



Green Climate Fund Programme

“Implementation of the Lao PDR Emission Reductions Programme through Improved Governance and Sustainable Forest Landscape Management”

Feasibility Study

Green Climate Fund Programme “Implementation of the Lao PDR Emission Reductions Programme through Improved Governance and Sustainable Forest Landscape Management”

Feasibility Study

Client

Deutsche Gesellschaft für International Zusammenarbeit (GIZ) GmbH

Authors

Eduard Merger (UNIQUE forestry and land use)

Laura Kiff (UNIQUE forestry and land use)

Suzanne v. Dijk (UNIQUE forestry and land use)

Duncan Gromko (UNIQUE forestry and land use)

Somphavy Keoka (Forest Inventory and Planning Division, Department of forestry, Ministry of Agriculture Lao PDR)

Date: 11.06.2019

TABLE OF CONTENTS

List of tables	6
List of figures	8
1 Country profile and programme context	9
1.1 Socio-economic context	9
1.2 Environmental context	17
1.3 Forest sector profile	22
1.4 Agricultural sector profile	29
1.5 Financial sector profile	35
1.6 Climate change context and GHG emission profile	36
1.7 National-, provincial- and district-level institutions responsible for management of natural resources	39
1.8 Policy framework	43
1.9 National REDD+ and sub-national emission reduction program	53
1.10 Relevant current and past projects in the target area	57
2 Programme objective against baseline	75
2.1 Programme baseline - Proximate drivers of deforestation and forest degradation and underlying causes	75
2.2 Barrier analysis	87
2.3 Programme objective and theory of change	93
2.4 Programme implementation period	96
2.5 Programme location and target area selection	96
3 Programme design / description	102
3.1 Programme versus project approach	102
3.2 Target beneficiaries	106
3.3 Programme design	107
4 Programme implementation	206
4.1 Organizational structure / Institutional / Implementation arrangements	206
4.2 Legal agreements	211
4.3 Scenarios for responsibility sharing	211
4.4 Financial management and procurement	217
4.5 Programme timeline – Gantt chart	219
5 Capacity needs assessment	220
5.1 Scope of capacity needs assessment	220
5.2 Details of organizations	224

5.3	Previous capacity assessments	228
5.4	Analysis of existing capacity	229
5.5	Functional and technical capacity in relation to the ER-Program and associated GCF programme.....	234
5.6	Capacity and gap assessment of the FFRDF	239
5.7	Capacity development plan	243
5.8	FFRDF capacity development strategy	248
6	Regulation / taxation and insurance	258
6.1	Privileges, immunities and taxation	258
6.2	Approvals, permits, licenses and land	258
6.3	Currency	258
6.4	Insurance	258
7	Programme financing plan	259
7.1	Sources of finance	259
7.2	Procurement.....	262
8	GHG mitigation benefits and efficiency	263
8.1	GHG mitigation and carbon removals summary	263
8.2	Methodology used for calculating GHG mitigation benefits.....	264
9	GCF added Value and exit strategy	274
9.1	Added Value of GCF	274
9.2	Exit strategy	278
9.3	Scaling-up and replication potential.....	281
10	Programme risk and mitigation approaches	282
11	Arrangements for monitoring, reporting and evaluation	293
11.1	Recruitment of M&E staff.....	293
11.2	Independent monitoring and evaluation studies	294
11.3	Data collection and frequency.....	294
11.4	Measurement, Reporting and Verification (MRV) of reduced GHG emissions.....	294
12	Stakeholder engagement Plan	296
12.1	Stakeholder engagement in programme design	296
12.2	Stakeholder engagement strategy for Programme implementation.....	316
12.3	Stakeholder grievance mechanism.....	325
	Reference list.....	334
	Annexes	336
	Annex 1: Presence of selected financial institutions in programme provinces	337
	Annex 2: Figures highlighting forest regulations for different forest categories.....	340

Annex 3: Overview of good agricultural practices	350
Annex 4: Key steps for the deforestation hotspot and risk analysis.....	357
Annex 5: Regulations for the purchase of vehicles	359
Annex 6: Stakeholder consultation annex	360
Annex 7: Knowledge management plan	380
Annex 8: Detailed programme timeline.....	383
Annex 9: Management Information System, with community-based data collection	385

LIST OF TABLES

Table 1: Population and population growth in the six target provinces	12
Table 2: Land/ forest cover of the programme area per province 2015 (unit in ha, unless otherwise specified).....	18
Table 3: Overview of National Parks and National Protected Areas (NPAs) within the programme area	20
Table 4: Stratification of land use in Lao PDR.....	23
Table 5: Forest categories in Lao PDR (in 2015)	29
Table 6: Agricultural production in each of the six target provinces	32
Table 7: Overview national, provincial and district institutions responsible for management of natural resources.....	39
Table 8: Overview of key national and sectoral strategies and plans in Lao PDR for the proposed programme	43
Table 9: Overview of key Prime Minister Orders, decrees and other government initiatives	49
Table 10: Relevant sector goals / targets of the Lao PDR Strategy on Climate Change (2010)	51
Table 11: Overview of key priorities related to the proposed programme in Lao PDR's NAPA (2009)	52
Table 12: Overview of the REDD+ Task Force as per 2017.....	54
Table 13: Average Annual Historical Emissions and Removals over the Reference period	76
Table 14: Overview of key proximate drivers in the programme area	78
Table 15: Drivers of deforestation and forest degradation identified through stakeholder consultations.....	81
Table 16: Overview of main drivers of deforestation and associated key underlying causes	83
Table 17: Overview of barriers and proposed interventions to address them	88
Table 18: Quantitative GCF programme area district selection framework	97
Table 19: Selected priority districts for the proposed GCF programme (28 out of 51 districts).....	97
Table 20: Overview of the REDD+ Taskforce as per 2017	206
Table 21: Departments, Divisions and Agencies Interviewed	223
Table 22: Recurring themes in interviews	230
Table 23: Output 1 Capacity Rating.....	236
Table 24: Output 2 Capacity Rating.....	237
Table 25: Output 3 Capacity Rating.....	238
Table 26: Gap assessment	240
Table 27: Institutional Capacity Gaps and Capacity Response	245
Table 28: Programme implementation partner responsibility and financing.....	254
Table 29: Source of finance by Output and Activity.....	260
Table 30: Summary of GCF programme GHG mitigation impact	263
Table 31: Summary of GCF project GHG mitigation impact (Project 1 and 3)	263
Table 32: Key efficiency and effectiveness indicators – Programme	264
Table 33: Key efficiency and effectiveness indicators – Project 1.....	264
Table 344: Projected land use change matrix without the GCF programme for 2020-2029 (ha).....	265

Table 35: Key GCF programme interventions, linkage to RL activity data and assumptions on effectiveness of interventions	268
Table 36: Projected land use change matrix with the GCF programme intervention for 2020-2029 (ha) (for 6 GCF programme provinces)	270
Table 37: Assumed and quantified carbon stocks for forest and non-forest land cover types	271
Table 38: E/R factors for land use changes (tCO ₂ e) for above-ground and below-ground biomass ..	271
Table 39: Projected land use change matrix without the GCF project for 2020-2029 (ha)	272
Table 40: projected land use change matrix with the GCF project for 2020-2029 (ha).....	273
Table 41: Overview of stakeholder consultations to support the preparation of the GCF proposal..	303
Table 42: Overview of comments received and responses during GCF proposal development	306
Table 43: Potential risks and mitigation measures identified in the ESIA for the proposed programme activities	309
Table 44: Identified gender inequality drivers and risks, and measures applied to address them within programme design.....	313
Table 45: Overview of the main steps within the programme-level grievance redress mechanism..	329

LIST OF FIGURES

Figure 1. Programme area location in the Lao PDR context	11
Figure 2. Province-specific HDI values, 2011-2013 for Lao PDR.....	13
Figure 3: Percentage of GDP growth attributable to different sectors.....	15
Figure 4. Lao PDR National Protected Areas (NPA) network	22
Figure 5: Lao PDR forest type map (2015).....	23
Figure 6: Programme area forest type and national forest categories map (2015) (PTA: Protection Forest Areas; PFA: Production Forest Areas; National Protected Areas (NPA)	26
Figure 7. Key agriculture crops in the target provinces (ha planted).....	30
Figure 8. Yields of key agricultural crops in the target provinces (tons/ha)	31
Figure 9: Historical GHG emission and removals due to deforestation, forest degradation, reforestation and forest restoration.....	38
Figure 10. Overview of the institutional arrangements for REDD+ at the national and provincial level	55
Figure 11: Disturbance by type (disturbances > 5ha) in the programme area (2005-2015).....	77
Figure 12: Summary of drivers, agents and underlying causes for the programme area.....	82
Figure 13: Theory of change for reducing GHG emissions and enhancing removals from Lao PDR's forests	94
Figure 14: Selected GCF programme district and ADB Sustainable Rural Infrastructure Watershed Management Sector Project sites.....	99
Figure 15: Forest landscape district map (2015), Beng district.....	100
Figure 16: Deforestation probability analysis in Beng district and target village selection	101
Figure 17: Overview of programmatic approach	103
Figure 18: Programme Area	104
Figure 19: Institutional arrangement for REDD+ at the national and provincial level.....	208
Figure 20: Governance structure.....	Fehler! Textmarke nicht definiert.
Figure 21: Proposed programme cycle: Government agency window	214
Figure 22: Proposed project cycle: village group window.....	215
Figure 23: Proposed project cycle: private sector enterprise window	216
Figure 25: Staff levels	231
Figure 25. Composition of ethnic groups in the ER Program area, and overview of ethnic groups consulted during PRAP kumban consultations	299
Figure 26. Overview of stakeholders consulted during the funding proposal development process (additional to consultations conducted for the ER-PD).....	302
Figure 27. Overview of local level processes and arrangements for programme implementation ...	318
Figure 28. Overview of feedback and grievance redress mechanisms applied for REDD+ in Lao PDR	326
Figure 29: Options for grievance redress under REDD+.....	327
Figure 30: Overview of grievance redress mechanism	328

1 COUNTRY PROFILE AND PROGRAMME CONTEXT

The Government of Lao PDR, together with GIZ, is developing a proposal for the Green Climate Fund (GCF) focusing on reducing emissions from deforestation and forest degradation in six Northern Provinces (Info Box 1). The GCF programme will contribute to the successful implementation of Lao PDR's Emission Reduction Program for the Forest Carbon Partnership Facility. The following profiles cover both the national context as well as the programme-specific context.

Info Box 1. Selection of the Programme Area¹

Six Northern provinces comprise the proposed programme area: Bokeo, Houaphan, Luang Namtha, Luang Prabang, Oudomxay and Sayaboury. The selection of the area is due to a number of factors that were taken into consideration when designing Lao PDR's Emissions Reduction Program for the Forest Carbon Partnership Facility (FCPF).

Apart from being a significant contiguous landscape, the area has experienced more than 30% of the country's deforestation and forest degradation (in area terms) in 2005-2015. The region has a prevalence of shifting cultivation practices and is one of the poorest regions in the country. For such reasons, in the early phase of REDD+ readiness, a number of projects supported by development partners focused their REDD+ pilot actions in the Northern provinces. This gave way to increased capacity and preparedness of these provinces for REDD+, and the eventual selection of the six Northern provinces as the area for the Lao ER Program and this proposed programme. The detailed programme area selection is summarized in the [Chapter 2.5](#).

1.1 Socio-economic context

1.1.1 Demographic and social context²

Lao PDR

Lao PDR is home to 6,901,000 inhabitants (3,443,000 women, 3,458,000 men).³ The country has a population density of around 27 people per km², with the most densely populated provinces including Vientiane, followed by Champasack and Svanakhet provinces.⁴ Nationally, the population is growing, but, at reduced rates compared to that of the 1990s. During 1985-1995, the average growth rate reached 2.47% annually. In the following decades, the annual growth rate fell to 2.08% (1995-2005) and 1.45% (2005-2015). The declining growth rate is a result of falling birth rates and migration (to neighboring countries for economic reasons), among other contributing factors. The median age within the country is 22.7 years with 4.6 million inhabitants between the ages of 15 and 64.⁵

It is a predominantly rural country with approximately 66% of its population in rural areas and only 34% in urban centers.⁶ While urbanization is occurring at an annual rate of 3.3%, it has considerably

¹ Adapted from the ER-PD, available at: https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR_ERPD_FinalDraft-May.2018-Clean.pdf

² Unless otherwise indicated, information has been adapted from the ER-PD.

³ LSB 2018

⁴ Lao Housing and Population Census 2015; Note 2017 population density information is not available, data used from 2015.

⁵ Lao PDR has a relatively young population, with 32% of the population between 0-14 years, 64% between 15-64 years and only 4% of the population above the age of 65 years; Lao Housing and Population Census 2015

⁶ MPI and UNDP 2017

slowed down since the 1990s and early 2000s when rates exceeded 5.1% and 6.4%, respectively.⁷ Among the rural population, those without road access have declined significantly from 21% in 2005 to just 8% in 2015.⁸

Lao PDR is home to a rich cultural diversity, with 50 ethnicities and 160 ethnic groups – speaking 82 distinct languages.⁹ Around 53% of Lao PDR's population is ethnically Lao, whereas the remaining 47% of the population comprises over 48 other ethnicities.¹⁰ Ethnicities with the large populations in Lao PDR include the following ethnic groups, among others:¹¹ Khmu (708,412, 50% women), Hmong (595,028 people, 49% women), Phouthay, Lue (218,108, 51% women), Tai (201,576, 49% women), Makong (163,285, 51% women), Katang (144,255, 51% women), and Akha (112,979 people, 50% women). Around 83% of the population is literate, having improved by from 75% in 2003.¹²

Lao PDR has a human development index (HDI)¹³ of 0.601, ranking 139th globally. It is a least developed country (LDC) and aims to graduate from its LDC status by 2024. A recent review determined that the country met the requirements for gross national income per capita, and the human assets index, but that it still has yet to meet the requirements of the Economic Vulnerability Index (see Section 1.1.2).¹⁴ Nationally, poverty declined during 2003-2013 from 33.5% to 23.2%.¹⁵ At the province-level, poverty declined in all but three provinces (Bokeo, Sekong and Champasack) during this period.¹⁶ Currently, progress towards poverty reduction is uneven, and there are discrepancies between urban and rural areas, certain provinces and among different ethnic groups. There is a large discrepancy between urban and rural areas, with 28.5% and 10% of the rural and urban population, respectively, living in poverty.¹⁷ Poverty reduction progress is slower in the northern and southern regions of the country.¹⁸ Poverty is largely concentrated among minority (non-Lao or Thai) ethnic groups, as well as the less educated, unemployed and family farm-dependent households.¹⁹

Programme area²⁰

The programme implementation area covers the six northern provinces of Bokeo, Houaphan, Luang Namtha, Luang Prabang, Oudomxay and Sayaboury and is fully consistent with the FCPF Carbon Fund Emission Reduction Program account area (See Figure below).

⁷ World Bank World Development Indicators database: http://databank.worldbank.org/data/views/reports/reportwidget.aspx?Report_Name=CountryProfileandId=b450fd57andtbar=vanddd=vandinf=nandzm=nandcountry=LAO

⁸ Lao Housing and Population Census 2015

⁹ Ibid.; Further information on ethnic groups in Lao PDR is available in Section 1.1.4

¹⁰ Ibid.

¹¹ Ibid.

¹² MPI and UNDP 2017

¹³ HDI takes into account three dimensions to provide an estimation of to assess the development of a country. It is based on three dimensions: long and healthy life (life expectancy at birth, knowledge (expected years of schooling, mean years of schooling), a decent standard of living (GNI per capita). Additional information can be found at: <http://hdr.undp.org/en/content/human-development-index-hdi>

¹⁴ UNDP 2018

¹⁵ MPI and UNDP 2017

¹⁶ Bokeo (from 21.1% to 44.4%), Sekong (from 41.8% to 42.7%) and Champasack (18.4% to 19.9%); Pimhidzai et al. 2014 in UNDP 2017

¹⁷ MPI and UNDP 2017

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Adapted from the ER-PD (2018) unless otherwise stated

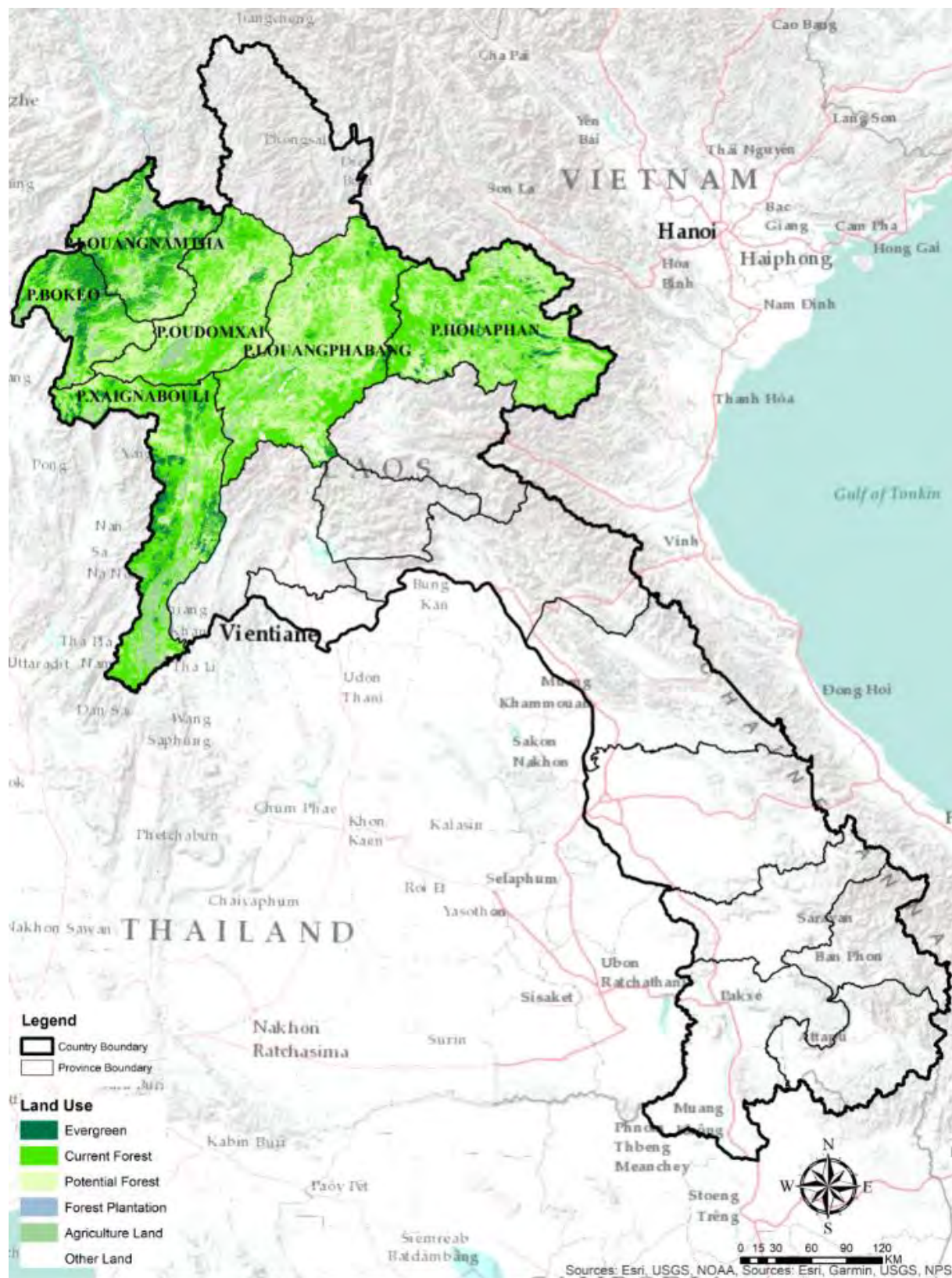


Figure 1. Programme area location in the Lao PDR context

In total, over 1.76 million people live in these six Northern provinces. Luang Prabang and Sayabouri are the most populated provinces and Luang Namtha and Bokeo are the least populated provinces (Table 1). Over the past decade, the provinces' population has been growing steadily with an average growth rate of 1.14%.

On average 28% of the population in the programme area lives in urban centers²¹, which is below the national average.²² Sayabouri is the second most urban province in the country, with 40% of its population living in urban areas – second only after Vientiane province. On the other hand, Houaphan has one of the largest rural populations, with only 14% of its population living in urban centers.

Table 1: Population and population growth in the six target provinces

	Population (2005) ^a	Population (2015) ^b	Population Growth (2005-2015)	Urban population (2015) ^b	Female population (%) ^c
Bokeo	145,263	179,243	1.23%	33%	50%
Houaphan	278,677	289,393	1.04%	14%	49%
Luang Namtha	145,092	175,753	1.21%	27%	50%
Luang Prabang	400,202	431,889	1.08%	32%	50%
Oudomxay	264,582	307,622	1.16%	24%	50%
	338,669	381,376	1.13%	40%	50%
Total	1,572,485	1,765,276	1.14%	28%	50%

a) Population census 2005 from Lao Decade, b) Population and housing census 2015, c) based on 2017 information from LSB 2018

Source: ER-PD 2018, Page 34

In Northern Lao PDR, poverty rates are among the highest in the country. Substantial efforts have reduced the number of people living below the poverty line, from 52% to 26% from 1993 to 2013.²³ Despite this notable progress, poverty levels in the northern region still exceed the national average (23%). HDI values are lower in programme region than the national level (0.44 compared to 0.61; Figure 2). Bokeo, Houaphan have particularly low HDI values. Around 28% of people living in the programme area live below the poverty line,²⁴ surpassing the national average. There are substantial discrepancies between provinces and within provinces (including the rural and urban population, ethnic groups and gender, among other factors). Sayabouri and Luang Namtha have poverty levels substantially below the national average, with 15% and 16% of the provincial populations, respectively. On the other hand, Bokeo has the second-highest incidence of poverty within Lao PDR, where 44% of the population lives in poverty. Houaphan, Oudomxay, and Luang Prabang also have higher levels of poverty (39%, 30% and 26% respectively).

²¹ Urban is classified as a town with more than 5,000 inhabitants

²² Lao PDR Population and Housing Census 2015

²³ Pimhidzai et al. 2014 and UNDP 2009 in MPI and UNDP 2017

²⁴ Lao PDR Poverty Line Definition from the 2017 Lao PDR Human Development Report (MPI and UNDP 2017): "The national poverty line is calculated on a nutritional basis. An adult must be able to consume an equivalent of 2,100 kilocalories a day to be above the poverty line. S/he should also have access to some non-food necessities. First, the monetary equivalent of 2,100 kilocalories of food (from a defined basket) is calculated, and then allowances for non-food items are calculated. The sum of these two is the poverty line. Each time a survey is conducted, the poverty line is adjusted for inflation. No new poverty line has been defined for over two decades. Lao PDR follows the World Bank's method of measuring poverty."

