcium arsenate – herbicide, rodenticide, molluscicide, insecticide
24. Monocrotophos	49. DBCP – Nematocidide
25. Polychlorocamphene	50. Daminozide – Plant growth regulators
26. Phorate	51. Fluoroacetamide – Insecticide, rodenticide
27. Schradan	52. Oxamyl – Insecticide, acaricide, termiticide
28. TEPP	53. Phosphamidon – Insecticide, nematocidide
29. Toxaphene	54. Sodium Arsenite – Insecticide, fungicide, herbicide, rodenticide
	55. Thallium (i) sulfate – Rodenticide, insecticide.