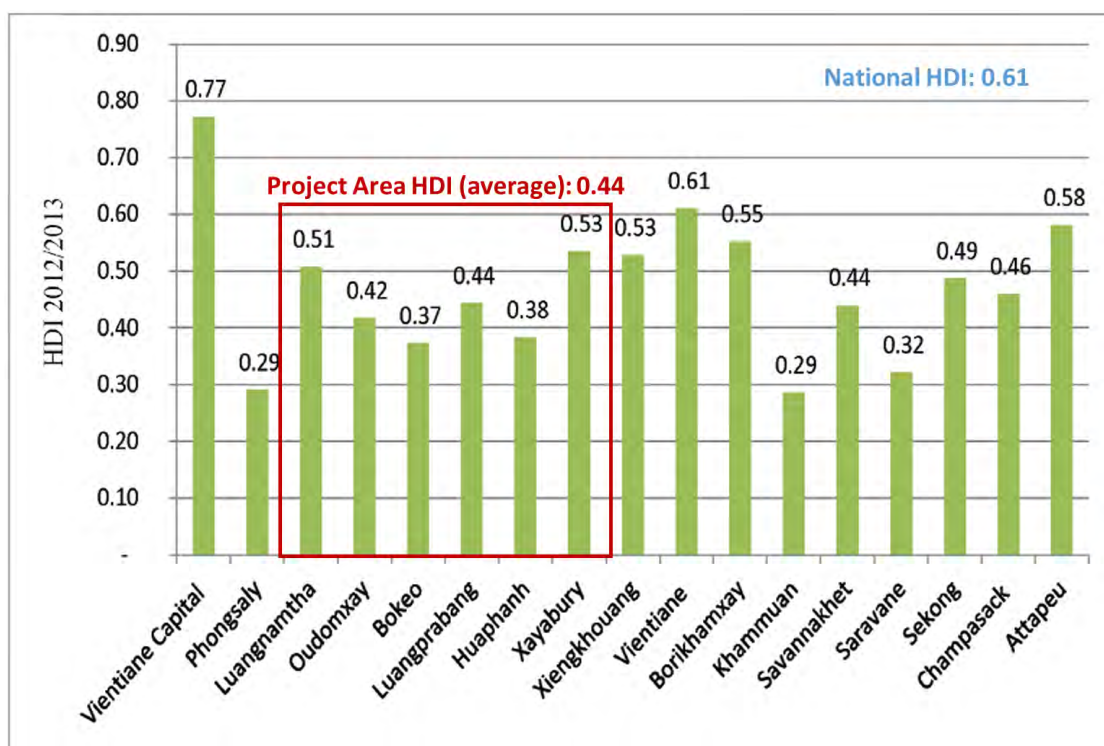


Figure 2. Province-specific HDI values, 2011-2013 for Lao PDR

Source: Adapted from UNDP 2015

Food security 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.²⁵ A major limitation for ensuring food security is the region's mountainous terrain, and limited valley space for growing rice paddy. Local households cultivate upland rice for subsistence; however, yields are low, cultivation requires challenging physical labor, and unsustainable practices can lead to degradation (landslides, mass erosion events, sedimentation, and riverbank cutting downstream etc.).

Local villages in the North are comprised of many different ethnic groups.²⁶ As noted above, the Government of Lao PDR officially recognizes 50 different ethnic groups, of which 23 are present in the programme area.

- Luang Namtha has 18 different ethnic groups,
- Bokeo, 12
- Luang Prabang, 11
- Oudomxay, 10
- Houaphan, 8,
- Sayaboury, 8.²⁷

²⁵ Pimhidzai et al. 2014 in UNDP 2015

²⁶ Note from the ER-PD (2018): The Government does not recognize any specific ethnic group as "indigenous peoples". Nonetheless, the Government has signed the Declaration of the Rights of Indigenous Peoples and the International Labor Organization Agreement (ILO 169) for the rights of indigenous peoples. Moreover it has agreed with development partners that the protections afforded to indigenous peoples will be respected for 41 ethnic minority groups, i.e. groups that are not belonging to the majority ethnic Lao or ethnic Tai groups. Due to the fact that these 41 ethnic groups are numerous in some areas, the Government does not use the term ethnic minority.

²⁷ Keokominh in ER-PD 2018

The three major ethno-linguistic families in the programme area are the Lao-Tai, the Mon-Khmer, and the Hmong-lumien. According to 2005 data, around 45% of the regional population belong to the Lao-Tai ethno-linguistic family, 30% to the Mon-Khmer, 15% to the Hmong-lumien and the remaining groups in the Sino-Tibetan compose the remaining 10%.²⁸

The six Northern provinces are notable insofar as in this region the Lao-Tai ethnic groups comprise less than half the population, whereas nationwide they comprise two-thirds of the population. Other ethnic groups are more numerous in these Northern provinces.²⁹ Often these groups have lower rates of education, especially among girls and women, lower rates of self-reported land ownership, higher rates of poverty, and more food insecurity than Lao-Tai ethnic groups.

Ethnic groups in the Lao-Tai ethno-linguistic family have many linguistic similarities that permit mutual understanding, as do the groups in the Sino-Tibetan ethno-linguistic family. The Mon-Khmer ethno-linguistic family has many ethnic groups and sub-groups, and their languages are not easily mutually understood. The same difficulties with linguistic understanding prevail with the Hmong-lumien ethnic groups. This linguistic and corresponding educational situation poses great challenges for REDD+ - and for development in general. As foresters and other staff often do not speak the local languages, they have to work with the Lao Front for National Development (LFND), the Lao Women's Union, or others as interpreters to reach the local villages.

1.1.2 Economy and governmental debt

Lao PDR

Northern Lao PDR has historically been the poorest and most rural region of the country. The average annual income in the programme area is approximately USD 1,200 per capita, compared with a national average of USD 2,330.³⁰

Lao PDR's Gross Domestic Product in 2017 amounted to USD 16.83 billion. Lao PDR is one of the fastest growing-economies globally, where GDP growth has averaged 7.8% over the last decade and 6.9% in 2017³¹. The country's economic growth is largely attributed to power generation, manufacturing and natural-resource based industries. Figure 3 shows the contribution of different sectors to GDP growth. Additionally, the gradual opening up of the country and increased regional integration have also helped to spur growth.³²

The country faces a number of challenges to continue growing in the future. Mining has historically been an important contributor to the national economy, but production is on the decline, particularly in the two large mines, where only lower-grade ore remains. The tourism sector is another area where the country faces challenges. The number of tourist arrivals decreased by 10 percent in both 2016 and 2017; this is largely attributable to a substantial drop in tourists from ASEAN countries, particularly Thailand and Vietnam.³³

In macroeconomic terms, a primary challenge for Lao PDR is the fiscal deficit. However, the deficit is narrowing, from 4.5% in 2016 to 4.4% in 2017 – much better compared to initial projections. Revenues declined during 2017 and are projected to continue below targets. Lower than expected revenues were

²⁸ Lao PDR Population Census 2005 in ER-PD 2018

²⁹ For a detailed description of the ethnic groups in the ER Program area, see Annex 1 of the ER-PD (2018)

³⁰ World Bank 2018, available at: <http://www.worldbank.org/en/country/lao/overview>

³¹ IMF 2018; World Bank 2017 and 2018, <http://documents.worldbank.org/curated/en/418261529002464394/pdf/127222-REVISED-Lao-PDR-Economic-Monitor-Report-June-2018-for-Website.pdf>

³² World Bank 2017

³³ *Ibid.*

matched by reductions in spending, though – for example, by restricting salary increases of civil servants. Persistent fiscal deficits have led to an increase in public debt and an elevated risk of debt distress. Total public debt was nearly USD \$9 billion in 2016, or 59% of GDP. 80% of public debt comes from external markets by issuing bonds on the capital market of Thailand. Management of the debt is a constraint on the Lao PDR economy, inhibiting the government from spending on its development agenda.³⁴ The challenge of debt management demonstrates the importance of the proposed GCF programme financed via a grant. Taking on an additional loan to implement the programme would be a difficult decision for the government, as it would force it to cut back on other domestic priorities.

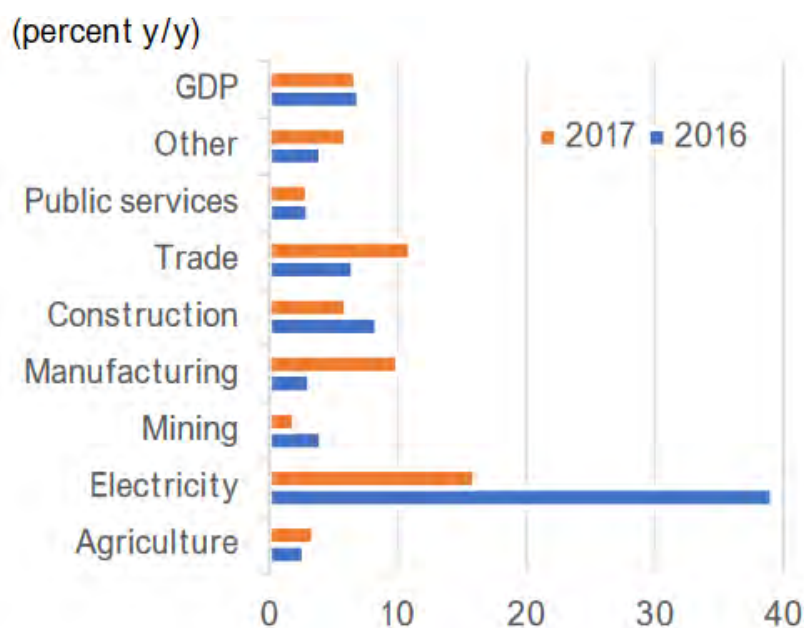


Figure 3: Percentage of GDP growth attributable to different sectors

Source: World Bank 2017

The country's economy is partially dependent on natural resources, especially forestry, agriculture, electricity generation (especially hydropower) and mining. Agriculture, forestry and fisheries comprised 16.2% of the country's GDP in 2017.³⁵ Agriculture plays an even larger role in terms of employment and livelihood provision: 64% of the Lao workforce is engaged in the agricultural sector. The low GDP contribution can be explained by the high level of subsistence agriculture and low productivity, particularly in the programme area. Within the agricultural sector, economically significant products include rice, maize, sugarcane, cassava, watermelon, banana, sweet potato and industrial tree crops such as rubber and eucalyptus, among others. "Rice remains the main crop and almost all 783,000 farm households produce paddy on 75% of the arable land."³⁶

In 2017, the country's gross national income (GNI) per capita was USD 2,270.³⁷ The country is an LDC. As noted in the previous section, a major challenge for the country involves strengthening the country's economic vulnerability index (Info Box 2).

³⁴ *Ibid.*

³⁵ World Bank

³⁶ World Bank 2018

³⁷ Using 2015 data; World Bank 2017

Info box 2. Government indebtedness and economic vulnerability

Despite the economic growth observed in Lao PDR, the country's exposure to economic vulnerability remains high. The country's economic vulnerability index (EVI) in 2015 was 36.2 (i.e. 88% of the threshold), within the range to still be classified as a LDC.³⁸ Lao PDR is ranked 138th on the Human Development Index.

The International Monetary Fund (IMF) has classified Lao PDR's debt as moderate, but the risk of external debt distress is high due to increased external borrowing, and there is an "urgent need" to reform fiscal policies and public financial management.³⁹ One reason for consistent deficits is the inefficient and inadequate collection of revenues. Public debt has risen in the country, which has been further affected by falling commodity prices for key sectors (e.g. rubber). IMF (2018) notes that while there are large flows of foreign direct investments, that non-FDI related trade-deficit is high at nearly 7.6% of the GDP in 2017.

According to the World Bank (2018)⁴⁰, **public debt reached 61% of GDP in 2017**. "Public debt is largely external and increasingly on less concessional terms, including bond issuance to finance the budget. This makes Lao PDR increasingly vulnerable to risks of sudden exchange rate volatility, and to a lesser extent to an upward movement in external interest rates. Lower concessionality adds to the pressure on debt service, keeping the risk of debt distress high."

The IMF has identified the following key risks that face Lao PDR's economy:⁴¹

Domestic risks:

- **"Government Finances:** A failure to contain the fiscal deficit would worsen an already weak external position and, given the high level of the public debt stock, increase the possibility of debt distress, higher interest rates, lower external financing and a slow-down in growth",
- **"Agriculture:** One-sixth of the total economy is agriculture, and an extreme weather shock would damage, growth prospects, worsen the current account, and risk hurting the rural population, reversing poverty reduction."

External risks:

- **"Global monetary conditions:** Tighter global monetary conditions (as currently observed by the US Federal Reserve⁴²) could raise funding costs, hurt domestic liquidity in the dollarized banking system increasingly reliant on external funding, and lead to a reduction in credit."
- **"Capital flight or deterioration in terms of trade:** With a thin reserves cushion, the external position remains vulnerable to a deterioration in the terms of trade or sudden capital flight, which could cause a deterioration in confidence in the financial system."

³⁸ UNDP 2017

³⁹ IMF 2018

⁴⁰ <http://documents.worldbank.org/curated/en/418261529002464394/pdf/127222-REVISED-Lao-PDR-Economic-Monitor-Report-June-2018-for-Website.pdf>

⁴¹ IMF 2018, p. 6

⁴² <https://www.bbc.com/news/business-45657009>

- “Slowdown in trading partners: A significant slowdown in China would impact commodity and agriculture exports and tourist arrivals, and could be felt in Lao PDR through lower foreign direct investment (China is the main source of FDI), and capital flow reversal.”

Macroeconomic risks:

- “Banking system liquidity crunch: A sudden tightening of liquidity due to banking system distress could cause a credit crunch and a slowdown in economic activity, with adverse feedback loops through further distress in bank and corporate balance sheets.”
- “Banking system solvency: A macroeconomic or external shock that leads to a sudden slowdown in economic activity could lead to higher non-performing loans and expose weaknesses in the banking system that could lead to further declines in credit and slower growth.”
- “Exchange rate: A sudden devaluation of the exchange rate could lead to a rapid deterioration in the balance sheets of banks and corporates with currency mismatches, which could affect banking system liquidity and solvency and lead to further decline in credit and economic activity.”

A financial sector profile is provided in [Chapter 1.5](#) below.

1.2 Environmental context

1.2.1 Geography and Topography

Lao PDR

Lao PDR is a landlocked country in Southeast Asia bordering Cambodia to the south (border length of 535km), China to the north (508km), Myanmar to the northwest (236km), Thailand to the west (1,835km), and Vietnam to the East (2,337km).⁴³ It has 18 provinces (including Vientiane Capital). The country covers a total surface area of 236,800 km² (See Figure 1).

Lao PDR is a topographically diverse country, where nearly 80% of the country is comprised of hilly and mountainous upland areas.⁴⁴ The highest mountain in the country, Phou Bia (Xiengkhuang Province), reaches a height of 2,820 m above sea level. Cultivated flood plains are found along the Mekong River and other larger fluvial tributaries.

The majority of Lao PDR (90%) is located within the Mekong river basin, comprising 25% of the entire Mekong river basin.⁴⁵ The Mekong spans 1,898 km through Lao PDR, and provides important resources for local livelihoods and industry, within Lao PDR as well as upstream and downstream.⁴⁶

Programme area⁴⁷

The programme area is comprised of six Northern provinces, constituting approximately 35% of the national territory. It is a contiguous landscape, covering the entire administrative areas of Bokeo, Houaphan, Luang Namtha, Luang Prabang, Oudomxay and Sayabouri provinces (8,123,149 ha total). Each province shares an international border with one of the surrounding countries of Thailand, Myanmar, China and Vietnam.

⁴³ LSB 2018

⁴⁴ FAO 2011

⁴⁵ Ibid.

⁴⁶ LDB 2018

⁴⁷ Adapted from the ER-PD

The Northern region of Lao PDR is characterized by hilly topography, remote accessibility and limited public and industrial infrastructure. The following is a summary of the land use in the programme area (further described below in the forest and agriculture sector profiles and Table 2):

- Forest land (including Current Forest and Potential Forest classes of the national land/forest classification system) accounts for 89% of the total programme area for which the national average is 84.7%. (See [Chapter 1.3](#) on the terminology and definition of forest)
 - 53.0% is under Current Forest, for which the national figure is 58.0%.
 - 36.5% is under Potential Forest, which is significantly higher than the national average of 26.7%. According to the forest-type maps analysis over the period of 2000-2015, only 3-4% of the entire Regenerating Vegetation (RV) area (comprising more than 99% of the Potential Forest) were restored to Mixed Deciduous (MD) forest (comprising 88% of the Current Forest; RV is considered to grow into MD forest in the absence of disturbances). In reality this forest class refers to the shifting cultivation landscape which is disturbed every 3-7 before the forest can actually regenerate.
- Crop land covers 6.9% of the programme area, lower than the national average of 10.1%. This indicates less intensive agriculture due to topographical constraints, and suggests dominant practices of shifting cultivation in upland areas.

Considering the population density of the programme area and the land coverage under potential forest, it indicates a high land consumption on a per household level. This can be explained on the one hand by the hilly / mountainous topography of the programme area, and on the other hand by the poor farming and land degrading land use practices (see chapter 2). This implies the need for improving agricultural practices and reduce the area expansive practices.

Table 2: Land/ forest cover of the programme area per province 2015 (unit in ha, unless otherwise specified)

	BKO	HPN	LNT	LPB	ODX	SAY	Total	%
Current Forest	397,125	894,248	561,679	963,837	544,165	945,817	4,306,872	53.0
Potential Forest	196,557	715,557	284,892	860,959	536,293	371,920	2,966,178	36.5
Other Vegetated Areas	753	48,129	9,896	62,155	1,196	2,065	124,194	1.5
Cropland	91,682	73,161	90,169	81,209	95,503	222,691	654,413	8.1
Settlement	2,603	1,098	1,729	4,565	2,687	3,924	16,607	0.2
Other Land	769	593	366	2,453	202	1,833	6,216	0.1
Above-ground Water Source	8,057	4,341	4,652	14,950	4,878	11,791	48,670	0.6
	697,547	1,737,127	953,383	1,990,128	1,184,924	1,560,041	8,123,149	100

(Source: Forest type map 2015, FIPD, DOF, Lao PDR)

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

Source: Lao PDR ER-PD 2018, p. 30

1.2.2 Climate

Lao PDR

Lao PDR has a warm, tropical climate. The average temperature is 25.1°C. The country's climate is strongly influenced by the monsoon rains occurring from May to November. On average, it receives

1,834mm of rain annually, of which 75% typically falls during the monsoon season.⁴⁸ There is substantial variation in rainfall in the country, where the Northern region receives around 1,300 mm, and the southern region can receive over 3,700 mm annually.⁴⁹

Programme area⁵⁰

All six programme provinces have a two-season, monsoonal cycle with a dry season (October to April) and a rainy season (May to November). The mean annual temperature is around 24° C, except for Houaphan which has a lower annual mean temperature due to its mountainous terrain. December and January are the coldest months for all provinces: the mean temperature during these months can drop under 20°C. In fact, in January 2016, frozen rain leading to broken branches and die-off of large forest areas was reported in Houaphan province, an extreme weather event that had previously not occurred in the province⁵¹. Annual rainfall is around 1,200 - 1,900 mm, with most provinces falling below the national average. Nonetheless, intense rainfall often triggers landslides in mountainous areas, and localized flooding within the region. Landslides and soil erosion are often driven by clearing forest land in steep slopes to practice shifting cultivation. This implies the need to protect high-risk areas and maintain these under forest cover and improve land use planning.

1.2.3 Biodiversity

Lao PDR

Lao PDR is rich in natural resources and a well-known hotspot for biodiversity in Southeast Asia. In the country there are between 8,000-11,000 species of flowering plants, 166 species of reptiles and amphibians, at least 700 species of birds, 90 species of bats and over 100 species of large mammals.⁵² Examples of rare and endangered species found in Lao PDR include the Asian elephant, tigers, clouded leopards, guar, leopards, saola, gibbon, Siamese crocodiles, Irrawaddy dolphins and white winged ducks, among others.⁵³

There are 4.7 million ha of conservation forests areas in Lao PDR.⁵⁴ This includes 2 National Parks and 22 National Protected Areas (NPAs), as well as 66 provincial and 143 district conservation forest areas. In addition, 27 important bird areas have been identified, of which only 8 are outside of the protected area network.⁵⁵

While Lao PDR has made important strides to establish protected areas, their management remains a major challenge. Only 6 protected areas have management plans, and there is an “...*absence of clear benchmarks and standards upon which systematic actions can be based*”.⁵⁶ Threats to biodiversity outlined in the country’s biodiversity strategy and action plan from 2016-2025, include shifting cultivation, overharvesting of NTFPs, and wildlife trafficking, among others.⁵⁷

⁴⁸ FAO 2011

⁴⁹ Ibid.

⁵⁰ Adapted from the ERPD unless otherwise specified

⁵¹ Langner et al 2018 (ReCaRED Project)

⁵² Lao PDR 2004

⁵³ MONRE 2016

⁵⁴

⁵⁵ MONRE 2016

⁵⁶ Ibid.

⁵⁷ Ibid.

Programme Area

Northern Lao PDR is home to a number of important national biodiversity conservation and protection areas hosting rare and endangered species. Six protected areas exist within the programme area. The national protected area includes the largest contiguous and intact forest landscapes that are at risk of deforestation and forest degradation. The intact forests tend to have significantly higher forest carbon stocks (350-730 tCO₂/ha) (see Section 1.3). Thus, protecting these national protected areas needs to be a key priority for the programme design and is one of the most efficient GHG mitigation options in the programme region and the highest impact in terms of biodiversity protection.

Table 3: Overview of National Parks and National Protected Areas (NPAs) within the programme area

NP	NPA	Province(s)	Area (ha)	Management plan? (y/n)
Nam-Et Phou Loey		Houaphan Luang Prabang Xiengkhouang	422,900	No
	Nam Xam	Houaphan	69,028	No
	Nam Ha	Luang Namtha	224,000	Yes
	Nam Khan	Luang Namtha Bokeo	136,000 (56% BK, 44% LN)	Yes
	Nam Pouy	Sayabouri	177,660	No
	Phou Hi Phi	Oudomxay	87,350	No
Total:			1,116,938	

The **Nam-Et Phou Louey National Protection Area** in **Houaphan province**, stretching into **Luang Prabang** province contributes the highest biological diversity among protected areas in the Northern region,⁵⁸ and is particularly renowned for its distinctive montane bird population. Until recently, the NPA harbored one of the most important tiger populations remaining in Indochina and lies within the second most important core area in the world for supporting small carnivore taxa of conservation concern. At least 17 globally threatened bird species and 20 mammal species have been recorded in the NPA.

Nam Xam NPA, located in Houaphan Province, still retains much of its rich biodiversity and is home to the white-cheeked gibbon, bears, langurs, sambar, hornbill, pheasants, and numerous other rare wildlife species.

Luang Namtha province is home to two NPAs: **Nam Ha NPA** (222,400 ha) and **Nam Khan NPA** (57,400 ha) (partly located in Bokeo). Nam Ha NPA is home to over 33 species of mammals, 288 species of birds.⁵⁹ Both of these conservation areas are in ongoing processes of updating management plans to be implemented for the period from 2020-2025.

Sayabouri province hosts the **Nam Pouy NPA**. Nam Pouy is home to 52 species of mammals, 98 bird species, 13 species of reptiles, 3 amphibian species, 15 fish species and diverse other mollusks, crustaceans and insects, representing an important hub of biodiversity in the country.⁶⁰

⁵⁸ Johnson et al. 2009 in Houaphan PRAP

⁵⁹ Nam Ha NPA 2015 in Luang Namtha PRAP

⁶⁰ Moore et al. 2011 in PRAP

Phou Hi Phi NPA is located in Oudomxay Province. It includes habitat for IUCN red listed species such as tigers, bears, elephants and deer have been reported. The area is also home to Sino-Himalayan and riverine bird species. Oudomxay also hosts the Upper Lao Mekong Important Bird Area stretching into the neighboring provinces of Bokeo. The area has bird species including, Rufous-necked Hornbill, Black-bellied Tern *Sterna acuticauda*, River Lapwing, Plain Martin *Riparia paludicola*, River Lapwing, Small *Pratincole Glareola lactea*, and Swan Goose *Anser cygnoides* are some of the recorded avifauna.⁶¹

⁶¹ Ministry of Information, Culture and Tourism 2014 and MPWT et al. 2016 in Oudomxay PRAP

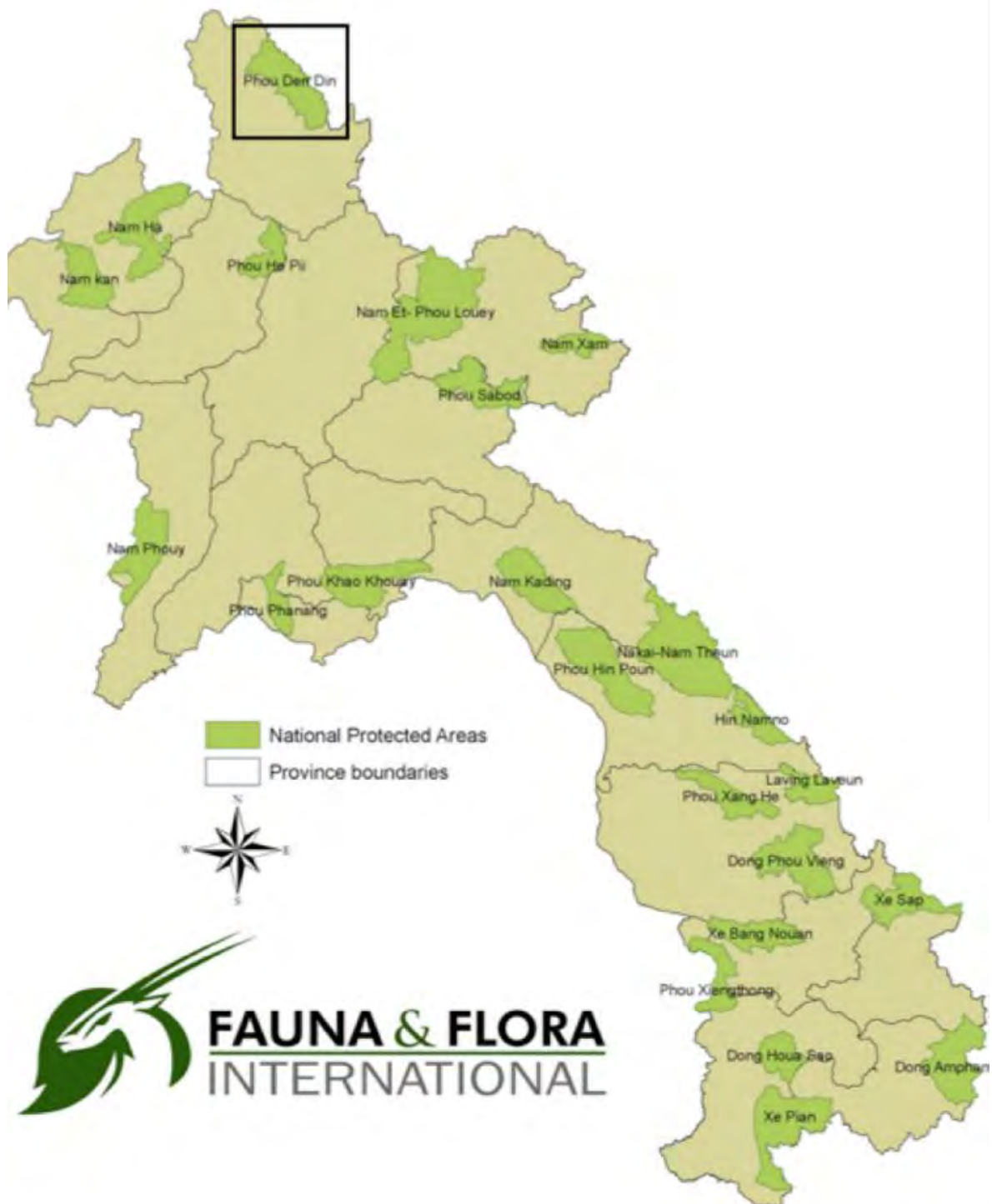


Figure 4. Lao PDR National Protected Areas (NPA) network

Source: Fauna & Flora International 2015.

1.3 Forest sector profile

1.3.1 Lao PDR

Forest Cover and Types

Of the country’s total land area of 23 million hectares (ha), forested land accounted for 58% in 2015 (Figure 3).⁶² As of 2015, under the classification of ‘*current forest*’, evergreen forest contributes 2.6 million ha (11% total land area), and mixed deciduous, coniferous, mixed coniferous and broadleaf collectively contribute 9.4 million ha (41% total land area). Dry dipterocarp forests alone contribute roughly 1.2 million ha (5% total land area). Collectively, forest plantations and potential forested land with bamboo and regenerating vegetation contribute 6.3 million ha and 27% of total land area

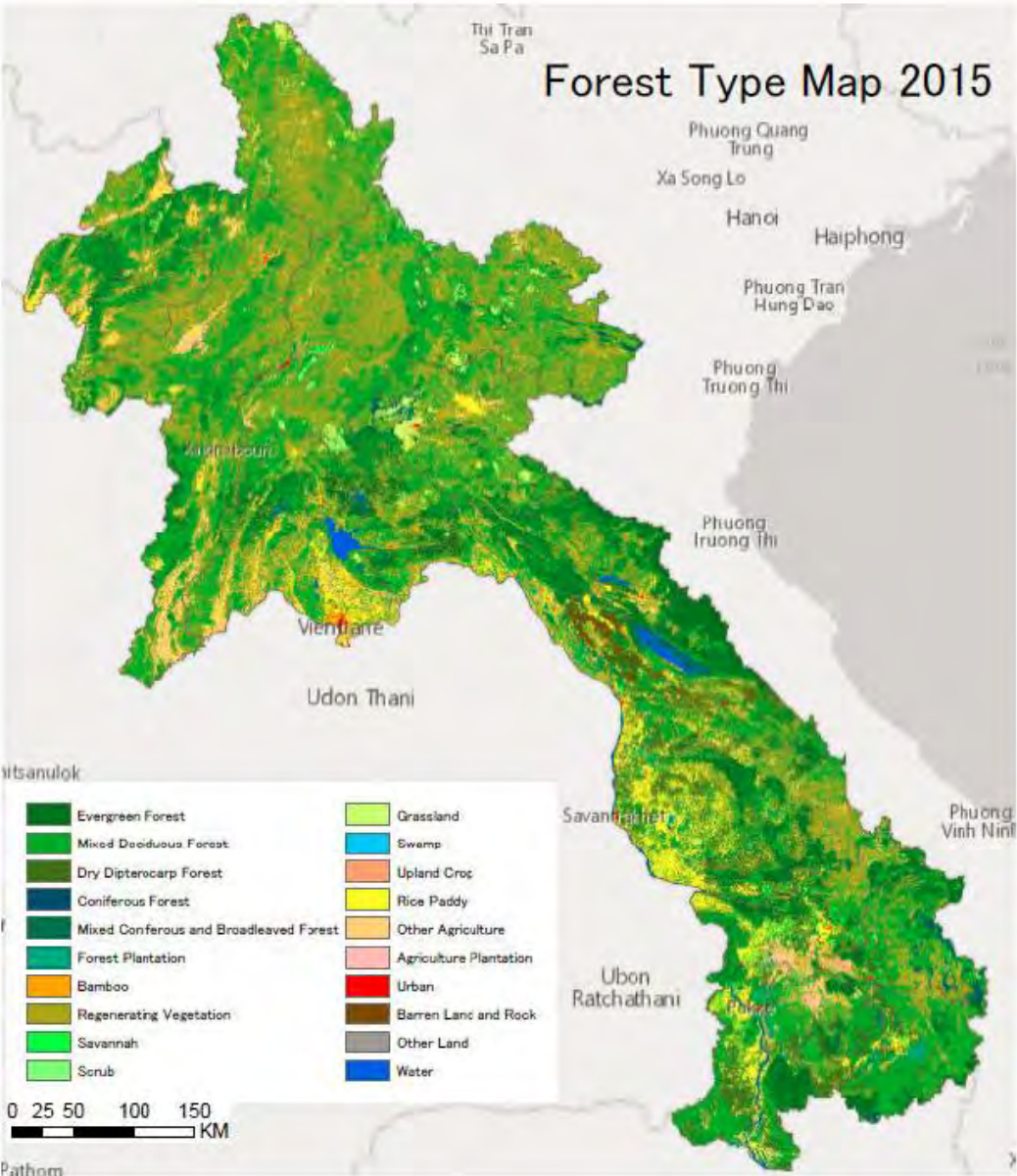


Figure 5: Lao PDR forest type map (2015)
 Source: DOF/MAF 2018

Table 4. Stratification of land use in Lao PDR

Land/forest classes			Area (ha)	% of total area	Strata
Level 1	Level 2				
Current Forest	Evergreen Forest	EG	2,605,557	11.3%	1
	Mixed Deciduous Forest	MD	9,437,688	40.9%	2
	Coniferous Forest	CF			
	Mixed Coniferous and Broadleaved Forest	MCB			
	Dry Dipterocarp Forest	DD	1,188,198	5.2%	3
	Forest Plantation	P	6,300,445	27.3%	4
Potential Forest	Bamboo	B			
	Regenerating Vegetation	RV	3,522,370	15.3%	5
Other Vegetated Areas	Savannah	SA			
	Scrub	SR			
	Grassland	G			
Cropland	Upland Crop	UC			
	Rice Paddy	RP			
	Other Agriculture	OA			
	Agriculture Plantation	AP			
Settlement	Urban Areas	U			
Other Land	Barren Land and Rock	BR			
	Other Land	O			
Above-ground Water Source	Wetland (Swamp)	SW			
	River (Water)	W			
Total			23,054,258	100%	

Source: DOF/MAF 2018, p.4

Info Box 3. Terminology on forests (information based on information from the ER-PD 2018⁶³)

The Lao national forest definition stipulates that “Forest land is the area of all land parcels which are covered by forest or the land which is not covered by forest but is determined by the State to be forest land”. Considering the IPCC definition of Forest land against the national circumstances of the Lao PDR, the IPCC Forest land category for Lao PDR has been determined by the Government to include both “Current Forest” land categories as well as “Potential Forest” categories.

Forest cover can refer to either of the following, and shall be defined in each specific occurrence of the term throughout the document: (See also Figure 5 on the next page)

- Areas under “Evergreen” and “Current Forest” (high-carbon-stock forest) (323-733 tCO₂/ha)
- Areas under “Current Forest” and “Potential Forest (low-carbon-stock forest)” (66 tCO₂/ha)

Current Forest (land/forest classification system Level 1) are areas with a tree cover and crown density of at least 20%. Forest Plantations are exempted from the rule of the minimum crown density.

⁶³ https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR_ERPD_FinalDraftMay.2018-Clean.pdf

- Level 2 classes under Current Forest include: Evergreen forests (EG), Mixed deciduous forest (MD), Coniferous forests (CF), Mixed coniferous and broadleaved forests (MCB), Dry Dipterocarp forest (DD), and Plantations (P).
- Current Forests covers Stratum 1, 2 and 3, and includes Plantations from Stratum 4 (Strata applied under REDD+ carbon accounting).

Potential Forest (land/forest classification system Level 1) are areas with a crown density less than 20% and not permanently being used for other purposes (i.e. housing, agriculture etc.).

- Level 2 classes under Potential Forest include: Regenerating Vegetation (RV) and Bamboo.
- **Regenerating Vegetation (RV)** are previously forested areas in which the crown density has been reduced to less than 20% because of logging or heavy disturbance including shifting cultivation. If the area is left to grow undisturbed it will become forest again.

For detailed information on the Lao land/forest classification system and definitions, refer to Chapters 8 and 9 of the ER-PD.

This forest classification implies that a large share of the defined forest areas (classified as Regenerating Vegetation) is actually not forest. The Regenerating Vegetation is very often under agricultural land use with a low carbon stock. From a GHG mitigation and biodiversity perspective, the high-carbon-stock forest must be a priority for conservation and management, while low-carbon-stock forest (RV) may be suitable for agricultural intensification or restoration. The selection of the target programme area ([Section 2.5](#)) considers this and prioritizes districts with a high remaining high-carbon-stock forest area and high risk of deforestation and forest degradation.

Forest Type Map 2015

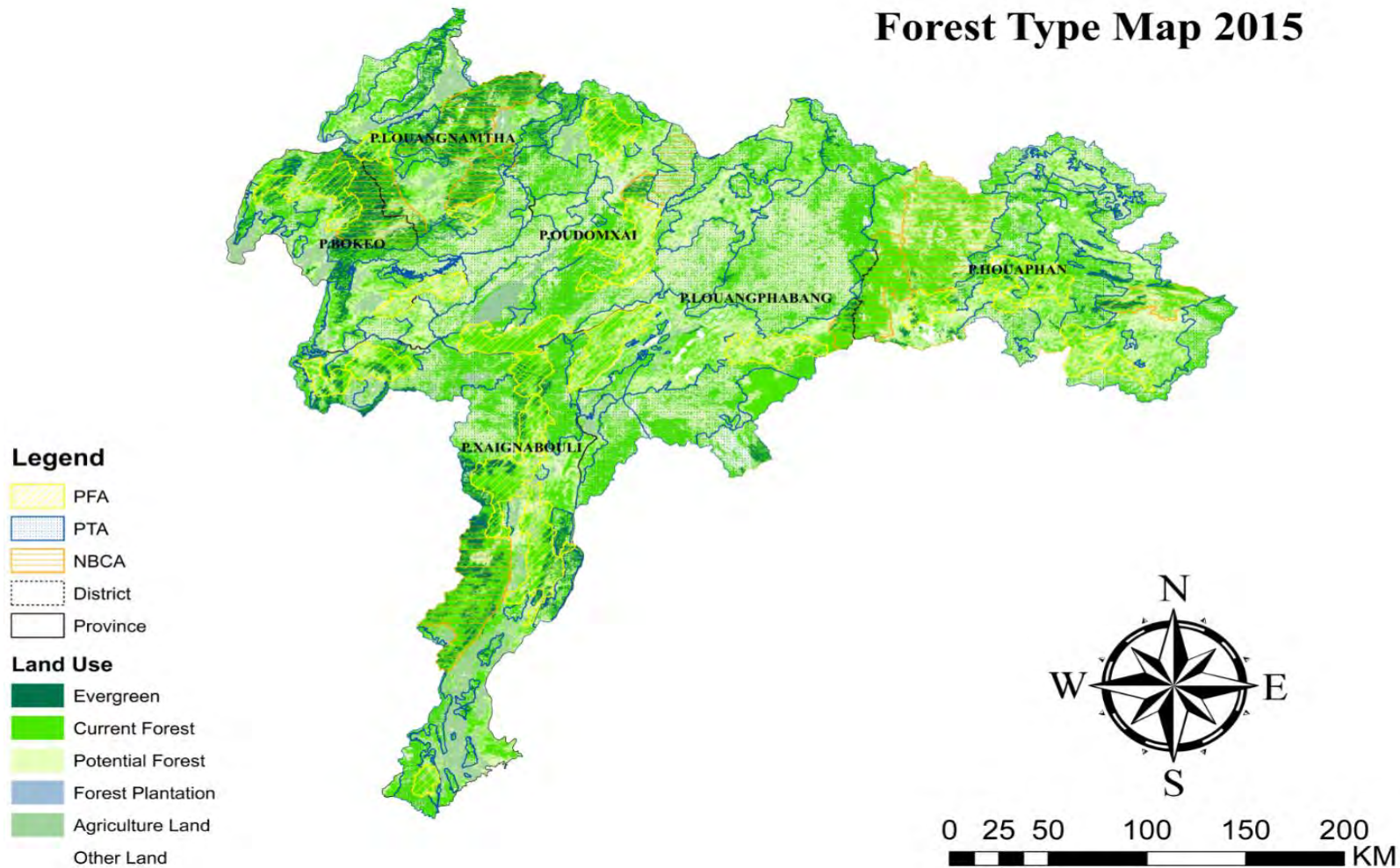


Figure 6: Programme area forest type and national forest categories map (2015) (PTA: Protection Forest Areas; PFA: Production Forest Areas; National Protected Areas (NPA))

Note: Evergreen and current forest have the highest average forest carbon stocks 733.2 tCO₂/ha for evergreen forest and 323 tCO₂/ha for current forest, and have highest GHG mitigation potential from avoided deforestation and forest degradation. Potential Forest has an average carbon stock of 66 tCO₂/ha.

Lao PDR has three administrative categories of forests:

- **Production forests (PFA):** “Production Forests are natural forests and planted forests classified for the utilization purposes of areas for production, and wood and forest product businesses to satisfy the requirements of national socio-economic development and people’s living.”⁶⁴ “Production Forest Areas (PFAs) are forest and forestland areas allocated to the State for management and which are managed in accordance with the Forestry Law. The forest in PFAs may be harvested for natural timber under the management of the Department of Forestry under Ministry of Agriculture and Forestry (MAF), although PMO 31 has imposed a ban on such harvesting since 2013. Responsibility for the management of production forest is assigned vertically downwards through the Department of Forestry, with most operational activities being undertaken at the District level. Village Forest Units, which are the ‘smallest’ administrative level, also play a role. Timber harvesting operations are undertaken by timber harvesting units or timber harvesting enterprises, which are licensed by the Department of Forestry.”⁶⁵
- **Protection forests (PTA):** “Protection Forests are forests classified for the function of protecting water resources, river banks, road sides, preventing soil erosion, protecting soil quality, strategic areas for national defense, protection from natural disasters, and environmental protection.”⁶⁶ “In Protection Forests individuals and villages have certain rights with respect to the harvesting of timber and forest products for their own consumption.”⁶⁷ They are managed by the Department of Forestry.
- **Conservation forests (also referred to as National Parks/NP National Protected Areas NPAs):**⁶⁸ “Conservation forests are forests classified for the purposes of conserving nature, preserving plant and animal species, forest ecosystems and other valuable sites of natural, historical, cultural, tourism, environmental, educational and scientific research experiments. Conservation Forest consists of National Conservation Forest areas and Conservation Forest areas at the Provincial, District and Village levels.”⁶⁹ “Conservation Forests are divided into total protection zones, controlled use zones, corridor zones and buffer zones”.⁷⁰ Within Conservation areas, individuals and village have certain rights with respect to the harvesting of timber and forest products for their own consumption.”⁷¹ They are managed by the Department of Forestry.
- **Unclassified forest areas** (outside of the three forest categories) also exist. These areas include forests, woodlots and industrial tree plantations, among others and agricultural land. The ER-PD (2018, p. 30) notes “It is commonly understood that, due to lack of operational management systems and proximity to villages, forests outside of three forest categories

⁶⁴ Smith and Alounsavath 2015, p. 242

⁶⁵ Smith and Alounsavath 2015, p. 26

⁶⁶ Smith and Alounsavath, p. 242

⁶⁷ Smith and Alounsavath, p. 113

⁶⁸ “Conservation Forests may be converted from Forest Land to another Land Type for the purposes of infrastructure development with approvals as set out in the Law on Land No 04/NA 2003.” – Smith and Alounsavath 2015, p. 23

⁶⁹ Smith and Alounsavath, p. 242

⁷⁰ Smith and Alounsavath, p. 245

⁷¹ Smith and Alounsavath, p. 113

are more prone to disturbance (e.g. shifting cultivation, agricultural expansion, infrastructure, mining road), and unsustainable timber extraction.”

Info Box 4. Village Forests⁷²

Village use forests are production forests (including NTFPs) 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.⁷³

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.⁷⁴

1.3.2 Programme Area

Forest Cover and Types

Forests cover over 7.27 million hectares in the programme area (Table 5 and Figure 5). The majority of forests within the programme area (73%) are included within the three official forest categories (Table 5). 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).

⁷² Adapted from CliPAD Village Forest Management Guidelines (CliPAD/GIZ 2016)

⁷³ 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).

⁷⁴ Draft Forest Law 2015

Table 5: Forest categories in Lao PDR (in 2015)

Land/ Forest classification	6 Northern Provinces				
	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	8,726⁷⁵
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 containing located in all four forest categories, the programme interventions need to be planned in all for forest categories.

Refer to [Chapter 2](#) for an in-depth analysis on the drivers of deforestation and forest degradation and to [Section 1.6.2](#) for a historical summary of the deforestation and forest degradation and the GHG emissions of the programme area.

1.4 Agricultural sector profile

The agricultural sector is the primary source of livelihoods for the majority of people in Lao PDR.⁷⁶ At the same time, the sector has been the primary source of deforestation and forest degradation (see Chapter [Section 1.6.2](#) for a historical summary of the deforestation and forest degradation and [Chapter 2](#) for an in-depth analysis on the drivers of deforestation and forest degradation). Approximately two-thirds of the population live in rural areas.⁷⁷ The agricultural sector mainly comprises 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.⁷⁸ Extension services are of limited quality and have limited

⁷⁵ In reality the figures is much higher is much higher and higher than 120,000 ha. The remote sensing analysis had limitation in identifying forest plantations.

⁷⁶ World Bank 2018

⁷⁷ Onphanhdala et al. 2016

⁷⁸ GIZ (2018), *Towards Responsible Agricultural Investment in Lao PDR: A Study of Agribusiness Experiences*.

reach due to low (human and financial) resources. Agricultural value chains are highly fragmented, with limited farmers' organizations and cooperatives and weak linkages between value chain actors.

Although this range of issues affects the sector, the sector has evolved over the past ten years, slowly shifting from subsistence to commercial agricultural production, though at a very limited pace. The production of maize, for example, has increased during recent years, as response to the increasing demand for maize as an ingredient of livestock feed in countries like Thailand and Vietnam.⁷⁹

1.4.1 Agriculture in the programme area

The Northern Uplands region of Lao PDR is characterized by hilly topography combined with flatland areas.⁸⁰ 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.⁸¹

Rain-fed (lowland and upland) paddy rice, maize and vegetables are among the key agricultural crops grown in the six Northern Uplands provinces Luang Namtha, Oudomxay, Bokeo, Luang Prabang, Houaphan and Sayabouri (Figure 6).

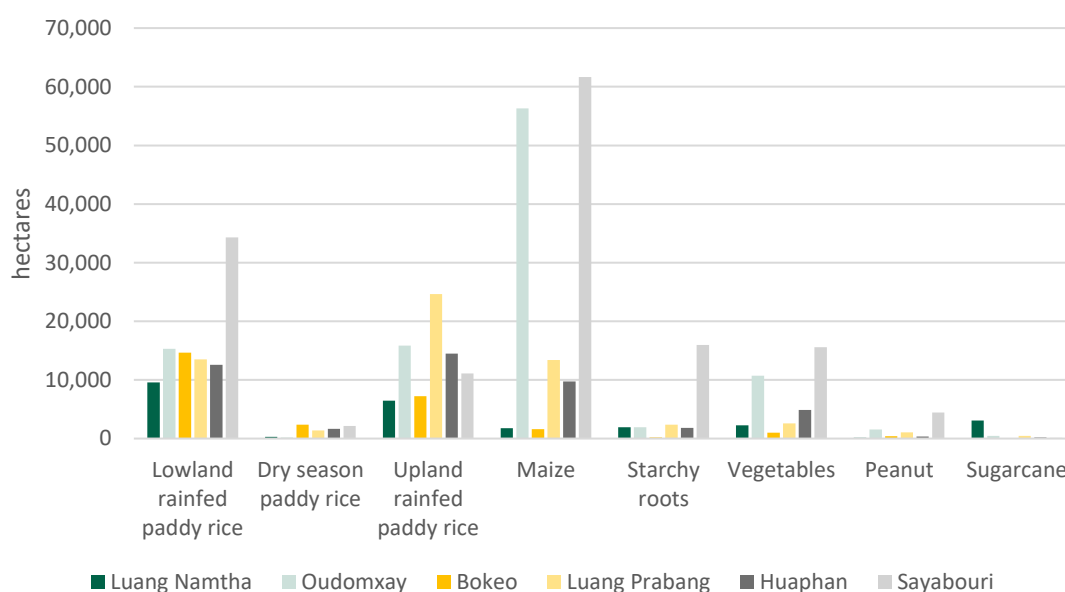


Figure 7. Key agriculture crops in the target provinces (ha planted)

Source: Based on Ministry of Planning and Investment, Statistical Yearbook 2017

⁷⁹ Ibid.

⁸⁰ Onphanhdala et al. 2016

⁸¹ Agricultural Census Office 2012

Due to limited use of inputs such as high-quality seeds, fertilizer and the lack of application of good agricultural practices, crop yields tend to be low (Figure 6). Characteristics of agricultural production in each of the six provinces are summarized in Table 7.

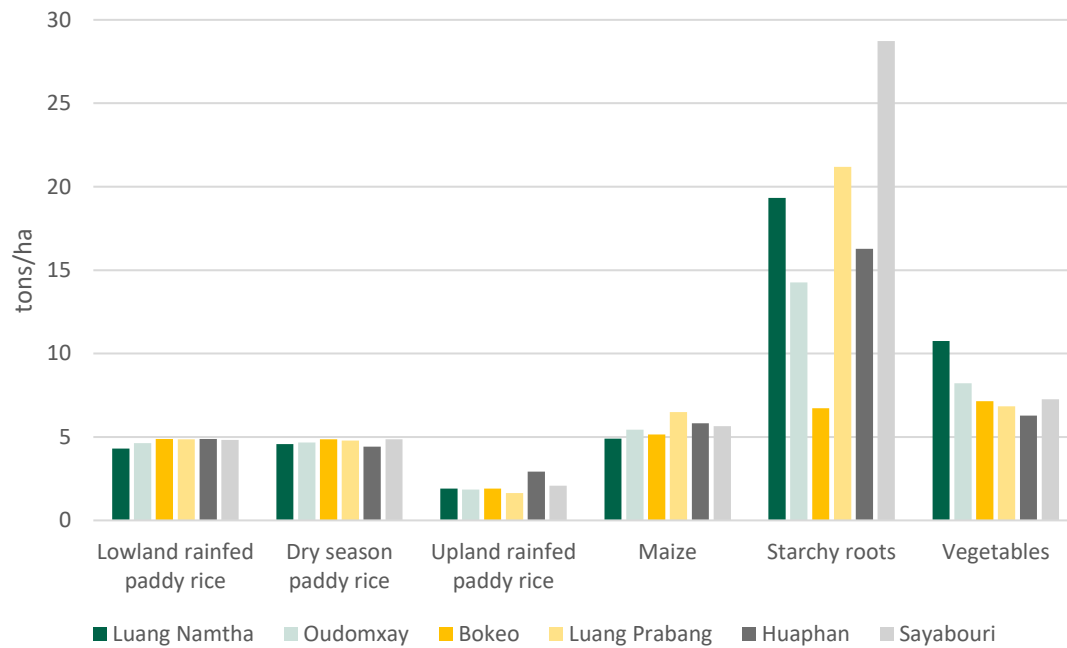


Figure 8. Yields of key agricultural crops in the target provinces (tons/ha)

Source: Based on Ministry of Planning and Investment, Statistical Yearbook 2017

Table 6: Agricultural production in each of the six target provinces

Province	Agricultural production characteristics
Luang Namtha	<p>The province is one of the main producers of rubber and sugarcane in the country and has seen substantial expansion of both crops since the early 2000s. With 9,590 and 6,434 hectares respectively, lowland and upland rain-fed paddy rice are key agricultural crops grown in the province, followed by sugarcane (3,095 ha), vegetables (2,255 ha), starchy roots (1,940 ha) and maize (1,790 ha).</p> <p>The main proximate drivers of deforestation and forest degradation are linked to the rapid expansion of rubber plantations, shifting cultivation land and cash crop cultivation. Average gross forest cover loss was 8,705 ha per year between 2000 and 2015.</p>
Oudomxay	<p>Employing 56,320 hectares or ~54% of Oudomxay's agricultural production area, maize is the dominant crop produced in the province. Other major crops produced in the province include upland and lowland rain-fed paddy rice (15,826 and 15,290 ha respectively) and vegetables (10,725 ha).</p> <p>Pioneering shifting agriculture and the expansion of cash crop cultivation are the main drivers of deforestation and forest degradation. Agricultural activities cover 104,262 hectares in the province.</p>
Bokeo	<p>With 14,632 hectares (out of 27,586 hectares agricultural production area), lowland rain-fed paddy rice is the key crop grown in Bokeo province, followed by upland rain-fed paddy rice (7,209 ha) and maize (1,595 ha). The application of increasingly intensive agricultural practices in unsuitable upland areas with low productivity leads to soil degradation, low yields and, ultimately, shorter fallow periods.</p> <p>Especially for upland rice mixed with other vegetables (e.g. cucumber, eggplant, chili peppers and ginger, among others), shifting cultivation leads to deforestation. Increased competition for the most fertile agricultural lands by rubber and cash crops has led villagers to clear forested land in upland areas to cultivate subsistence crops to provide food for their households.</p>
Luang Prabang	<p>Similar to Bokeo province, upland and lowland rain-fed paddy rice, followed by maize, are the key agricultural crops grown in the province. The three crops employ 24,635, 13,496 and 13,380 hectares respectively, and jointly account for approximately 82% of land used for agricultural production in the province.</p> <p>Poverty, population increase and limited livelihood options lead to agricultural expansion into the forest area. Furthermore, increased market demand for agricultural products lead to expansion of agricultural production.</p>
Houaphan	<p>Key agricultural crops grown in Houaphan province include upland and lowland rain-fed paddy rice (14,469 and 12,580 hectares respectively), followed by maize (9,740 ha) and vegetables (4,850 ha).</p> <p>The impact from agriculture on forests is projected to increase in the future, as district level socio-economic development plans have projected that agricultural land in the province will increase by over 90,690 ha from 2016 to 2020, with a large focus on expanding cash crop production in the province.</p> <p>With 61,645 hectares, maize employs 42% of the agricultural area in the province. Other key agricultural crops grown in the province include lowland rain-fed paddy rice (34,321 ha), starchy roots (15,960 ha) and vegetables (15,555 ha). Maize cultivation in the province has grown extensively since the introduction of contract</p>

farming systems in the early 2000s. Currently, the province is the largest producer of maize in the country, responsible for 22% of national maize production.⁸²

Due to various reasons including agricultural diversification, land degradation, decreased labor availability, increased labor costs and market fluctuations (price), the government aims to reduce the area covered by maize by 2020 to 50,000 ha.

Source: Ministry of Planning and Investment, Statistical Yearbook 2017

Key agriculture value chain actors

The agricultural value chain in the Northern Region of Lao PDR consist of both informal and formal value chain actors. Key agriculture value chain actors are naturally farmers (farm households, villagers) as primary producers. (Refer to [Chapter 2.1 and 2.2](#) for details about agriculture as a driver of deforestation and forest degradation).

Further actors include local small-scale traders (e.g. fertilizer suppliers, rice traders) and business developers, who make up the majority of the informal sector. The formal sector consists of local agribusiness companies (e.g. rice millers), some of which are focused on export, and regional and international agribusinesses, including well-established large agro-industrial companies.⁸³

The Lao National Chamber of Commerce connects private sector companies to state organizations and is therefore an important value chain actor.⁸⁴

A key public actor at national, province and district level is the Ministry of Agriculture and Forestry (MAF). Specifically, the District Agriculture and Forestry Office (DAFO) under MAF is responsible for agricultural extension services. Through Technical Service Centers (TSCs) extension services are delivered at *kumban*⁸⁵ level.

Regional trade dynamics

The agriculture sector is the second-largest sector for foreign direct investment. In 2015, approximately USD 470 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.⁸⁶

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).

⁸² LSB 2016

⁸³ NUSD 2008

⁸⁴ Ibid.

⁸⁵ Cluster of villages.

⁸⁶ <http://www.investlaos.gov.la/index.php/resources/statistics>

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.

Barriers to agriculture value chain development

Although the agriculture sector in Lao PDR faces various barriers in general, specific barriers affecting agricultural value chain development in the Northern provinces include:

1. Increasing population growth and government policies (village relocation, land use planning/allocation) limit the area available for agricultural production. As a result, farmers more intensively practice shifting cultivation, leading to reduced soil fertility, reduced land productivity and contributing to forest degradation and deforestation.
2. Access to agricultural inputs, tools and machinery is limited; little to no agro-vet shops exist and many farmers thus rely on their own seeds, limited fertilizer (livestock manure) and pesticides for crop production. This results in low productivity of agricultural land management and leads to further land expansion into forested landscapes.
3. Private traders import cheap fertilizer and pesticides from neighboring countries such as China; however, product labels are not translated and thus farmers do not know how to best apply the products to their fields. Wrong application can risk under- or over application of inputs on-farm and may risk farmers' health (e.g. through the lack of protective clothing during application).
4. Limited access to vaccines, breeding stock (including Artificial Insemination (AI)) and high-quality livestock feed hinder livestock production.
5. The District Agriculture and Forestry Office (DAFO) is the main provider of agricultural extension services. Lack of capacity, means (finances, transport) and up-to-date knowledge (e.g. on Good Agricultural Practices) constrains DAFO staff from providing high-quality extension services to farmers. The reach of extension services is limited, especially in very remote villages.
6. Production and sales of agricultural produce are often undertaken by farmers individually; limited producer organizations exist. As individuals, farmers only sell limited volumes and thus have limited negotiation power with traders/private sector.
7. Price fluctuations of crops such as maize are common. Farmers are highly susceptible to these price fluctuations. Significant declines in prices can have a detrimental impact on people's livelihoods.
8. Private sector actors (e.g. farmers, traders, millers) lack financial capacity and literacy for, e.g., business plan development, financial analysis, planning and accounting. This hinders actors from fully exploiting business opportunities, business expansion or securing access to credit.
9. The lack of a market information system and lack of post-harvest practices/value addition results in farmers selling their produce directly after harvest at farm gate. Prices

directly after harvest are often – due to large supply – low. Farmers thus do not benefit from potential higher prices later in the season, or higher prices due to value added.⁸⁷

1.5 Financial sector profile

Access to financial services for businesses and families operating in the agricultural and forestry sectors can be broadly characterized as low within Lao PDR. In addition to challenges in receiving loans or investment from banks and other investors, low access extends to other important financial services, such as savings deposits and insurance. The credit that is available is typically limited to short-term tenors, e.g. 1 year or less.

There are a number of factors that constrain access to credit from formal sources in rural areas, and financial services more generally: many banks and other financial institutions do not have strong geographic reach into rural areas. For households and small businesses, it can be physically difficult to reach a bank branch. Many households do not have a savings account because of the inconvenience, thus making it more difficult to access credit.

Agriculture and forestry sectors, and the small businesses that operate in these sectors, are perceived as risky by financial institutions. This perception is exacerbated by the lack of insurance products in the country for land use investments. Regulation of the financial sector limits the spread between deposits and credits that financial institutions can offer, discouraging banks from lending to sectors that are perceived as risky.

Many households and businesses lack business planning and financial management capacity. Preparing a business plan or audited financial accounts, for example, are not skills that are widespread in the sectors. This challenge contributes to the perception that the sector is risky.

Related to all of the above, interest rates for the sector can be prohibitively high (10-14% annual interest rate), pricing out all but the most profitable investments.

The formal financial sector is primarily comprised of three state-owned commercial banks: the Banque pour le Commerce Extérieur du Laos Public (BCEL), the Lao Development Bank (LDB), and the Agricultural Promotion Bank (APB). Even though APB has an explicit mandate to operate in the agricultural sector, its rural reach is limited. ACLEDA Bank Lao is a privately-owned commercial bank, with limited but growing coverage of rural areas.⁸⁸

Aside from larger banks, microfinance institutions and village banks play an important role in finance in Lao PDR. Village banks operate entirely on a deposit basis from villagers, and they make their own credit decisions about lending to villagers. GIZ⁸⁹ has supported village banks via microfinance institutions, enabling its supported village banks to achieve a combined capitalization of USD 30 million.

A large fraction of financial services operate informally in Lao PDR. When a household or small business needs financing, they may seek this from family and friends, rather than inaccessible

⁸⁷ NUDP 2009

⁸⁸ Rural Finance in Northern Laos: Opportunities and Limitations for “Green Finance.” GIZ. 2018.

⁸⁹ <https://www.giz.de/en/worldwide/17492.html>

formal institutions. Equally, savings are most often not kept in a financial institution but, rather, invested in livestock or jewelry, or even stored in a '*secret place*'.⁹⁰

For more insights on the financial sector as it relates to green financing opportunities, see "Rural Finance in Northern Lao PDR: Opportunities and Limitations for 'Green Finance,'" published by GIZ. The geographic presence of selected financial institutions in programme provinces is provided in Annex 1.

1.6 Climate change context and GHG emission profile

1.6.1 Climate Risk and Vulnerability

In its 2nd National Communication to the United Nations Framework Convention on Climate Change (UNFCCC), Lao PDR identifies itself as an LDC with limited adaptive capacities that is highly vulnerable to climate change impacts.⁹¹

Past trends

The annual mean temperature in Southeast Asia consistently increased from 1970-2010.⁹² 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 rainfall (2,741 mm/year) rates.⁹³ These trends are due to increased frequency of extreme rainfall events. Probability analyses revealed 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.⁹⁴ During the last century, a slight delay has been observed in the rainy season, indicating that rainfall variability and uncertainty remains a '*critical issue*'.⁹⁵ Other studies indicate that the dry season is becoming longer, and that climate change will result in increasing droughts, especially within the dry season.⁹⁶

From 1966-2009, about three-quarters of national disasters were climate-related (flood 50%, storm 14%, drought 14%, and epidemics (non-climate) covering 22% of disasters).⁹⁷ The frequency of natural disasters has increased from once every two years before 1992 to once per year or even twice per year after 1992.⁹⁸ The country is considered to have a high risk of river flooding, urban flooding, landslides, cyclones and wildfires, a medium risk for extreme heat, and a low-risk for water scarcity.⁹⁹

⁹⁰ Ibid.

⁹¹ Lao PDR 2013

⁹² Lao PDR 2013; Lefroy et al. 2010

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Lefroy et al. 2010

⁹⁶ World Bank Climate Portal 2018 (http://sdwebx.worldbank.org/climateportalb/home.cfm?page=country_profileandCCCode=LAO-andThisTab=Overview); Eastham et al., 2008

⁹⁷ Lefroy et al. 2010

⁹⁸ Ibid.

⁹⁹ ThinkHazard! Tool 2018;

Lao PDR faces a significant climate risk and is one of the most climate change-vulnerable countries with less readiness for coming impacts.¹⁰⁰ 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.

Projected future climate risks

By 2100, mean annual temperatures are projected to increase by 1.4 to 4.3°C.¹⁰¹ Under high emissions scenarios, the number of days of extreme rainfall are projected to increase by about 7 days from 1990 to 2100, and the days of heat waves to increase from fewer than 10 in 1990 to about 170 days on average in 2100.¹⁰² Also under high emissions predictions, the number of drought days is projected to increase from 55 days in 1990 to about 65 in 2100.¹⁰³

Regarding future climate vulnerabilities, scenario analyses have shown that Lao PDR could experience changes in typical rainfall patterns by the middle of this century. Rainfall in north and central Lao PDR is projected to decrease, with the rainy season shifting its timeframe, creating greater variability that could significantly alter traditional Lao agriculture patterns.¹⁰⁴ This potential change will need to be specifically considered in the design of the GCF programme Output 2, focused on the implementation of good agricultural practices.

1.6.2 Greenhouse gas emissions context

National Greenhouse Gas (GHG) Emissions profile

Official information on national GHG emissions is outdated, with the Second National Communication to the UNFCCC using information from 2000. At that time, land use change and forestry were responsible for 83% of all GHG emissions, followed by agriculture with 15%.¹⁰⁵ In total, the country's emissions were reported at 43.8 million tCO₂eq and carbon removals were estimated at 2.05 million tCO₂eq.

An updated national GHG inventory will be published in the Third National Communication to the UNFCCC, to be submitted in early 2019. This inventory will include the emission sources and sinks from five sectors: energy, industrial processes, agriculture, land use change and forestry, and waste. Information from the country's Nationally Determined Contribution (NDC) to the UNFCCC suggests similar trends, and notes that mitigation efforts should concentrate on land use change and forestry sector.

Estimates using CAIT climate data explorer from WRI (2014) indicate that the country's total greenhouse gas emissions were approximately 29.6 million tCO₂eq in 2014, where the forestry

¹⁰⁰ University of Notre Dame 2018

¹⁰¹ World Bank 2011

¹⁰² WHO 2016

¹⁰³ Ibid.

¹⁰⁴ Ibid.

¹⁰⁵ Lao PDR 2013 <https://unfccc.int/sites/default/files/resource/Laonc2.pdf>

and land use change for responsible for 67% of total GHG emissions, followed by agriculture 28%.¹⁰⁶

However, the data quality of this analysis is highly uncertain. A more accurate assessment was prepared in the framework of the detailed assessment of Lao PDR's Forest Reference Level.

In January 2018, Lao PDR submitted its national Forest Reference Level for REDD+ results-based payments under the UNFCCC¹⁰⁷ for the reference level period 2005-2015. The analysis was based on the 2nd national forest inventory (2015) and the use of high-resolution satellite imagery. The same dataset was utilized to establish the forest reference level assessment for the programme area and for the ER-Program accounting area (see next section). Thus, the data sets used for the national Forest Reference Level and the GCF programme are fully consistent.

Based on the above-described datasets and analysis, Lao PDR's historical GHG emissions due to deforestation and forest degradation amounted to **34.1 million tCO₂eq /year for the period 2005 to 2015**, with an increasing trend in 2010-2015. **Removals due to reforestation and forest restoration amounted to -7.53 million tCO₂eq/year** during the same period (Figure below). This results in annual average net GHG emissions of 26.6 million tCO₂eq from land use change and forestry from Lao PDR.

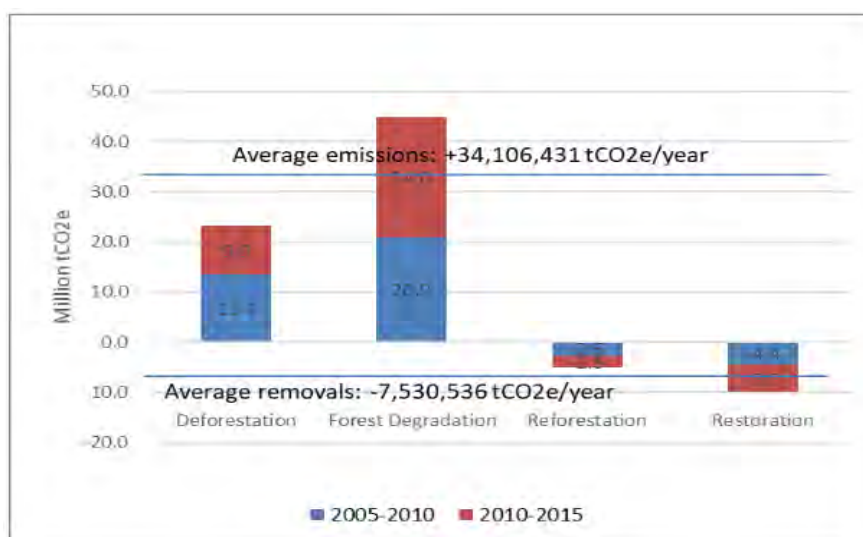


Figure 9. Historical GHG emission and removals due to deforestation, forest degradation, reforestation and forest restoration¹⁰⁸

¹⁰⁶ WRI 2014, <https://www.climatewatchdata.org/countries/LAO?source=31>

¹⁰⁷ https://redd.unfccc.int/files/2018_frel_submission_laopdr.pdf

¹⁰⁸ https://redd.unfccc.int/files/2018_frel_submission_laopdr.pdf

Forest reference emission levels in the GCF programme area (six provinces)¹⁰⁹

As described in the forest profile above, the six northern target provinces face pressures from land use change based on commercial interests in land use (hydropower, expansion of permanent cultivation of cash crops, unsustainable logging, etc.) as well as local needs for resource consumption, such as shifting subsistence agriculture.¹¹⁰ (For a detailed assessment of the baseline situation and explanation of the drivers of deforestation and forest degradation, refer to [Chapter 2](#))

For the programme accounting area encompassing six provinces of northern Lao PDR (8.1 million ha, of which 4.3 million ha is natural high-carbon-stock forest in 2015), a Reference Level has been prepared following the FCPF Carbon Fund Methodological Framework for the reference period 2005 - 2015, as part of the ER-Program preparation (see ER-PD chapter 8 on Reference Level.)¹¹¹

The forest reference GHG emission level is 10.5 million tCO₂eq per year, and the forest reference level for removals is -1.96 million tCO₂eq per year. The net GHG emissions are 8.5 million tCO₂eq/year which is equivalent to 31% of the national net GHG emissions from deforestation, forest degradation reforestation and forest restoration and more than 40% of total deforestation area in the country.

1.7 National-, provincial- and district-level institutions responsible for management of natural resources

The following table provides an overview of the key governmental entities that are relevant for the implementation of the GCF programme and management of natural resources in Lao PDR.

Table 7: Overview national, provincial and district institutions responsible for management of natural resources

Name of agency	Governmental function
National Institutions	
Ministry of Agriculture and Forestry (MAF)	National-level ministry responsible for policy, management and protection of forestry and agricultural resources.
Forestry and forest Resource Development Fund (FFRDF)	Hosted under the Ministry of Agricultural and Forestry (MAF). The Decree on the Forest and Forest Resource Development Fund (No

¹⁰⁹ Adapted from the ERPD unless otherwise specified

¹¹⁰ PRAPs

¹¹¹ DOF/MAF available online at:

https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR_ERPD_FinalDraftMay.2018-Clean.pdf

Name of agency	Governmental function
	38/PM, 2005) ¹¹² “determines principles, regulations on the establishment, management and monitoring of the Forest and Forest Resource Development Fund, aiming at raising funds from people engaged in forestry operations so that funds can be used for management, protection and development of the forest resources and contributed to the national economic and social development”. FFRDF funds forestry operations including conservation and protection of watersheds and protected areas, tree planting, forest rehabilitation for protection of the watersheds and environment, wildlife conservation, training, conservation education and outreach, dissemination of forestry policy, law, regulations and technical inputs for forestry and other matters related to the forest and forest resources.
Department of Forestry (DOF)	A department within MAF responsible for policy development, management and protection of forest resources nationally. Conducts policy analysis, revision and alignment in support of PRAP objectives. Provides capacity building and technical support to PAFO for PRAP implementation.
REDD+ Division under the Department of Forestry (DOF)	Division within the Department of Forestry responsible for the overall implementation and coordination of REDD+ activities throughout the country. Supports the PRO with capacity building, policy review and revision and in its provincial management duties.
Department of Forestry – Division of Village Forestry and NTFP Management	Division under DOF responsible for policy development, guidelines and technical support for the development of village-level forest and NTFP management. Provides technical support and capacity building for PAFO on the implementation of village forest management (VFM).
Production Forest Management Division of DOF	Responsible for production forest in Lao PDR.
Department of Forestry Inspection (DOFI)	DOFI is responsible for the inspection and law enforcement of forest and wildlife laws and regulations. Provides technical support and capacity building to POFI for provincial-level law enforcement in support of the PRAP.
Department of Agriculture (DOA)	Department within MAF responsible for policy development, management and protection of agricultural resources nationally. Conducts policy analysis, revision and alignment in support of PRAP objectives. Provides capacity building and technical support to PAFO for PRAP implementation.
Department of Agriculture Land Management (DALAM)	A department within MAF responsible for agricultural land management and planning. Provides capacity building and technical support

¹¹² https://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKEwiY7ICPtOreAh-VEzKQKHSj1Ay0QFjABegQIAxAc&url=https%3A%2F%2Ftheredddesk.org%2Fsites%2Fdefault%2Ffiles%2Fdecreonforestrydevelopmentfund1_1.doc&usg=AOvVaw01VBg7Ec9WbIsJB_7iGs

Article 12 The sources of revenues for the Fund

- Costs for forest rehabilitation, forest land and forest resources
- Obligatory costs for tree planting and non-timber forest produce regeneration
- Costs for forest inventory, forestland and forest resources
- Contributions from Lao and foreigners who run business on forestry, non-timber forest produce and wildlife
- Contributions from the state budget, individuals, juridical entities, collectives, Local and international social organization, international institutions including financial institutions.
- Other revenues including interests or dividends from investors or shareholders
- Revenues from profit dividends from selling woods in the production forest as per the Prime minister's Decree No 59/PO, dated on 22/05/2002 on the Sustainable Production Forest Management.

Name of agency	Governmental function
	to PAFO for PRAP implementation of land-use plans and land allocation.
Department of Agricultural Extension and Cooperatives (DAEC)	A department within MAF responsible for the development of local-level cooperatives and supporting efforts for rural development. Primarily a technical service provider. Provides technical support and capacity building to PAFO in support of PRAP implementation.
National Agriculture and Forestry Research Institute (NAFRI)	National-level institute that conducts policy, technical and market research and analyses in the agriculture and forestry sectors. Supports policy review and research into innovative agricultural models for implementation under the PRAP.
Department of Technical Extension and Agricultural Processing (DTEAP)	A department within MAF responsible for the provision of agriculture and extension services and supporting efforts to scale-up and enhance agricultural processing. Primarily a technical service provider. Provides technical support and capacity building to PAFO in support of PRAP implementation.
Ministry of Natural Resources and Environment (MoNRE) – Department of Land Management	A department within MoNRE responsible for land-use planning and allocation. Supports PoNRE – Land Management Section with land-use planning and allocation under the programme.
Environmental Protection Fund (EPF)	<p>Established in 2005, the EPF serves as a financially autonomous organization to strengthen environmental protection, sustainable natural resources management, biodiversity conservation and community development in Lao PDR. The resources of the EPF shall only be used to finance regular and recurrent expenses of ministries, departments, agencies and any other public or private organizations and entities receiving financial support from the EPF, where these expenses relate directly to the implementation of Eligible Activities.</p> <p>It should be noted that Lao PDR's Nationally Designated Authority (NDA – MoNRE), nominated the EPF as an entity to undergo the GCF accreditation process to become a direct access national accredited entity under the GCF. Currently, EPF is undergoing the accreditation process.</p>
Provincial Level	
Provincial REDD+ Task Force (PRTF)	Provincial cross-sectoral body with responsibility and oversight of REDD+ activities in the province. Bears ultimate responsibility for the implementation of the programme.
Provincial REDD+ Office (PRO)	Provincial body that executes the day-to-day management and coordination activities for the PRTF, including PRAP management and coordination with the programme.
Governors' Office	Provincial administrative office responsible for establishing provincial development goals and strategies. Provides overall guidance to the PRAP process and ensures provincial line agencies conform to PRAP objectives.
Provincial Department of Planning and Investment Office (PPIO) – Planning Section	Provincial line agency of the MPI-DoP. Responsible for coordination and development of provincial development strategies and action plans. Ensures the cooperation and integration across line agencies to achieve stated national socio-economic goals. Ensures line agency plans conform to PRAP and programme's objectives, supports the integration of improved spatial planning, and forest landscape planning into provincial planning processes.

Name of agency	Governmental function
Provincial Agriculture and Forestry Office (PAFO)	Provincial line agency to the Ministry of Agriculture. Same remit as MAF but at the provincial level. Main body to coordinate the implementation of PRAP and programme activities.
PAFO – Agriculture Section	Provincial line agency to the Department of Agriculture. Provides technical implementation support, coordination and capacity building for DAFOs for the implementation of agriculture sector-based PAMs.
PAFO – Agriculture and Land Management Section	Provincial line agency to the Department of Agriculture Land Management. Provides technical implementation support, coordination and capacity building for land-use planning and allocation under the PRAP.
PAFO – Forestry Section	Provincial line agency to the Department of Forestry. Responsible for the management and protection of three forest categories at the provincial level. Provides a critical role in the implementation of several of the Forestry Sector PAMs.
PAFO – Agriculture and Forestry Research Section	Provincial line agency to NAFRI. Supports research into alternative agricultural production methods and approaches.
PAFO – Agriculture and Forest Extension Section	Provincial line agency responsible for forest and agricultural extension services. Critical role in supporting DAFO and local communities with capacity building and training on the adoption of new agricultural and forestry production methods.
PAFO – Planning and Management Section	Administrative section of PAFO. Responsible for planning and monitoring of PAFO activities. Ensures PAFO activities achieve PRAP plans. Critical role in the M&E of the programme.
PAFO – Irrigation Section	Provincial line agency to the Department of Irrigation. Responsible for expanding access to irrigation infrastructure for agricultural cultivation, primarily for rice production. Provides technical support and capacity building for the expansion of paddy area in the province under the PRAP.
PAFO – Livestock and Fishery Section	Provincial line agency responsible for the provision of capacity building and technical support in the development of improved livestock production methods in the province under the PRAP.
Provincial Department of Finance	Provincial line agency to the Ministry of Finance responsible for management and distribution of national and international sources of finance and funds. Supports the design, establishment and implementation of the financing scheme for PRAP agriculture and forestry investments.
POFI	Provincial line agency to the Department of Forestry Inspection responsible for the inspection and law enforcement of forest and wildlife laws and regulations. Supports the implementation of forest law enforcement measures within the programme.
PONRE	Provincial line agency to MoNRE, responsible for land-use planning and allocation under the PRAP and programme.
Private Sector	Based on provincial planning and PAM financing protocols developed, can play a role in the execution of PAM financing and the development of innovative agricultural and forestry investments and business models.
District Level	

Name of agency	Governmental function
District Agriculture and Forestry Office	District line agency to PAFO and MAF. Responsible for the on-the-ground implementation of agricultural and forestry PAMs at the district level. Closest point of contact with local communities.
DOFI	District line agency to POFI and DOFI responsible for the implementation of forest law enforcement, coordinating with POFI. Closest point of contact with local communities.
DONRE	District line agency to PONRE and MoNRE. Responsible for the on-the-ground implementation of land use planning and allocation at the district level in coordination with PONRE. Closest point of contact with local communities.

1.8 Policy framework¹¹³

1.8.1 National and sectoral policies and plans

Overview

The following table provides an overview of the key national and sectoral policies, plans and strategies in Lao PDR. The design of the GCF programme is closely aligned with the development objectives and the programme will support the key governmental priorities such as:

- Transition to a middle-income developing country, with inclusive, stable and sustainable economic growth, balancing socio-economic development and environmental protection
- Sustainably develop the agriculture and forestry sectors to ensure food security and environmental protection
- **Forest cover to reach 70% of the total land area**
- Land use classification to be completed for all parts of the country
- Establishment of mechanisms to manage forest resources efficiently and sustainably
- Establish financial mechanisms, regulations and a database for studying, managing and reducing GHG emissions arising from deforestation and forest degradation to ensure that revenue from the forestry sector is used to restore and manage forests

Table 8: Overview of key national and sectoral strategies and plans in Lao PDR for the proposed programme

Strategy/ Plan	Description of actions/targets/objectives
Vision 2030 for socio-economic development¹¹⁴	<ul style="list-style-type: none"> ▪ Transition to a middle-income developing country, with inclusive, stable and sustainable economic growth, balancing socio-economic development and environmental protection

¹¹³ A detailed assessment of the policy and regulatory framework for the project's context has been conducted in the framework of the ER-PD and PRAPs. This section provides a summary of those policies, plans and strategies. For more detailed information, refer to the ER-PD and respective PRAPs.

¹¹⁴ Included within the 8th Five-Year Development Plan (Lao PDR 2015a)

	<ul style="list-style-type: none"> ▪ Sustainably develop the agriculture and forestry sectors to ensure food security and environmental protection ▪ Improve the effectiveness and sustainability of natural resource utilization
Strategy 2025 for socio-economic development¹¹⁵	<ul style="list-style-type: none"> ▪ Graduate from LDC Status by 2025 ▪ Economic diversification, poverty eradication, reduced population growth ▪ Enhance agricultural productivity to promote inclusive growth ▪ Promote environmental management to address the effects of climate change, strengthen resilience to natural disasters, and ensure that the social, environmental and economic impacts of activities in the resource sector are fully understood
8th Five-Year Socio-economic Development Plan (SEDP) (2016-2020)¹¹⁶	<ul style="list-style-type: none"> ▪ Land use classification to be completed for all parts of the country ▪ Properly allocate agricultural production areas by classifying and identifying land use areas ▪ Forest cover to reach 70% of the total land area by 2020 (6 million ha of naturally regenerating forest and 500,000 ha of planted forest in un-stocked forest areas; also mentioned within the Forestry Strategy to the Year 2020); ▪ Establishment of mechanisms to manage forest resources efficiently and sustainably ▪ Establish financial mechanisms, regulations and a database for studying, managing and reducing GHG emissions arising from deforestation and forest degradation to ensure that revenue from the forestry sector is used to restore and manage forests
Draft Green Growth Strategy (as of 2018)¹¹⁷	<ul style="list-style-type: none"> ▪ Forestry agenda as a priority, increase forest cover and promote green urban areas ▪ Promote the use of economic tools to promote domestic and foreign investments in tree planting in deforested and degraded land in order to meet the 70% forest cover target ▪ Promote agro-technological solutions to promote environmentally-friendly and climate-smart agricultural practices, as well as alternative livelihoods to shifting cultivation ▪ Strengthen the environmental management sector, including the regulatory frameworks, capacities and standardize environmental management practices ▪ Financial mechanisms, including environmental taxes and payments for ecosystem services (PES), are proposed to support the implementation of the strategy, alongside intentions to access concessional loans and private sector investments
Forestry Strategy to the Year 2020¹¹⁸	<ul style="list-style-type: none"> ▪ Formulate national land policy and introduce land use planning both at all levels ▪ Enhance village-based natural resource management for poverty eradication ▪ Control unsustainable harvesting and exporting of NTFPs, and promote sustainable participatory management and processing of NTFPs ▪ Improve the performance of the wood industry, including bringing processing capacity into closer accord with the sustainable timber supply

¹¹⁵ Ibid.

¹¹⁶ Lao PDR (2015a)

¹¹⁷ World Bank supports the Government of Lao PDR in a number of reform areas contributing to the Green Growth Strategy objectives, through the Green Resilient Growth Development Policy Operations. Information adapted from the ER-PD.

¹¹⁸ Lao PDR (2005)

	<ul style="list-style-type: none"> Promote tree planting and management by setting clear targets, investment models and markets to strengthen the national timber supply and farmer incomes Prevent forest encroachment, unauthorized land use activities and biodiversity degradation through strengthened law enforcement, capacity building and participation of villagers in forest management
Strategy for Agricultural Development 2011 to 2020¹¹⁹	<ul style="list-style-type: none"> Stabilize shifting cultivation and tailor climate change adaptation measures to the specific socio-economic and agro-ecological conditions of each region Support the widespread adoption of ecologically sustainable production practices adapted to the region-specific context Increase and modernize production of agricultural commodities to lead to pro-poor and green value chains, targeting domestic, regional and global markets based on the organization of smallholder farmers and partnering investments with the private sector Promote sustainable forest management to preserve biodiversity and improve national forest cover, providing valuable environmental services and fair benefits to rural villages as well as public and private forest and processing enterprises
National Biodiversity Strategy and Action Plan (2016-2025)¹²⁰	<ul style="list-style-type: none"> Protect the country's diverse and economically important ecosystems (e.g. monitoring and enforcement of forest protection rules; increase in number of household beneficiaries from village forestry-oriented programme's in biodiversity hotspots) Integrate the value of biodiversity to socio-economic decision-making (e.g. integrating integrated spatial planning in development/planning activities) Strengthen the knowledge-base on biodiversity information and value Improve communication, education and public awareness on biodiversity
Draft National Master Plan on Land Allocation (as of 2018)	<ul style="list-style-type: none"> Reach and maintain a 70:30 ratio balance in terms of conservation and development objectives of land management. <ul style="list-style-type: none"> .1. 70% of land under conservation and protection objectives should consist largely of conservation and protection forest land, as well as reserved areas, where management objectives are set towards watershed management, biodiversity and ecosystem conservation among others. .2. 30% of land will be reserved for residential areas, industrial areas, transport infrastructure, as well as agricultural and production (commercial) forest area. Identify land use objectives, taking into account the context on the ground to overcome barriers and challenges associated with land allocation
National REDD+ Strategy to 2025 and Vision to 2030	<ul style="list-style-type: none"> Guide REDD+ implementation, including with the participation of all relevant stakeholders in the country Improve the quality and extent of forests nationwide to provide economic, social and environmental values Active participation of stakeholders for strategy implementation to reduce deforestation and degradation, and promote forest restoration and reforestation

¹¹⁹ MAF (2010)

¹²⁰ MoNRE (2016)

Socio-economic Development Plans

While many of these documents provide the key regulatory framework and provide medium- to long-term direction for the countries development trajectory, critical documents for short- and medium-term planning and the operationalization of these strategies and visions are the country's socio-economic development plans (SEDPs).

Government SEDPs at the national, province and district levels are prepared as 5-year plans and are the primary strategic reference for government entities to fulfill their work. Currently, the Government of Lao PDR is in the 8th SEDP planning cycle that runs from 2016-2020, which will be followed by the 9th planning cycle from 2021-2025, etc. SEDPs and sectoral plans are the basis for government budgeting, and thus it is crucial that REDD+ related interventions are integrated. They are outcome-based plans, including clear development outcomes and outputs corresponding to the sector. Provincial and district development plans should be able to show harmonization with national plans and are closely aligned with available sources of funding (including government budget, grants, loans, domestic and foreign private investments, and investments in the financial system).¹²¹

The 8th National SEDP (2016-2020) specifically mentions the implementation of REDD+, noting the need to “enhance and develop REDD+ projects to reduce GHG emissions” as a priority action.¹²² While this demonstrates strong government commitment to REDD+, there is a need to further incorporate REDD+ into the future national SEDPs (2021-2025; and 2026-2030), to specifically strengthen the link with priority actions and clear national targets, and enhance REDD+ mainstreaming across sectors, especially in infrastructure, forestry and agriculture which are closely linked to deforestation and forest degradation.¹²³ In addition, national, province-level and district-level SEDPs tend to be inconsistent and interventions are not fully in line with the objectives of the national REDD+ Strategy and Provincial REDD+ Action Plans (PRAPs) that were developed in the timeframe 2016-2018.¹²⁴ This is compounded by the fact that many provincial and district-level SEDPs do not directly mention REDD+, and thus limit the awareness of REDD+ as a priority action and limits the setting of provincial- and district-level targets as well as budget allocation for REDD+ priority measures. This has led to an inability to monitor and enforce compliance with plans, policies and regulations, and competition between competing sectors. Thus, the weak integration of REDD+ at all levels is seen as a barrier to REDD+.

1.8.2 Land and Forestry laws

Land use regulations and revisions to the land law¹²⁵

The *Land Law 04/NA 2003* (under review) is the principal legislative instrument governing the management, protection 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

¹²¹ http://www.la.one.un.org/images/publications/8th_NSEDP_2016-2020.pdf

¹²² Koch 2017; GoL 2016, p.143

¹²³ Lao PDR ER-PD and PRAPs;

¹²⁴ Lao PDR ER-PD

¹²⁵ Text from the ER-PD 2018 and PRAPs

the State is charged with the centralized and uniform management of land, including allocation. 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 2003*, all land is classified into a category for which boundaries must be determined. The eight Land Categories are:

- agricultural land;
- forest land;
- water areas;
- industrial land;
- communication land;
- cultural land;
- land for national defense 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 14).

Land use plans and the land use planning process are not defined in the Land Law (2003). The LUP process is understood to be a process that largely emerged through the LUP/LA Program, and has since been taken up by various projects (see descriptions in Chapter 3 and Chapter 1.8), and has resulted in a number of LUP-related manuals that have been endorsed by the government. The LUP is most often regarded as a process and output for land allocation and can range from the delineation of the village boundaries, to zonation of general land use categories in the village and, ultimately, to mapping out boundaries of plots at the household level. The 2017 Central Party Resolution on Land also refers to LUP, but in the context of higher-level land use plans (i.e. national master plan).

Since 2012, a National Land Policy for Lao PDR has been under preparation. In August 2016, the draft National Land Policy was presented and discussed in a national workshop chaired by the Deputy Prime Minister with the attendance of 18 sector ministries, the National Assembly, several ministry-equivalent organizations, academia as well as representatives of donor partners and civil society. After the meeting, the final National Land Policy was expected to be tabled during the next meeting of the National Assembly. In the aftermath it was decided, however, that the Lao Government would no longer work on a National Land Policy but that the Politburo should issue a Party Resolution instead. The Party Resolution on Land was signed on 3rd August 2017.

The Government of Lao PDR is revising the Land Law of 2003 to reflect changes in the Party Resolution on Land to provide more regulation for its implementation. MoNRE is charged as lead agency with the responsibility to finalize revisions of the Land Law and resubmit it to National Assembly. Once the Land Law is revised, then the Forestry Law and other natural resource laws would subsequently be revised, so that they would be harmonized with the Land Law. MAF plans

to submit a revised Forestry Law to the Government of Lao PDR in March 2019.¹²⁶ MAF has already formally established a committee to undertake the revision, headed by the Vice-Minister.

Lao PDR Forestry Law

The 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, regeneration of 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:

- Three categories of forest (see Chapters 1.3 and 3 for more detailed information): Protection Forests, Conservation Forests and Production Forests
- Forest regeneration through nature is defined as natural regeneration, in cases aided by clearing and thinning.
- 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.
- Village forest area is defined as area categorized as forest that is under village management.
- Natural forest and forestland is “*the property of the nation community*,” which is managed by the state with the participation of the people.¹²⁷

Natural forest and forest land are considered “*the property of the nation community*”,¹²⁸ which is managed by the State with the participation of the people. 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.

The Government is currently revising the Land Law, Forestry Law, and their by-laws in an effort to update the legislative framework to meet the emerging domestic and international challenges of the sectors. Within the Forestry Law there are inconsistencies within the legal framework and limited practical guidelines for implementation.¹²⁹ 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 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.¹³⁰ Support is needed to address such gaps and inconsistencies in the regulatory framework to create an enabling environment that facilitates and encourages stakeholders to

¹²⁶ In late 2014 a final draft revision of the Forestry Law with intensive development partners’ support had already been submitted to the National Assembly but has not been discussed in one of the meetings due to the pending Land Policy and Land Law.

¹²⁷ ER-PD 2018, p. 51

¹²⁸ Ibid.

¹²⁹ ER-PD 2018, 185

¹³⁰ E.g. ER-PD ; Lestrelin et al. 2013

adopt sustainable forest management, forest landscape restoration and village forestry – all key activities aligned with Lao PDR’s REDD+ objectives.¹³¹

More specific information pertinent to the Forestry Law, in relation to the main forest categories and specific challenges/ barriers, is presented in Chapters 2 and 3. Detailed information on key forest sector regulations for the three forest categories and village forests is provided in Annex 2.

1.8.3 Political decisions, including Government orders, decrees and other initiatives that improve sustainability in the forest sector

In addition to the above described policies and strategies, various Government orders and decrees are in place that aim to strengthen the management of forest resources.

Table 9: Overview of key Prime Minister Orders, decrees and other government initiatives¹³²

Decree/ Order/ Initiative	Description
Prime Minister Order No. 31 (2013) – Temporary ban on the logging in national production forests	<ul style="list-style-type: none"> Prohibits export of logs, timber, processed wood, roots, branches, and trees from natural forests as well as logs the previous government had recently approved for export Suspends timber harvesting in production forests and a plan of the production-forest allocation must be completed and submitted to the government for approval All types of wood must be turned into finished products before they are exported PMO was further extended been further extended for implementation through the Prime Minister’s Order No. 15 of 2016
Prime Minister Order No. 15 (2016) on “Enhancing Strictness on the Management and Inspection of Timber Exploitation, Timber Movement, and Timber Businesses”	<ul style="list-style-type: none"> Tightened previous efforts to enforce the ban on export of logs and unprocessed timber to avoid illegal logging, among other issues pertaining to forest management. Followed up by a special task force for its monitoring, PMO 15 has seen significant results compared to other such efforts in the past, including a sharp drop in levels of timber exports According to a Forest Trends study, Lao exports of logs and sawn wood to its main traders of Vietnam and China had decreased by 74% by the end of 2016, compared with their levels in 2014. The report makes the link between these trade figures and PMO 15.¹³³
Prime Minister Order No. 13 (2012) on “Moratorium on new concessions for	<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.

¹³¹ Smith et al. 2017

¹³² Adapted from the ER-PD unless otherwise cited, section 4.1.2

¹³³ Xuan 2017 in ER-PD 2018

mining, rubber and eucalyptus plantations”	<ul style="list-style-type: none"> ▪ The order was extended in 2015 and lasted until 2018, with PMO no. 09 (see below) and PMO no. 08 replacing it¹³⁴
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” ¹³⁵	<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.
Lao-EU Voluntary Partnership Agreement for Forest Law Enforcement, Governance and Trade (negotiations began in 2017 and are ongoing) ¹³⁶	<ul style="list-style-type: none"> ▪ While FLEGT negotiations typically take several years to complete, Lao PDR and the EU have entered negotiations to establish a voluntary partnership agreement that could result in a long-term commitment by Lao PDR’s government to improve forest governance, law enforcement and trade. ▪ This includes reviewing forest legislation and policy, developing a timber legality definition and timber legality assurance system, and establishing other commitments on transparency and independent monitoring. ▪ Once the VPA is approved and licensing begins, valid FLEGT licenses can accompany Lao PDR timber-based exports to the EU without undergoing the due diligence checks required by the EU Timber Regulation.

1.8.4 Climate change strategies and plans

National Strategy on Climate Change and Nationally Determined Contribution

¹³⁴ 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.

¹³⁵ PMO 09/2018

¹³⁶ EU FLEGT Facility 2017

Lao PDR's *Strategy on Climate Change*¹³⁷ provides an initial framework to help guide the implementation of climate change objectives and key measures across sectors (Table 10). Lao PDR is in the process of developing its *Climate Change and Disaster Law*, which was due to be completed in 2017.

The country's Strategy on Climate Change and the country's Nationally Determined Contribution (NDC) aim to "...strengthen capacities to monitor and evaluate policy implementation success, with a view to producing new policy, guidance and data... and to develop and implement effective, efficient and economically viable climate change mitigation and adaptation measures".¹³⁸ So far, the Government has earmarked USD 12.5 million for the implementation of the measures identified in the NDC, but has also noted the need for external finance equivalent to nearly USD 1.5 billion.¹³⁹

The Lao NDC puts significant weight on the forestry sector, echoing the forest cover target of 70%, as well as activities for regeneration of forests. The NDC estimates removing 60-69 million tCO₂eq by 2020. Two main activities that act as implementation measures in the NDC are also aligned with the Lao PDR's Forestry Strategy 2020 and include:

- Increase and maintain forest cover at 70% as a GHG sink, and address the risks of flooding and soil erosion in order to reduce domestic GHG emissions; and
- Achieve sustainable village forest management, promote agriculture and forestry, and alleviate poverty.

The programme design takes these aims into account and will contribute to achieving these aims.

The following table provides information on relevant sector goals and targets of the Lao PDR strategy on climate change.

Table 10: Relevant sector goals / targets of the Lao PDR Strategy on Climate Change (2010)¹⁴⁰

Sector	Description of goals/ targets
Agriculture	<ul style="list-style-type: none"> ▪ Mainstream climate change into key sectors and enhance the adaptive capacity of the agricultural sector ▪ Promote conservation agriculture and climate-smart/resilient agricultural practices ▪ Improve and monitor water resources and water supply system, and rehabilitation of flood control system ▪ Strengthen financial instruments and capacity development for farmers; support village-based adaptation measures ▪ Enhance sector-based research on climate change adaptation ▪ Enhance information dissemination and extension support (to staff and farmers) ▪ Improve cross-sectoral coordination mechanisms and cooperation
Forestry and Other Land Use	<ul style="list-style-type: none"> ▪ Mainstream climate change in forest policy and management activities ▪ Promote the adoption of climate-resilient practices ▪ Improve forest management systems for rural livelihoods

¹³⁷ Lao PDR 2010

¹³⁸ Ibid.

¹³⁹ The timeframe for the specific measures varies from 2015 until 2020, 2025 or 2030, depending on the measure. Specific measures and their timeframes can be found in Annex 1 and 2 of Lao PDR's INDC; Lao PDR 2015c.

¹⁴⁰ Lao PDR 2010

	<ul style="list-style-type: none"> ▪ Enhance the adaptive capacity of forest-dependent peoples ▪ Improve biodiversity conservation and management ▪ Halt slash and burn agriculture, and promote sustainable forest management and forest landscape restoration ▪ Increase forest cover and enhance carbon sinks by promoting climate-smart and sustainable land use options, in addition to alternative livelihood opportunities ▪ Promote alternative fuels for forest-dependent villages, including the use of harvest residues or village-based fuel wood plantations ▪ Reduce forest fires by setting regulations and necessary measures to raise awareness, intercept and prevent forest fires ▪ Integrate forest management to include forest-food production systems, NTFPs and village-based forest management ▪ Improve mapping and land use planning processes for different purposes over the medium and long-term; minimize encroachment into national parks (NPs) and national protected areas (NPAs) ▪ Pursue carbon market opportunities and early introduction into REDD+ by developing and implementing more reforestation and afforestation programs
Water/ Hydropower	<ul style="list-style-type: none"> ▪ Conduct an assessment of the hydropower industry's vulnerability to climate change ▪ Develop climate change adaptation strategies to enhance resilience and adaptive capacity ▪ Integrate climate change measures into risk management strategies and planning processes

National Adaptation Programme of Action (NAPA)

In addition to the NDC, Lao PDR developed a National Adaptation Programme of Action to Climate Change (NAPA) in 2009.¹⁴¹ The NAPA notes the stark impact climate change will have on Lao PDR's socio-economic development, especially in the agriculture, forestry, water, public health and energy sectors. It notes the agriculture sector will be strongly affected by the increasing severity of floods and droughts. Lao PDR's NAPA highlights the urgent need for action in key sectors, including the following priorities related to the GCF programme, among others:

Table 11: Overview of key priorities related to the proposed programme in Lao PDR's NAPA (2009)

Sector	Description of priorities
Agriculture	<ul style="list-style-type: none"> ▪ Promote secondary professions in order to improve the livelihoods of farmers affected by natural disasters induced by climate change ▪ Land use planning in hazard prone and affected areas ▪ Technical capacities of local agricultural officers in natural hazard prone areas strengthened ▪ Train farmers on the processing and storing of human and animal food stuffs

¹⁴¹ Lao PDR 2009, available at: <https://adaptation-undp.org/resources/assessments-and-background-documents/laos-pdr-national-adaptation-programme-action-napa>

	<ul style="list-style-type: none"> ▪ Establishment and strengthening of farmers groups in natural hazard prone areas ▪ Promote soil improvement using locally available organic fertilizer and existing agricultural waste ▪ Develop appropriate bank erosion protection systems for agricultural land in flood prone areas
Forestry and Other Land Use	<ul style="list-style-type: none"> ▪ Continue the slash and burn eradication program and permanent job creation program ▪ Strengthen capacity of village forestry volunteers in forest planting, caring and management techniques, as well as the use of village forests ▪ Public awareness ▪ Set up and further strengthen the technical capacity of forest fire management teams at provincial district and village levels ▪ Public awareness campaign to disseminate information on forest and wildlife regulations and laws, and strengthen the implementation of these regulations ▪ Develop agroforestry systems for watershed protection and erosion reduction in steep areas ▪ Construct bush fire barriers/ forest-fire protection buffer zones in forest conservation areas ▪ Carry out surveys and develop forest areas suitable for supporting seed production ▪ Promote and establish tree nurseries to provides saplings to areas at high risk from flooding or drought ▪ Raise public awareness on wildlife conservation and forest-fire prevention
Water / Hydropower	<ul style="list-style-type: none"> ▪ Conservation and development of major watersheds ▪ Repair / rehabilitate infrastructure and utilities damaged by floods in agricultural areas ▪ Mapping of flood-prone areas ▪ Strengthen institutional and human resource capacities related to water and water resource management

Source: Lao PDR 2009

1.9 National REDD+ and sub-national emission reduction program¹⁴²

1.9.1 Lao PDR's National REDD+ Strategy

MAF Decree No. 1313 (2008) established the National REDD+ Task Force, a multi-sector body responsible for the development of REDD+ in the country. This includes the implementation of REDD+ in the country, supporting capacity development related to REDD+, ensuring cross-sectoral communication and coordination, and participating in international climate change policy discussions and negotiations. In 2017, the Task Force was reestablished based on the Decision "Concerning the appointment of National REDD+ Task Force (23.05.2017, Number: 2750/MAF)

¹⁴² Adapted from the ER-PD and PRAPs, unless otherwise noted.

appointed the Vice Minister of MAF as the head of the Taskforce, and the deputy head is the DG of the Department of Forestry (DOF).

Table 12: Overview of the REDD+ Task Force as per 2017

	Name	Governmental entity	Role
1	Mr. Thongphat Vongmany	Vice Minister of MAF	To be a head
2	Mr. Sousath Say-yakoummane	DG of DOF	To be a deputy head
3	Mr. Somchay Sanontry	DDG of DoF	To be a member
4	Mr. Anolath Chanthavongsa	DDG of Department of Agricultural Land Management and Development	To be a member
5	Mr. Siamphone Saengchandala	DDG of Department of Natural Disaster Management and Climate Change	To be a member
6	Mr. Anothai Chanthalasy	DDG of Land Department, MoNRE	To be a member
7	Mr. Angkhansada Mouangkham	DDG of Foreign Currency Department, Ministry of Finance	To be a member
8	Ms. Manivanh Keokomin	DDG of Ethnic Group Department, LFND	To be a member
9	Ms. Bangthong Thipsomphone	Director of Europe-America Division, Department of International Cooperation, Ministry of Planning and Cooperation	To be a member
10	Mr. Vonphasao Orlasaeng	Deputy Director of Administration Division, the Department of Environmental Quality Promotion, MoNRE.	To be a member
11	Ms. Vanthala Douangmanivanh	Director of Division of International Administration Law, Ministry of Justice	To be a member
12	Mr. Khamman Sorpasert	Director of Energy Conservation and Saving Division, Ministry of Mineral and Energy	To be a member
13	Ms. Vong-akon Phengdalith	Director of Party and Personnel Division, National Lao Women Union	To be a member
14	Mr. Bounthan Philachanh	Director of Planning and Cooperation Division, DOFI	To be a member
15	Dr. Chittana Phomphila	Deputy Director of Research and Technical Management Division, Faculty of Forestry Science, NUOL	To be a member

16	Ms. Valy Vetsaphong	Deputy Director of Chamber of Industry and Commerce	To be a member
----	---------------------	---	----------------

Members of the Task Force represent diverse key economic sectors, including agriculture, forestry, mining, energy and land use planning. In 2011, additional representatives were added into the Task Force, including representatives from the Ministry of Justice, Ministry of Finance, Ministry of Planning and Investment, the Lao Front for National Development (LFND), Lao Women's Union (LWU) and Lao Chamber of Commerce.¹⁴³

Six technical working groups related to REDD+ were established in 2015 to support the REDD+ Task Force and the Department of Forestry's REDD+ Division with the development of key elements of the country's REDD+ strategy, specifically the legal framework, land tenure, MRV/REL, safeguards, benefit-sharing and enforcement and implementation of mitigation activities (Figure 10).

The Provincial REDD+ Office (PRO) and the Provincial REDD+ Task Force are the main actors responsible for coordinating REDD+ at the provincial level. Similar to the national Task Force, the Provincial REDD+ Task Force includes participants from diverse Government sectors at the provincial level (including vice district governors from each district in the province), and is chaired by the provincial vice governor.

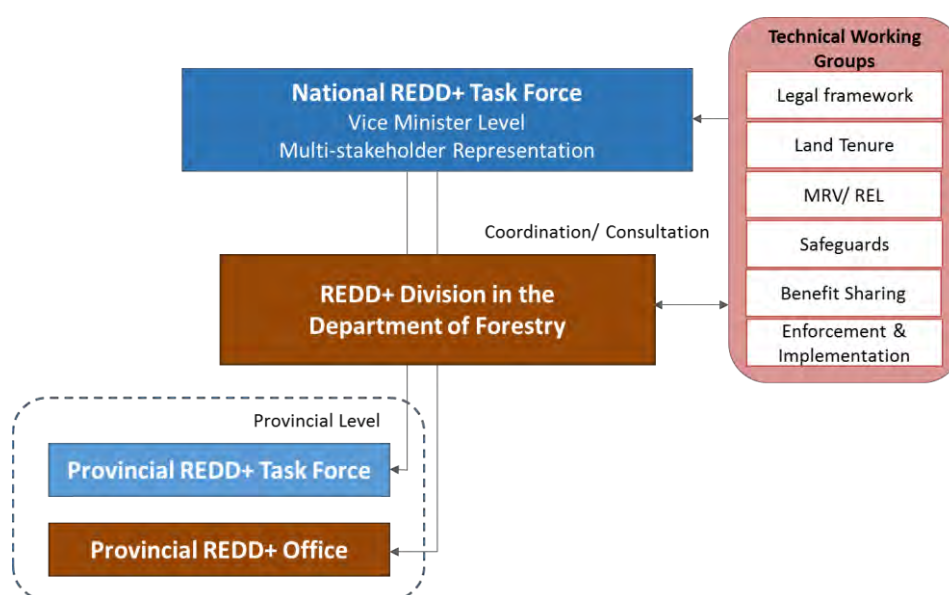


Figure 10. Overview of the institutional arrangements for REDD+ at the national and provincial level

Source: Lao PDR PRAPs

In 2018, the Government complemented the NDC and Forestry Strategy with the **National REDD+ Strategy (NRS)** to 2025 and **National REDD+ Vision** to 2030 as the official Government documents for guiding REDD+ implementation. The National REDD+ Strategy and Vision aim to

¹⁴³ MAF Decree No. 00006; 2011

improve the quality and extent of forests nationwide to provide economic, social and environmental benefits. They require all stakeholders, including households, villages and the private sector, to actively participate in the reduction of deforestation and degradation, and the promotion of forest restoration and reforestation.

Info Box 5. Warsaw Framework for REDD+

At UNFCCC COP 19 in Warsaw (2013), the Parties to the UNFCCC finalized the negotiations on what was later referred to as the “*REDD+ rulebook*”, or the “*Warsaw Framework for REDD+ (WFR)*”. It collates all relevant decisions on specific REDD+ agenda items, and guides countries seeking to implement REDD+. Compliance with the WFR is a prerequisite for accessing results-based payments (e.g. from the FCPF Carbon Fund). The WFR confirms the agreements of COP16 in Cancun (2010) that REDD+ will be implemented in three phases.

The WFR sets out that developing countries implementing the five eligible REDD+ activities in phase III have to comply with the rules related to ‘Measuring, Reporting and Verification (MRV)’ as a basis for receiving results-based payments. This includes MRV of “anthropogenic forest-related emissions by sources and removals by sinks, forest carbon stocks, and forest carbon stock and forest-area changes”, but also monitoring and reporting of potential displacement of emissions. Two further requirements are to define a national forest reference emission level and/or forest reference level, and to develop a National Forest Monitoring System (NFMS), which allows for the quantification of emissions and removals in the LULUCF sector. The Parties also adopted decisions on social and environmental safeguards, including the obligation to report via a Safeguard Information System (SIS) how REDD+ countries have addressed and respected the safeguards in the context of implementing REDD+ activities. In addition to these rather specific rules and modalities, the WSR also includes rather vague decisions without requirements for implementing countries:

- drivers of deforestation and forest degradation,
- finance and results-based payments (finance for REDD+ can come from different sources and will be channeled through institutions as the Green Climate Fund)
- institutional arrangements (REDD+ countries encouraged should establish a national entity or a REDD+ focal point)
- non-carbon benefits, and
- so-called alternative policy approaches.

1.9.2 Lao PDR and the Forest Carbon Partnership Facility

Lao PDR has been a partner country in the **Forest Carbon Partnership Facility (FCPF)** since 2008. Its Readiness Preparation Proposal (R-PP) was accepted in late 2010. Lao PDR was asked to submit an Emission Reductions Program Idea Note (ER- PIN) to the FCPF Carbon Fund in early 2015 to obtain access to potential performance-based payments for emission reductions. With the development of the ER-PIN its acceptance into the Carbon Fund pipeline in March 2016, REDD+ has gained new momentum in Lao PDR.

With the signed FCPF Letter of Intent (LOI) in July 2016, the country had 18 months to elaborate a full Emission Reduction Program Document (ER-PD) and also needed to show substantial progress in terms of REDD+ Readiness. Since then, the Department of Forestry (DOF), together with development partners, has worked on the institutional framework at national and sub-national level. This framework included the establishment of Technical Working Groups, REDD+ Offices and REDD+ Task Forces at provincial levels (in 2015), the development of the National REDD+

Strategy, the Forest Reference Emission Level (FREL) and Forest Reference Level (FRL), the National Forest Monitoring System (NFMS) and the Strategic Environmental and Social Assessment (SESA), as well as the ER-PD.

The ER-PD was submitted to the FCPF in January 2018. Revisions were resubmitted in March and May respectively, and the final ER-PD was accepted into the FCPF Carbon Fund without conditions at the 18th Carbon Fund Participants Meeting in June 2018¹⁴⁴. A key component of the ER-PD is the articulation of the Government's comprehensive strategy to reduce GHG emissions and increase removals from the forest sector in the six target provinces of Houaphan, Luang Prabang, Sayabouri, Luang Namtha, Bokeo and Oudomxay that comprise the ER Program area. This six-province strategy is an aggregation and synthesis of Provincial REDD+ Action Plans (PRAPs) developed for each target province in 2016 - 2018. PRAPs build on the following strategic pillars:

- (i) Interventions for an enabling environment to strengthen and mainstream REDD+ into existing policies and legal frameworks, building on the on-going FLEGT initiative to address illegal logging across the supply chain and improved (land use) planning processes at village, district and provincial levels including compliance monitoring.
- (ii) Agriculture sector interventions, focusing on sustainable livelihood development and low-emission agriculture and intensification.
- (iii) Forestry sector interventions, focusing on sustainable forest management, village forestry and forest landscape restoration.

Info Box 6. **Provincial REDD+ Action Plans**

To support the elaboration of the ER-PD, Provincial REDD+ Action Plans (PRAPs) were elaborated for six provinces in Northern Lao PDR: Bokeo, Houaphan, Luang Namtha, Luang Prabang and Sayabouri. These areas represent 30-40% of the areas deforested and degraded in Lao PDR from 2005 to 2015.

PRAPs seek to guide the implementation of strategies and institutional and financial arrangements to reduce emissions from deforestation and forest degradation. Specifically, they outline how a jurisdiction can plan the implementation of a cross-sectoral mitigation program focused on forest sector emissions and enhancing forest carbon stocks. They also seek to set a basis for inter-sectoral coordination, based on a transparent and inclusive process.

PRAPs were elaborated between 2016 and the end of 2017. A participatory approach was applied for their development, based on extensive consultations at the national, provincial, district and local (*kumban*/village cluster) level (see [Chapter 13](#) for additional information, or refer to the Provincial REDD+ Action Plans for detailed information).

1.10 Relevant current and past projects in the target area

There are a number of past and existing projects that have been implemented in the target programme region over the past 20 years. In the design phase of the PRAP development, the ER-PD

¹⁴⁴ <https://www.forestcarbonpartnership.org/carbon-fund-eighteenth-cf18-june-20-22-2018-paris>

preparation and in the design of the GCF programme, extensive consultations with relevant project teams were carried out. The design of the GCF programme largely builds upon the lessons learned from these projects and seeks to address and complement them. An overview of each project is provided in the following sections.

1.10.1 GIZ project portfolio in the target region

1.10.1.1 Climate Protection through Avoided Deforestation (CLiPAD)

Project name: CLiPAD Climate Protection through Avoided Deforestation (CLiPAD)	
Funding entity	German government (BMZ): GIZ (Technical Cooperation), KfW (Financial Cooperation)
Timeframe	2009 – expected 2019 ¹⁴⁵)
Financing volume	TC module GIZ: 9.8 million Euro ¹⁴⁶
Project objectives and components	<p>TC component: The project objective is to meet the central conditions for performance-based payments from the Carbon Fund of the World Bank set up by the FCPF: i.e. to improve conditions for SFM and REDD+ measures for stakeholders, as well as strengthen policy and institutional frameworks and initial implementation strategies at national and sub-national levels.</p> <p>The four components include: (i) national REDD+ support, (ii) provincial REDD Action Plans (PRAPs) development, (iii) access to climate finance and (iv) implementation of village forest management.</p>
Linkage/relevance to REDD+ and GCF programme	<p>Closely linked to Activities 1.2, 1.4 and 3.1 of the GCF programme design (chapter 3). GCF programme builds upon the achieved results, experiences and lessons learned from the CLiPAD project; both projects focus on strengthening the enabling environment for REDD+ and supporting planning and implementation processes of village forestry through developed Village forest management plans, to involve villagers in SFM.</p> <p><u>Village forest management:</u> The project has piloted innovative co-management approaches for certain National Protected Areas and forest areas outside of the three forest categories and promoted/disseminated new knowledge and sustainable practices among villages, especially among women. New mitigation activities have been introduced in some pilot villages: e.g. Forest Law enforcement and agriculture extension measures. Many pilot villages also completed their first village forest management plans and agreements.</p> <p><u>REDD+ readiness and implementation support</u></p> <p>CLiPAD supports Houaphan province with REDD+ readiness, piloting of climate change mitigation measures including village forestry, and supported the development of the first PRAP in Lao PDR (2016). Also, PRAP development in Luang Namtha and Sayabouri was supported by the project (2017).</p>

¹⁴⁵ <http://clipad-laos.org/about-clipad/> ; The follow-up project CLiPAD 4, funded by BMZ, will provide co-finance for the proposed GCF programme (if approved). This includes USD \$ 2 million from 2019-2021, and an additional USD \$6 million from 2021 until the end of the GCF programme.

¹⁴⁶ <http://clipad-laos.org/downloads/> CLiPAD Overview Presentation (29.11.2018)

	<p>CliPAD supported the establishment of Village Development Funds; the GCF programme will use this type of institution to access finance for deforestation-free agricultural value chain development in the future. Both projects also support marketing and easing access to markets and market information for project beneficiaries for agricultural products, to reduce pressure on forests. The regional focus of CliPAD (Houaphan) also overlaps with that of the GCF programme.</p> <p>The project team supported the preparation of the ER-PD for six Northern Provinces.</p> <p><u>GCF programme development</u>: The project has invested in the preparation of the GCF programme and the mobilization of international climate finance for the implementation of REDD+ in Lao PDR.</p>
Achieved results / impacts	<p>Local villages in Houaphan are supported in developing sustainable natural resource management practices and finding alternative income sources.</p> <p>In collaboration with the Village Forestry and NTPF Management Division and provincial and district forestry officers, the project supported the development of an implementable village forest management guideline which is now the official VFM guideline of Houaphan province. This has contributed to the strengthening of the enabling environment for the forestry sector. Further, the REDD+ Task Force and working groups have been established, and baseline studies on the current state of forests in Lao PDR has been completed, creating reliable data for monitoring purposes.</p> <p>The ER-PD of Lao PDR was approved in June 2018 by the Carbon Fund.</p> <p>Additionally, CliPAD, the Wildlife Conservation Society (WCS) and counterparts developed the first time in Laos a provincial Law Enforcement Action Plan (LEAP)¹⁴⁷ to reduce Deforestation and forest degradation in Houaphan Province. This included the setup of so-called rapid response teams (members from different law enforcement agencies, e.g. forest office, police, army) on provincial and district level and a close cross border cooperation with Forest Protection Departments in Vietnam.</p>
Intended coordination	<p>The project team of the CliPAD project (GIZ) will lead the national project management unit (NPMU) of the GCF programme and ensure coordination with national and international partners. (For more information refer to programme implementation, chapter 4.)</p>

1.10.1.2 Land Management and Decentralized Planning (LMDP I and II)

Project name: Land Management and Decentralized Planning (LMDP)	
Funding entity	BMZ
Timeframe	2015 – 2019
Financing volume	EUR 7 million (LMDP I: 2015-2017) ¹⁴⁸

¹⁴⁷ WSC/CliPAD (2013) *A Law Enforcement Action Plan for Reducing Deforestation and Forest Degradation in Houaphan Province*,

¹⁴⁸ https://snrd-asia.org/download/land_management_and_decentralised_planning_lmdp/Factsheet.pdf

Project objectives and components	To improve policies, practices and planning processes in relation to land in the Lao PDR, particularly among investors, village authorities and villages. The five components include: (i) provision of policy and technical advice to the Lao government on improving land governance, (ii) land use and spatial planning, (iii) land registration, tenure security and improved knowledge of villages on land issues (iv) decentralized development planning and (v) promoting high-quality investment promotion. All measures entail capacity development and cooperation with related projects, such as the GIZ Improving Land Management in the Mekong Region project.
Linkage/relevance to REDD+ and GCF programme	<p>Closely linked to Activity 1.5 of the GCF programme design: Both LMDP and the GCF programme support capacity development/training towards pro-poor development and management; including rural villages in planning and decision-making regarding land; advancing external communications with donors, government and non-governmental actors; bolstering land regulations, as well as increasing productive and sustainable investments on land to reduce pressure on forests and increase incomes. Another link between the projects: LMDP focuses on registration of plots of land and the GCF programme contains a boundary demarcation element.</p> <p>3 of the 4 LMDP project provinces overlap with GCF programme target areas, namely Houaphan, and Luang Namtha.</p> <p><u>Barriers:</u></p> <p>National legislation, irregular implementation and enforcement of laws (land registration was conducted, but unclear if these can be converted to land titles under current legal framework), villagers' lack of income/resources to invest in land and repay loans, low turnout of women in trainings/information dissemination workshops, project's inability to influence/directly resolve land conflicts, problematic nature of land leasing (one of the land transaction activities resulting from increased land security).</p>
Achieved results / impacts¹⁴⁹	<p>LMDP II started recently; the following are impacts of LMDP I:</p> <ul style="list-style-type: none"> • In selected villages, villagers in intervention areas are consistently more aware of land rights than in non-intervention areas; however, enhanced knowledge of key topics was found more among men than women. • Land tenure security improved to some extent (PLUP conducted across 67 villages, 31,000 plots of land were registered, 25,000 land titles issued, and a GIZ-supported digital cadaster (the Lao LandReg) was established). While there are existing PLUPs, most if not all can be reassessed and some updated. • Land transactions have increased. The land titling process did not play a strong role in resolving land conflicts but did support village authorities in tackling these issues locally. • The project has contributed to improved land governance, including land use planning at all levels. • In some cases, the titles helped villagers access loans; in others, land collateral was not required.

¹⁴⁹ https://data.opendatacommons.org/dataset/we-are-feeling-safe-about-our-land-now-giz-land-program-laos-assessing-the-contribution-to-changes-/resource/12c9d19d-5372-4224-9729-51936f3646ca?type=library_record

Intended coordination	Preferably, villages with land use plans supported by the LMPD project will be targeted by the GCF programme. The LMPD project does not support the implementation of the village management plans. The GCF programme will fill this gap and support the implementation, monitoring and evaluation of the land use plans.
------------------------------	---

1.10.1.3 Forest Law Enforcement, Governance and Trade (FLEGT)

Project name: Forest Law Enforcement, Governance and Trade FLEGT	
Funding entity	BMZ (implemented by GIZ)
Timeframe	Oct. 2013 - 2021
Financing volume	5.8 + 4.6 + 5.7 = 16.1 million Euro
Project objectives and components	The program objective is to improve opportunities for the Lao timber industry to access the EU market, diversify their timber products and increase revenue from timber exports.
Linkage/relevance to REDD+ and GCF programme	<p>Closely linked to Activity 1.4 of the GCF programme design (Improved law enforcement and monitoring). In 2016, a first draft Timber Legality Definition with Principles was elaborated for the first face-to-face FLEGT/VPA negotiations between Lao PDR and EU. This was significant as a concrete definition is crucial for Lao PDR to generate new export opportunities in ASEAN and other markets and thus enhance competitiveness of the timber industry, improve the supply of raw material, etc. Private sector actors such as timber processing, furniture and hand-craft companies/industries will be able to plan their operations more effectively due to more regulated and sustainable supply of raw material. In this way, FLEGT and the GCF programme are synergetic and focus on improving regulation and enforcement, with the FLEGT process focusing on improving transparency and traceability as well as standards and protocols for sustainable commercial wood markets (e.g. (e.g. wood legality standards, key definitions, timber legality assurance system, elaboration of a voluntary partnership agreement between Lao PDR and the EU), and the proposed programme increasing participation of villages in planning and decision-making, inducing behavioral change and improving access to, and involvement of villagers in sustainable markets. These factors together contribute to the mutual goal of both projects of improving sustainable management of forests, landscapes and natural resources and supporting livelihoods.</p> <p><u>Institutional and political barriers¹⁵⁰:</u></p> <p>Maintaining committees/teams at all levels of Government. In the FLEGT VPA process, high level of support required from upper echelons of Government to amend legislation related to forest management, inspection, timber sales, wood processing, trade, etc.; need to increase capacity of new divisions under the Dept. of Forest Inspection to serve as focal points for FLEGT VPA development and implementation; and lack of full participation of decision-makers and directors of appropriate departments in meetings: i.e. coordination issues.</p>
Achieved results / impacts	Reforms to the wood processing industry are increasingly making products compatible with international regulations and principles. Furthermore, the FLEGT process is creating an understanding among Government authorities regarding

¹⁵⁰ <http://www.euflegt.efi.int/documents/10180/451571/Lao+PDR+at+Chiang+Mai.pdf/927b65b0-24fa-705d-8d69-9df73c7a9f5f>

	the necessity to amend all relevant forest-related degrees and regulations and initiate the review (among others, needed for the Timber Legality Assurance System and Timber Legality Definitions).
Intended coordination	The GCF programme development team from GIZ has closely coordinated with the FLEGT project. If the FLEGT-VPA is approved, it will have positive impacts on the programme, improving timber legality, markets for sustainably produced timber and likely increased interest in sustainable forestry activities from the private sector.

1.10.2 KfW Portfolio

1.10.2.1 Climate Protection through Avoided Deforestation (CliPAD) - Financial Cooperation Module (FC)

Project name: Climate Protection through Avoided Deforestation (CliPAD) - FC module	
Funding entity	BMZ, implemented through KfW (Financial cooperation module)
Timeframe	2008-2020
Financing volume	10 million Euro
Project objectives and components	The scheme aims to regulate and promote sustainable management, protection and conservation of village forests by establishing a legal basis and framework to link all village forest categories with international funding for climate change mitigation, and to channel it down to the village-level through performance-based payments. There are four components of the scheme: (i) Participatory Land Use Plan (PLUP), (ii) Free, Prior and Informed Consent (FPIC), (iii) the Village Development Fund and (iv) village forest management plans (VFMPs).
Linkage/relevance to REDD+ and GCF programme	<p>Closely linked to Activity 3.1 of the GCF programme design to implement VFMPs together with villagers on activities such as boundary demarcation, monitoring, ANR, stand improvement, etc. The GCF programme will replicate and scale-up KfW-financed activities.</p> <p>The Village Forest Management (ViFoMA) approach links the activities of each village's VFMP and corresponding annual work plan to funding, while the GCF programme tries to plan and enact the activities identified in the VFMP, as well as secure financing for each.</p> <p><u>New/innovative/piloted:</u></p> <ul style="list-style-type: none"> • The new legally-binding agreements between the village and district authorities are an integral part of Village Forestry (VF). VF had also not been implemented in Lao uplands on a broad scale before. • It builds upon and improves former village forestry approaches being developed in Lao PDR, such as the comprehensive but rather too complex VFM Guideline of the Department of Forestry, which had never been implemented. • ViFoMA provides the legal and regulatory framework for direct cash payments to villagers participating in forest management and conservation, as identified in VFMPs. This provides an opportunity for long-term financing.
Achieved results / impacts	The pilot project has supported the development of a set of official Government guidelines for village forestry, such as a Village Forest Management Planning Guideline, a Village Forest Management Implementation Manual, a Forest Cover Change Detection Manual and a GIS guideline to process data and produce village

	forest maps. This has improved the planning capacity of the sector through improved quality and availability of information and guidelines. The work conducted and the key lessons learned have closely informed the design of the GCF programme.
Intended coordination	The GIZ/GCFP team closely coordinated with the programme implementation team. KfW will provide 7 million Euro co-financing for village forest management.

1.10.2.2 Integrated Conservation of Biodiversity and Forests (ICBF)

Project name: Integrated Conservation of Biodiversity and Forests (ICBF)	
Funding entity	BMZ
Timeframe	2015 – 2022
Financing volume	EUR 17.5 million (Lao contribution approx. 2 million) ¹⁵¹
Project objectives and components	The project objective is the effective management of selected target landscapes (comprising national protected areas (NPAs) and corridors) sustaining biodiversity in forest ecosystems, while supporting livelihoods of forest-dependent villages. The components are: (i) improved planning and management of NPAs, (ii) improved law enforcement in the 2 project biodiversity conservation landscapes, and (iii) sustainable land and forest management including livelihood activities based on PLUP established within the BD conservation landscapes.
Linkage/relevance to REDD+ and GCF programme	<p><u>Link to GCF project:</u> GCF programme Activity 3.3. (National Protected Area management) builds upon the ICBF project and its approaches on capacity building, strengthening data/information quality and availability, awareness creation, institutional development and support, border demarcation and biodiversity monitoring. Other Activities can benefit from ICBF's experience, notably ICBF's engagement with the private sector (which links particularly to Activities 2.1 and 2.2), law enforcement (Activity 1.4) and coordination with village development funds (Action 1.1.3). The GCF programme will provide additional financing after the KfW project ends and will support NPAs that are not supported by KfW. KfW already finances the project in two NPAs in two GCF programme provinces; Luang Namtha and Bokeo until 2022.</p> <p>Project focus on capacity building, strengthening data/information quality and availability, awareness creation, institutional development and support, demarcation, biodiversity monitoring, cooperation with private sector, law enforcement and coordination with VDFs.</p> <p>The focus of the project is on biodiversity conservation landscapes and NPAs, core areas, corridors and buffer zones (therefore operating on the landscape level rather than individual village/district level, similar to the SUFORD approach). The NPAs in the project areas contain the largest contiguous undisturbed forest areas in the project area that are high carbon stock that are increasingly under deforestation pressure. Thus, protection</p>

¹⁵¹ ICBF factsheet

	of these NPA forested landscapes is crucial for avoiding deforestation and forest degradation.
Achieved results / impacts	The National Protected Area system is supported with an improved enabling environment through promotion of open standards and adaptive management, national events, capacity building measures, awareness creation, improved monitoring information system and database systems, exchange with other relevant projects, site-specific shared governance, updated management plans, improved enforcement and identification of sustainable finance options.
Intended coordination	During the GCF programme design process, close consultation and coordination with the project management team was conducted. Lessons learned will be adopted and implementation approach will be replicated in the GCF programme and were considered in the design.

1.10.2.3. Village Forestry Management Project

Project name: Village Forestry Management Project (VFMP)	
Funding entity	BMZ, implemented through KfW
Timeframe	2018-2025
Financing volume	7 million Euro
Project objectives and components	The objective of this program is the improvement of forest ecosystems and the livelihood of the population in the project areas by the sustainable management of village forests. Planned outputs: (i) Enhanced GOL capacity and an enabling environment for village forestry, (ii) Financially sustainable and climate resilient village forestry models operating under varied conditions with secure tenure, (iii) Improved Socio-economic conditions in the VFMP villages as a result of village forestry.
Linkage/relevance to REDD+ and GCF programme	Closely linked to Activity 3.1 of the GCF programme design to plan and implement VFM together with villagers and to support the commercial use of sustainable harvested timber from Village Use Forests. Hence, the pilot provinces and districts of the VFMP are also target areas of the GCF programme (Phiang in Sayaboury and Phonxay in Luang Prabang).
Achieved results / impacts	Project's start is delayed, but expected to begin in spring 2019
Intended coordination	The GIZ CliPAD team will closely coordinate with the project implementation team to: <ul style="list-style-type: none"> Ensure the close involvement and enhance the capacity of the Department of Forestry (DoF)/Division of Village Forest Management and Non-Timber Forest Products regarding the formulation of a national/technical framework for village forest management (VFM concept/guidelines) towards the sustainable management of village forests as well as on monitoring and evaluation of the work packages. A national VFM concept should promote the legalization of commercial timber use according to forest management plans and the allocation of communal forest land titles.

	<ul style="list-style-type: none"> Provide technical advice and practical capacity building in collaboration with FC for staff of the Provincial and District Agriculture and Forestry Offices (PAFO/DAFO) in the two pilot provinces and districts regarding Village Forest Management.
--	---

1.10.3 JICA Portfolio

1.10.3.1 JICA's Sustainable Forest Management and REDD+ Support Project (F-REDD)

Project name: Sustainable Forest Management and REDD+ Support Project (F-REDD)	
Funding entity	JICA
Timeframe	Oct. 2014 – Dec. 2025
Financing volume	USD 7.1 million for F-REDD
Project objectives and components	<p><u>F-REDD project:</u></p> <p>The project aims to strengthen the capacity of forestry sector through strengthening policies, effective incorporation of REDD+, and improvement of forest resource information as the foundation of sustainable forest management (SFM) in both central and provincial level. The four components are: (i) enhanced capacity of the central Government on policy development, implementation and sector coordination, (ii) enhanced quantification of emission reductions and removals resulting from the implementation of the REDD+ activities at a national scale using the National Forest Monitoring System (NFMS), (iii) enhanced institutional development, management and coordination of the national REDD+, and (iv) enhanced REDD+ readiness in pilot site.</p>
Linkage/relevance to REDD+ and GCF programme	<p><u>The JICA activities are closely linked to the GCF programme Activity 1.6 and Outputs 2 and 3.</u> JICA supported the development of the PRAP in Luang Prabang.</p> <p>JICA supported the FIPD in developing the Forest Reference Level for the ER-Program and will be responsible for the implementation of GCF programme Activity 1.5 in close coordination with FIPD and the NPMU.</p> <p>JICA will co-finance the implementation of the GCF programme in the provinces Luang Prabang and Oudomxay.</p>
Achieved results / impacts	<ul style="list-style-type: none"> Supported the PRAP in Luang Prabang. JICA led the development of the Forest Reference Level and GCF programme Activity 1.6 will build upon this.
Intended coordination	JICA will be part of the programme implementation team and will be responsible for Activity 1.6 through technical assistance provision to implement the Activity. JICA TA team will also implement the activities of the 2 provinces (Luang Prabang and Oudomxay).

1.10.4 World Bank Portfolio

1.10.4.1 Sustainable Forestry for Rural Development (SUFORD)

Project name: Sustainable Forestry for Rural Development (SUFORD)	
Funding entity	IDA/Government of Finland (grant and specific investment loan)
Timeframe	Jun 2003 – 2013
Financing volume¹⁵²	USD \$40.45 million
Project objectives and components	<p>The project objective was to support Lao PDR achieve sustainable management of production forests to alleviate rural poverty in project provinces by implementing forest policy reform actions and policies. The four components were: (i) support services for SFM, (ii) SFM and village development, (iii) forestry sector monitoring and control, and (iv) project management.</p> <p>The outcomes envisioned were to improve policy, legal and incentive frameworks to enable the expansion of Participatory Sustainable Forest Management (PSFM) throughout the country; to bring the country's priority natural production forests under PSFM; and to improve villagers' well-being and livelihoods through benefits from sustainable forestry, village development and the development of viable livelihood systems.</p>
Linkage/relevance to REDD+ and GCF programme	<p>GCF programme Activity 3.2 builds upon the SUFORD approach and key lessons learned in the implementation of the project.</p> <p>The project objective was to assist Lao PDR achieve the sustainable management of production forests to alleviate rural poverty in the project provinces by implementing the forest policy reform actions and policies set forth in its letter of forest management policy.</p> <p><u>Key challenges:</u> Weak Government commitment to increasing citizens' natural resource rights and employing participatory planning and implementation processes; villagers without secure tenure are unlikely to commit to SFM; absence of/unreliable comprehensive data on forest resources; weak forest governance; lack of transparency of government; lack of clear land rights and zoning.</p>
Achieved results / impacts¹⁵³	<p>Outcome rating "moderately unsatisfactory"; World Bank and Government of Lao PDR performance rated "moderately satisfactory". Profiling of, and communications with, ethnic minorities were insufficient. Output targets were largely met; however, the extent of achievement of various objectives is likely small. Poor/poorest households were not targeted. Loan repayment rate was low.</p> <p>However, institutions were strengthened through training, orientation and capacity building. Forest cover increased in project area; decrease in deforestation was noted.</p>
Intended coordination	The SUFORD project team was consulted and key lessons learned were integrated into the design of GCF Activity 3.2.

¹⁵² <http://projects.worldbank.org/P064886/sustainable-forestry-rural-development-project?lang=en>

¹⁵³ https://ieg.worldbankgroup.org/sites/default/files/Data/reports/ppar_laosustainableforestry.pdf

1.10.4.2 Scaling-Up Participatory Sustainable Forest Management Project (SUPSFM)

Project name: SUPSFM	
Funding entity	WB/IDA
Timeframe	Aug 2013 – Aug 2019
Financing volume ¹⁵⁴	USD 39.39 million: Breakdown: US\$ 19 million IDA grant, a US\$ 12.83 million grant from the Forest Investment Program (FIP) under the Strategic Climate Fund (SCF), and a contribution of US\$ 7.56 million from the Government of Lao PDR (GoL). The Government of Finland is providing parallel financing of US\$ 14.5 million for technical assistance.
Project objectives and components	The primary objective is to reduce carbon emissions through participatory sustainable forest management in priority areas and to pilot forest landscape management in four northern provinces in Lao PDR. The four components are: (i) strengthening and expanding Participatory Sustainable Forest Management (PSFM) in production forest areas, (ii) piloting forest landscape management, (iii) enabling legal and regulatory environment, and (iv) project management.
Linkage/relevance to REDD+ and GCF programme	GCF programme Activity 3.2 build upon the project approach and key lessons learned in the implementation of the project. The SUPSFM project has been operating in four out of 6 GCF project provinces.
Achieved results / impacts	Currently under implementation.
Intended coordination	The project team was consulted and key lessons learned were integrated into the design of GCF Activity 3.2.

1.10.4.3 Agriculture Competitiveness project

Project name: Agriculture Competitiveness project, Lao PDR	
Funding entity	World Bank (mostly IDA, partially local sources of Lao PDR)
Timeframe	Apr 2018 – Jun 2024
Financing volume	USD \$29.30 million
Project objectives and components	<p>The objective is to increase the competitiveness of selected agricultural value chains in the project areas. The four components are:</p> <ol style="list-style-type: none"> 1) Improved Agricultural Efficiency and Sustainability, for increased adoption of improved varieties and high-quality seeds, increased application of good agricultural practices, provision of critical productive infrastructure; and strengthening of public services delivery. 2) Enhanced Agricultural Commercialization, aiming to support establishment of an Agricultural Venture Capital Facility (AVCF), better link farmers to

¹⁵⁴ <http://www.worldbank.org/en/news/feature/2013/06/03/lao-pdr-qa-scaling-up-participatory-sustainable-forest-management-project>

	<p>markets and conduct studies to improve the enabling environment for agro-enterprise and VC development.</p> <p>3) Project Management, also to support monitoring and evaluation.</p> <p>4) Contingent Emergency Response, to finance public and private sector expenditures on specific goods and services.</p>
Linkage/relevance to REDD+ and GCF programme	The project is strongly linked to Activities 2.1 and 2.2 of the GCF programme , which are designed to promote deforestation-free value chains and access to markets, as well as to improve access to finance for deforestation-free agricultural value chains. Geographical overlap is only in Sayabouri province.
Achieved results / impacts	Just recently started.
Intended coordination	The GCF programme design team met with the project management team and has taken into account key lessons and advice on the design of Activities 2.2. Coordination will only be in Sayabouri province.

1.10.4.4 Second Lao Environment and Social Project (LENS II)

Project name: Second Lao Environment and Social Project LENS II	
Funding entity¹⁵⁵	Financing sources: World Bank/IDA (USD 32 million), Global Environment Facility grant (USD 6.83 million) and Govt. of Lao PDR (USD 3 million), implemented by the Environmental Protection Fund (EPF – implementing agency)
Timeframe	July 2014 – June 2021
Financing volume	USD 41.83 million
Project objectives and components	<p>The aims of the project are to: (i) provide support to forested upper watersheds of rivers important to hydropower, agriculture irrigation and flood prevention, (ii) create wildlife and Protected Area enforcement standards, (iii) support capacity building for national, provincial and district institutions which implement environmental and social impact legislation, and (iv) build the capacity of the Environmental Protection Fund.</p> <p>The components of the project include: (i) national institutional development and capacity building to improve the capacity and collaboration of national and provincial public institutions, (ii) management of wildlife and protected areas, and (iii) project administration and EPF capacity building.</p>
Linkage/relevance to REDD+ and GCF programme	<p>The GCF programme builds upon and complements the results of existing and past NPA support projects in the region, such as the LENS II project – specifically, in Activity 3.3: support to national conservation forest management; development and implementation of NPA management plans, producing co-management agreements with villages inside/near NPAs, provision of technical assistance, equipment and capacity building for NPA staff.</p> <p>The EPF will serve as an Executing Entity in the GCF programme.</p>

¹⁵⁵ http://www.worldbank.org/content/dam/Worldbank/document/EAP/lao-pdr/la_lens_factsheet_June_2015.pdf

Achieved results / impacts	Progress rated moderately satisfactory. 7 PAs have been approved, reporting of trafficking cases has improved through support to improved law enforcement, various up-to-date reports have been prepared towards the goal of improving information, project communication and monitoring (however, they are not published and the Government website remains offline); status of select wildlife, and threats has been measured for over 245,000 ha of PA, and for forest loss, in almost 355,000 ha. SDA and SDA partner institutions have received project-initiated formal short courses to improve mitigation monitoring and measurement.
Intended coordination	The Environmental Protection Fund will be one of the two Executing Entities of the GCF programme and was selected due to its capacities to implement internationally-funded projects.

1.10.5 Asian Development Bank (ADB) portfolio

1.10.5.1 Sustainable Rural Infrastructure and Watershed Management Sector project

Project name: Sustainable Rural Infrastructure and Watershed Management Sector	
Funding entity	Asian Development Fund, Govt. of Switzerland and International Fund for Agricultural Development (IFAD)
Timeframe	2007 – 2014
Financing volume	USD 16.5 million
Project objectives and components	The project's objective was to contribute to improved sustainability of livelihoods (improved cash incomes, food security and nutrition) of upland smallholders in northern Lao PDR through improved livestock productivity and profitability under integrated upland farming systems. The components were: (i) enhanced productivity of village livestock systems, (ii) capacity building for village-driven development, and (iii) support for implementation management.
Linkage/relevance to REDD+ and GCF programme	<p>Actions taken that are relevant to the GCF programme/REDD included: providing access to appropriate technology, management and marketing systems, providing upland ethnic women with opportunities and support to participate in the selection and implementation of village and household investments in livelihoods improvements, supporting the organization of villages into small groups, training in credit management, and technical training in livestock rearing.</p> <p>Four project provinces overlap with the GCF programme: Houaphan, Luang Prabang, Luang Namtha and Bokeo.</p>
Achieved results / impacts	12,187 total beneficiary households (88% from non-Lao Tai ethnic groups); 3,587 large ruminant livestock production groups (86% from ethnic groups).
Intended coordination	Project ended

1.10.6 IFAD portfolio

1.10.6.1 Rural Livelihoods Improvement Programme (RLIP)

Project name: RLIP	
Funding entity	IFAD (loan and grant plus grants from German govt. and counterpart contributions from Lao govt., WFP food aid package)
Timeframe	2006 - 2014
Financing volume	USD 28.99 million
Project objectives and components	The programme objective was to promote economic growth and livelihood improvements among the rural poor, including women and other vulnerable groups in the target area, such as unemployed rural youth and upland ethnic groups. The four components were: (i) Social development (village development, health, education, and drug detoxification and rehabilitation only in Province (SP)); (ii) Economic development and natural resource management (agriculture and marketing, off-farm income generation, rural microfinance, and natural resources management); (iii) Rural infrastructure (local roads, and warehouses only in Attapeu Province (AP)); and (iv) Institutional development and capacity-building (strengthening capacity for policy analysis and management, and coordination).
Linkage/relevance to REDD+ and GCF programme	Both the GCF programme and the RLIP project focus on village development, natural resource management market access, institutional development and capacity building. <u>New/piloted:</u> RLIP was considered to be the first externally-supported development programme directly supporting the implementation of NGPES (Lao PDR's National Growth and Poverty Eradication Strategy). It was also one of the first projects to support the decentralization policy.
Achieved results / impacts	The programme was basically a livelihoods improvement programme, primarily promoting the improvement of food security and attempting to diminish food scarcity during the lean months. As such, there was no marketing strategy created in the regions. Bottom-up socio-economic planning processes were strengthened, leading to participatory land use planning and land allocation, and lower slash and burn practices, increased forest areas and natural regeneration and fish conservation areas. The number of poor households decreased markedly in both provinces. In terms of food security and agricultural productivity, a significant increase in households not experiencing a first hunger season was a key achievement. Other key achievements included increases in cash crop production, enhanced rice production due to the expansion of rice fields in the lowland areas, and the reduction of chronic malnutrition.
Intended coordination	The GCF development team closely coordinated with the IFAD team in the design of Output 2.

1.10.6.2 Village-based Food Security and Economic Opportunities Program (SSSJ)

Project name: Village-based Food Security and Economic Opportunities Program	
Funding entity	IFAD
Timeframe	2011 – 2017
Financing volume	USD 19.3 million Breakdown: financed by IFAD Debt Sustainability Framework (DSF) Grant of USD 13.9 million, co-financing from World Food Program (WFP) of USD 3.7 million, GIZ of USD 0.4 million, Beneficiaries of USD 0.3, and Government of Lao PDR of USD 0.8 million.
Project objectives and components	The programme goal was to contribute to the reduction of extreme poverty and hunger in two provinces, Sayabouri and Oudomxay. The development objective was to ensure sustainable food security and income generation for the rural poor in the target villages. The two project components were: (i) integrated market systems (i.e. improving upland conservation and production systems, livestock development, and water management), and (ii) links to the markets (i.e. village access roads and improving market access).
Linkage/relevance to REDD+ and GCF programme	Both project target provinces (Sayabouri and Oudomxay) are also covered by the GCF programme. Common topics include improving market access and systems, developing/supporting good irrigation infrastructure and water management, technical support provision, and supporting local-level instructions such as farmer and village groups. <u>Key challenges:</u> Weak agricultural extension systems/low capacity of government agencies, inadequate M&E system, delays in fund flows and low disbursement, limited land assets of many upland villages that were resettled to newly-merged larger villages.
Achieved results / impacts	The programme reached 15,000 direct beneficiary households consisting of about 79,000 people from eight ethnic groups living in 223 villages. Up to the end of April 2016, technical advisory services were provided to 8,345 households. 118 Farmer Field Schools were established. However, only 2,094 households benefited from conservation technologies as part of the project. A large number of farmer groups were organized (246). Livestock production groups were formed; however, members did not typically engage in collective activity. Procuring ruminants was also difficult due to limited market access. 64 irrigation schemes were set up (however, at small scale and limited coverage); sustainable O&M was also lacking. Limited group function building was noted, along with weak service support to link with markets.
Intended coordination	The GCF development team closely coordinated with the IFAD team in the design of Output 2.

1.10.7 Partnerships for Irrigation and Commercialization of Smallholder Agriculture (PICSA)

Project name: Partnerships for Irrigation and Commercialization of Smallholder Agriculture (PICSA)	
Funding entity	IFAD (11 th country allocation)

Timeframe	2020 - 2026
Financing volume	Total investment and incremental recurrent costs: USD 29.36 million (Of which, USD 20.88 million is an IFAD loan)
Project objectives and components	<p>The goal to which PICSA will contribute is <i>enhanced livelihood resilience and sustainability within the Project intervention area towards inclusive local economic development</i>. The project aims to provide added value to irrigation infrastructure through building market linkages, enhancing commercialization of irrigated agriculture and supporting improved nutrition.</p> <p>There are three project components:</p> <ul style="list-style-type: none"> (i) Intensified agricultural development respectively profitable smallholder irrigated agriculture, which encompasses (1) trainings for district-level staff, village authorities and water user groups, (2) creating effective market linkages and multi-stakeholder platforms, (3) forming agribusiness investment and farmer group investment facilities, (4) improving access, and (5) extension service provision through public, private and farmer-to-farmer channels. (ii) Value chain development to promote further commercialization of smallholder agriculture by enabling, promoting and starting-up market linkages that benefit smallholder farmers. (iii) Improved nutritional practices, encompassing increased dietary intake and improved diet quality for nutritionally vulnerable groups, and school-based nutrition interventions.
Linkage/relevance to REDD+ and GCF programme	There will be a geographical overlap between GCF and PICSA target districts in 10 districts (Houaphan: Sam Neua, Sopbao, Viengxay, Xam Tai; Luang Prabang: Xieng Ngeun, Nan; Sayaboury: Sayaboury, Phiang, Paklai, Thongmixay). In the ten districts where the PICSA project will operate, the GCF programme will not implement Output 2 activities because the proposed activities were designed in a similar way.
Achieved results / impacts	90% of the village population (approx. 40,000 households) are expected to benefit from project interventions. An estimated 35,000 households are targeted by all project activities, and 33,000 are targeted directly by activities aimed at profitable agriculture. Specific project interventions will target nutrition-vulnerable people in the project area, with an emphasis on women, children and adolescent girls.
Intended coordination	This project is being designed alongside a climate-smart irrigation sector programme, financed by ADB (the Sustainable Rural Infrastructure and Watershed Management Sector Project (SRIWMSP)), the European Union (EU), German International Cooperation (GIZ) and the Green Climate Fund (GCF). The NPMU of the GCF programme will closely coordinate activities with the project implementation team of the PICSA project.

1.10.8 Other projects/ programs

1.10.8.1 Lowering Emissions in Asia's Forests (LEAF) USAID

Project name: LEAF	
Funding entity	USAID through its Regional Development Mission for Asia
Timeframe	2011 – 2016
Financing volume	USD 20 million for all 6 core countries (Cambodia, Lao PDR, Malaysia, Papua New Guinea, Thailand and Vietnam)
Project objectives and components	The overall goal of the project was to strengthen the capacity of target countries to achieve meaningful and sustained reductions in greenhouse gas emissions from the forestry-land-use sector, thus allowing the target countries to benefit from the emerging REDD+ framework. The project had four components: (i) replicate and scale-up innovation through regional platforms and partnerships, (ii) assist in the development of policy and market incentives for GHG reductions, (iii) build and institutionalize technical capacity for economic valuation of forest ecosystem services, and (iv) monitor changes in forest carbon stocks and demonstrate innovation in sustainable land management.
Linkage/relevance to REDD+ and GCF programme	The LEAF program encouraged local villages to voluntarily protect their forests through the provision of livelihood action plans that improved the farmers' economic situation. LEAF promoted actions linked to law enforcement and monitoring of Lao forests, and institutional capacity building similar to the GCF programme. Both projects target Houaphan province.
Achieved results / impacts	The project succeeded in decreasing deforestation and forest degradation in the target area and generating greater village engagement in NPA management. The project worked on management planning for the 70,000 ha Nam Xam conservation area, participatory land use planning covering nearly 10,000 ha, and village livestock improvement to reduce pressure on forests.
Intended coordination	Implemented by Winrock International, partnered with SNV Climate Focus and RECOFTC. The project has ended and no coordination is therefore envisioned.

1.10.8.2 Eco-Friendly Intensification and Climate Resilient Agricultural Systems (EFICAS)

Project name: EFICAS	
Funding entity	EU (under the GCCAP program) and AFD
Timeframe	2014 - 2018

Financing volume¹⁵⁶	EUR 2.2 million
Project objectives and components	The project aims at developing innovative methods and intervention approaches to support farmers' adoption of climate-smart agricultural systems based on conservation agriculture to improve living standards of villagers and increase resilience to economic and climate change. The three work packages are: (i) village landscape management, (ii) participatory innovation network, and (iii) multi-stakeholder communication platform.
Linkage/relevance to REDD+ and GCF programme	2 of the 6 project provinces overlap with the GCF programme, namely Houaphan and Luang Prabang. Both projects have a focus on engaging village villages in co-designing sustainable forest and land use strategies and creating/improving the enabling environment. EFICAS further aims at broad-scale dissemination of alternative production systems through participatory learning approaches and formulation of evidence-based policies and engaging stakeholders in testing agro-ecological practices.
Achieved results / impacts	<p>Villages were highly involved in the project and resultant activities due to the use of PLUP and CADP (village-based agricultural development plan).</p> <p>Positive impacts were found on herd growth (perceived as attractive alternative to cash crops), crop damage from livestock reduced due to fencing and improved livelihoods¹⁵⁷.</p> <p>Increased capacity of various stakeholders (extension agents and farmers trained on new sustainable methods).</p> <p>However, this does not necessarily improve resilience of villages and the new cropping and livestock systems are not adequately integrated at this stage (e.g. with manure and composting). The adoption rate of alternative practices (legumes, manure etc.) is limited and technical quality of irrigation infrastructure built is low.</p>
Intended coordination	Consulted in the design of the GCF programme.

¹⁵⁶ https://eeas.europa.eu/topics/human-rights-democracy/47410/conservation-agriculture-eco-friendly-intensification-and-climate-resilient-agricultural_ru

¹⁵⁷ <https://www.eficas-laos.net/content/download/4579/33782/version/1/file/EFICAS+debriefing.pdf>

2 PROGRAMME OBJECTIVE AGAINST BASELINE

2.1 Programme baseline - Proximate drivers of deforestation and forest degradation and underlying causes

In the framework of the ER-PD and the development of the Provincial REDD+ Action Plans, a detailed assessment of the historical proximate drivers of deforestation and forest degradation and the underlying causes was carried out, combining spatial analysis methods, in-depth literature research, and district- and *kumban*-level consultations (see [Chapter 13](#) for a summary of the consultations over the past 2 years).

In addition, the barriers were assessed that prevent sustainable land use in the GCF programme area. A summary is provided in the following sub-sections:

Info Box 7. Methodology applied for the driver assessment (description from ER-PD 2018)

The assessment of deforestation and forest degradation, including the drivers, agents and underlying causes, utilized three approaches:

- **Wall-to-wall mapping:** Based on the MRV/MMR system for carbon accounting, wall-to-wall mapping is the immediate tool that enables the quantification of drivers in carbon (or CO₂eq) terms. However, the MRV/MMR system is not directly tied to the drivers but, rather, to the forest and land use categories – largely associated with detection through remote sensing. Drivers were analyzed by identifying land cover change using the forest-type maps for 2000, 2005, 2010 and 2015 which were also used for the Reference Level assessment of the FCPF Carbon Fund ER-Program.
- **Spatial drivers analysis based on Global Forest Watch/Hansen tree cover loss data:** Spatial assessment using the Global Forest Watch dataset. Land and forest classes were for the greater part applied as driver categories and augmented with further analysis using assumptions about drivers (e.g. if a plot of land was repeatedly identified to be in the land/forest class of ‘regenerating vegetation’, this plot would be identified as a shifting cultivation plot.)
- **Stakeholder consultations:** where the categories of drivers were defined by the stakeholders themselves, meaning that different consultations at different levels and localities used different categories. Different categorizations of drivers also emerged (e.g. shifting cultivation for subsistence purposes differentiated from shifting cultivation for cash crops, etc.).

The driving factors of land use change are rarely clear-cut and applying different approaches in the analysis enabled a better understanding of the complex nature of the interactions among the drivers. At the same time, the categories of drivers should be understood as a generic grouping for operational purposes, which requires careful contextualization in understanding what is actually taking place at the local level. For the elaboration of the ER-PD, stakeholder consultations were held with Government staff in six provinces, 50 districts and 50 *kumbans* (village clusters) that represent 339 villages.¹⁵⁸

Considering the limitations of the methodologies applied for each of these approaches individually, the results of any one study are not appropriate to be taken in isolation for determining

¹⁵⁸ Refer to chapter 13 for further information on stakeholder consultations.

the drivers or their importance and impact, but, rather, the results have been viewed together to inform the decision-making on the ER Program interventions.
For a more detailed description refer to the ER-PD and supporting PRAPs.

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

The Forest Reference Emission Level is 10.5 million tCO₂eq per year, whereas the Forest Reference Level for removals is -1.96 million tCO₂eq per year. Forest degradation is the largest emissions source, followed by deforestation.

Table 13. 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

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 ER-PD.¹⁵⁹

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. This deforestation is largely linked to the 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 tCO₂/ha) to regenerating vegetation forest (average carbon stock of 64 tCO₂/ha). This land use transition mainly

¹⁵⁹ [ER-PD 2018](#)

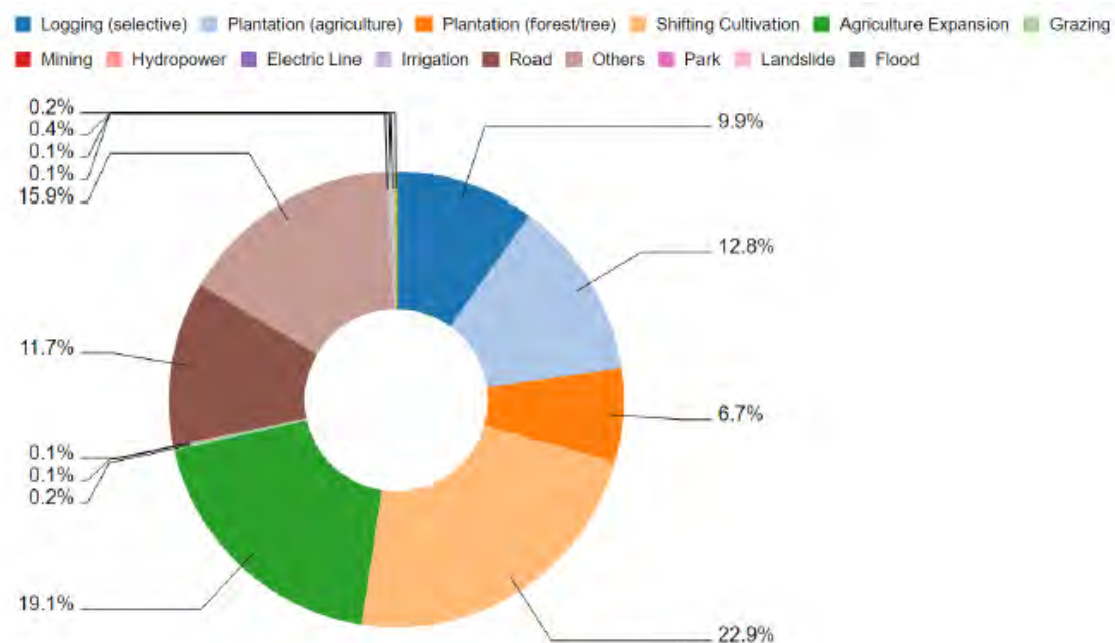
refers to shifting cultivation and agricultural development activities and is the largest GHG emission source in the programme area.

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 tCO₂/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).

2.1.2 Proximate drivers of deforestation and forest degradation

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.¹⁶⁰



Source: REDD+ Readiness Project in Lao PDR 2017 in ER-PD 2018, p. 38

Figure 11. Disturbance by type (disturbances > 5ha) in the programme area (2005-2015)

¹⁶⁰ 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.

The following table provides more detail about the key proximate drivers of deforestation in the programme area.

Table 14: Overview of key proximate drivers in the programme area¹⁶¹

Brief description of proximate drivers	
Shifting cultivation	<p>Conversion of forest or regenerating vegetation for shifting cultivation (rotational agriculture using slash and burn practices), where land undergoes rotations of 4-9 years (on average 5), where land is cultivated and then left fallow. Rotational practices, if stabilized in location and managed properly (including control of fires), can be sustainable. Considering the sub-tropical moist conditions of most of the programme area, bush fallow can recover back to forest status within the average shifting cultivation cycle.</p> <p><i>Pioneering</i> shifting cultivation is where shifting cultivation encroaches on forests that have previously not been cultivated in known history. This can take place as new shifting cultivation plots or through gradual expansion of existing plots. The continuous use of upland shifting cultivation plots with reduced years of fallow reduces the chance of land regenerating back into forest. Finally, forest fires are often triggered by slash-and-burn cultivation and have been noted as a driver of deforestation and forest degradation in many districts and <i>kumbans</i>.</p> <p>Examples of key crops associated with deforestation and forest degradation include:</p> <ul style="list-style-type: none"> ▪ Upland rice is a key crop for household food security in the region, especially in areas with limited suitable land for paddy rice cultivation. Yields are 100% lower in upland rice production systems compared to paddy rice. ▪ Maize (see agricultural expansion below), can also be cultivated in upland areas. ▪ Job's tear is cultivated in upland areas, often in areas with poor irrigation and low soil fertility, as is considered a low-labor/low-input crop. Job's tear is grown and dried before it is exported to neighboring countries, especially China and Thailand. Most provinces have identified Job's tears as a crop to increase production area for in the coming years.
Agriculture expansion and agriculture plantation establishment	<p>Conversion of forest for the expansion of permanent agricultural lands or agricultural plantations. Examples of key crops attributed to deforestation and forest degradation include:</p> <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 Sayaboury,¹⁶² Oudomxay and Houaphan provinces. Maize is cultivated primarily for use in livestock feed, where much of the production is exported to neighboring countries such as Thailand, Vietnam and China. ▪ Banana plantations were identified as a major driver in Luang Namtha, Oudomxay and to a lesser extent Bokeo. Prime Minister Order No. 483 banned the establishment of new banana concessions, and established a plan to phase-out banana production in seven provinces (Luang Namtha, Bokeo, Oudomxay, Luang Prabang, Sayaboury, Phongsaly and Vientiane provinces)
Road construction, electricity	<p>Construction of roads and electricity lines that cause the direct removal/conversion of forest area. This includes the direct areas for the roads or powerlines, as well as buffer zones for maintenance and construction.</p> <ul style="list-style-type: none"> ▪ While such investments are key for the development of the region, the lack of effective control, law enforcement and monitoring has generally led to increased unauthorized and unplanned clearing and harvesting in forests due to infrastructure development.

¹⁶¹ Descriptions adapted from the ER-PD (2018) and PRAPs unless otherwise cited

¹⁶² Currently province is the largest producer of maize in the country, accounting for 22 % of national maize production.

¹⁶³ Note: roads improve access to new areas, and are also considered underlying causes of deforestation and forest degradation (see Chapter 2.1.3).

Plantation establishment (trees)	<p>Conversion of forest for the establishment of tree plantations, especially rubber and, to a lesser extent, teak.</p> <ul style="list-style-type: none"> ▪ Rubber has been a major driver of deforestation in the provinces of Luang Namtha, Bokeo and Oudomxay. It was introduced through promotion by local government as a means to stabilize shifting cultivation practices, and also through investors from China and Vietnam. In particular, Chinese investments have seen Laos as a favorable destination for investing in rubber to supply the factories in China, and has been supported by Government policy incentives to promote replacements to opium cultivation. In the GCF programme area, rubber investments primarily take on the form of contract farming arrangements, as opposed to plantations in the south of the country.¹⁶⁴ ▪ A number of factors have since impacted the trend in rubber investments, including labor shortages for tapping, global rubber price fluctuations, and the introduction of alternative crops, namely banana.
Mining	<p>Conversion of forest for the establishment of mines/mining operations. Major mining and hydropower infrastructure investments also act as major drivers of deforestation, but they also overlap as cornerstones of national economic growth.</p> <ul style="list-style-type: none"> ▪ Mining products accounted for over 58 % of the total export value during the period 2011-2015.¹⁶⁵ ▪ Legal mining operations occur on over 100,000 ha of land in six GCF programme provinces according to available documents from the provinces. In coming years, mining activities are likely to expand in the Northern region. ▪ The lack of effective control, law enforcement and monitoring has generally led to increased unauthorized and unplanned clearing and harvesting in forests due to infrastructure development. ▪ PMO 30 (2012), and PMO 08 (2018) aim to limit unsustainable clearing of land for mining activities, although many exceptions exist where clearing is still permitted.
Hydropower	<p>Flooding of catchment areas leading to deforestation and forest degradation in addition to direct and indirect deforestation from infrastructure development (e.g. roads, powerlines etc.). It can further lead to the displacement of local populations and villages, which can create more pressure on other areas due to village relocation. Major mining and hydropower infrastructure investments represent major drivers of deforestation, but overlap as cornerstones of national economic growth.</p> <ul style="list-style-type: none"> ▪ Government has invested in over 70 hydropower feasibility studies within the country, 13 of which became operational plants from 2010-2015. Only 20% of the country's hydropower potential has been tapped. ▪ The lack of effective control, law enforcement and monitoring has generally led to increased unauthorized and unplanned clearing and harvesting in forests due to infrastructure development. ▪ The Lao Government is aware of the challenge to quantify the full extent of the impacts of hydropower on forest areas and carbon stocks due to limited data transparency and availability. Furthermore, data is often incomplete or the reported areas are not realistic given the land area in the district and or province (often over- or under-reported).¹⁶⁶ For

¹⁶⁴ Note from the ER-PD: "The prevalence of contract farming as the model for investments, particularly in the North of the country is a result of a number of factors, including the issuance of the Prime Minister's Order No. 13 (2012) regarding suspension of new investment projects related to mining, rubber and eucalyptus plantations. It thereby promotes contract farming models in the Northern region, as a means to engage local villagers in these agribusiness. »

¹⁶⁵ 8th National SEDP in ER-PD 2018

¹⁶⁶ Note from the ER-PD: "It should be noted that the spatial drivers analysis (mentioned earlier under this Section) is unable to detect changes of land use that relate to water, due to the nature of the Hansen tree loss data. Therefore hydropower related deforestation is not accurately captured from this source of analysis. "

	instance, the total inundated area for existing and planned hydropower plants is often unknown.
Selective logging/ unsustainable harvesting	<p>Forest degradation due to unsustainable harvesting (both legal and illegal)</p> <ul style="list-style-type: none"> ▪ Illegal logging for commercial purposes is considered one of the main drivers of forest degradation, and a major issue for the country. While high-value timber species are better known to exist in the forests of the Southern and Central regions, within the programme area illegal logging is particularly an issue along the borders with Vietnam, where a thriving timber market and increasingly stringent national forest regulations have driven up prices for natural timber species. In the district-level consultations, most districts identified illegal logging as one of the main drivers of forest degradation, and as a priority activity to be addressed. Besides directly causing forest degradation and small-scale direct deforestation, illegal loggers often build make-shift roads in order to help them to transport the timber and access more remote areas. This, in turn, facilitates increased encroachment into forests due to improved access to previously inaccessible areas. Although the exact scale of illegal logging activities is unknown, there are significant economic losses in tax revenue, export tariffs, permit fees and timber processing in the country.¹⁶⁷ <p>Various other activities contribute to the current rates of unsustainable wood extraction (described below), although to a lesser extent than illegal logging:</p> <ul style="list-style-type: none"> ▪ Legal commercial logging has occurred at relatively limited scales. Quotas have been provided by central and local governments, who also directly receive revenue from commercial logging. Since 2013, there has been a temporary national moratorium on logging in production forests (PMO 31), which has been further extended for implementation through PMO No. 15 (2016). ▪ Small-scale logging quotas can be requested by Government officials and villages for local construction and personal use. It is not clear how many such small-scale quotas are given out on an annual basis; however, with insufficient forest control and law enforcement it is likely that logs for personal use and local markets are often illegally harvested. Small-scale illegal logging may also occur amongst villagers for the harvest of small trees for construction, as well as for sale to local businesses and villagers. ▪ Fuelwood collection is another activity which can result in forest degradation due to unsustainable wood extraction from forested areas. Increasing efforts to promote rural electrification may reduce fuel-wood use in the long-term; however, in the short- and medium-term it remains the preferred fuel for cooking and heating in the provinces. But the scale is very small. ▪ NTFPs with a lucrative commercial market are red mushrooms, tea and bamboo. However, while the current scale of extraction may lead to small-scale degradation, these activities are not considered major drivers of deforestation in the programme area.

Extensive stakeholder consultations at the national, province, district and *kumban* level informed and validated the findings (refer to [Chapter 13](#) for further information on stakeholder consultations) and provided insight into the province-specific trends. The relevance of each proximate driver of deforestation and forest degradation within each province is presented in the following table. More detailed information can be found in the respective PRAPs.

¹⁶⁷ ER-PD 2018

Table 15: 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: ER-PD 2018, p. 39

2.1.3 Underlying causes of deforestation and forest degradation

Underlying causes of deforestation and forest degradation take into account demographic, economic, agro-technological, policy and institutional and cultural factors. The following table provides a summary of the proximate/direct drivers, agents and underlying causes identified during stakeholder consultations in the programme area.

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

Source: ER-PD 2018, p. 52

Figure 12. Summary of drivers, agents and underlying causes for the programme area

The following table provides an overview of the main drivers of deforestation and the underlying causes of deforestation with the largest impact. The background of the analysis and more details can be found in the ER-PD (Chapter 4) and in the Provincial REDD+ Action Plans (PRAPs) in Chapter 2 for each of the six provinces (developed 2016 – 2018).

Table 16: Overview of main drivers of deforestation and associated key underlying causes¹⁶⁸

Driver	Key underlying causes	Description
Shifting cultivation	<i>Economic and market demand</i>	With increasing competition for land with cash-crops, combined with growing population, fallow periods are becoming shorter, leading to lower productivity, increased soil degradation and the need to clear more forests for subsistence purposes, particularly for upland rice. Upland rice is a major dietary staple in the programme area, characterized by shifting cultivation. Upland rice remains an important crop for subsistence purposes and for ensuring food security, especially due to the hilly terrain and the limited availability of suitable flat areas for paddy rice cultivation. Increasingly, farmers are planting less upland rice and investing more in cash-crops. This has a potential impact on food security if cash-crop prices drastically drop as households may not be able to afford to buy rice for their families. Expanding agriculture into forest areas through slash and burn practices is also often a last resort among poor families moved or relocated because of either infrastructure development or village consolidation. In this respect, shifting cultivation practices act as a safety net for poor and vulnerable groups, who often have less secure land and resource
	<i>Agro-technological factors</i>	Upland rice yields are often limited by seasonal precipitation, as the crop is highly susceptible to drought, weed infestations, inadequate research on improved varieties and practices, inadequate extension support, and the lack of soil conservation practices to limit erosion. Continual planting of upland rice without intercropping can lead to massive reductions in soil fertility. For instance, a study in Luang Prabang found that upland rice yields declined from over 3t/ha/year to 0.5t/ha/year in a 5-year period when rice upland rice was continually cultivated each year. ¹⁶⁹ The reduction of yields normally drives villagers to clear new forest land that is more productive after clearance. After a few years, the productivity decreases again and puts new pressure on regenerated forests or new intact forests.
	<i>Policy and institutional factors</i>	Insufficient and inappropriate land use planning is a major underlying cause of deforestation, either through the complete absence of plans or through the lack of compliance with (usually top-down) designed plans. The absence of integrated spatial planning and village-level participatory land use planning in some villages

¹⁶⁸ Descriptions adapted from the ER-PD 2018

¹⁶⁹ Linquist et al. 2005 in ER-PD 2018

		<p>is a major underlying cause of deforestation from pioneering shifting cultivation. Uncertainty regarding land uses and border demarcation can lead to unclear rules and gradual encroachment into forests. Even when village land use plans have been developed, without adequate incentive mechanisms to encourage implementation, or sanctions discouraging non-compliance, plans often are ignored. Monitoring of the overall compliance with land use plans is weak in many villages and districts, and often areas under cultivation are under-reported, as many areas are illegally cleared.¹⁷⁰ Unclear land and resource rights and land allocation remains a challenge. Land allocation processes, especially in rural areas, have been hindered by the lack of sufficient capacities, resources and equipment.¹⁷¹ Without appropriate land allocation, sustainable investments in forests can be greatly limited as individuals, families and villages do not have a long-term incentive to invest in sustainable land use activities. The Government has developed a manual on participatory agriculture and forest land use planning at the village and <i>kumban</i> level, although additional resources and technical support are required to further clarify land use rights and support the land allocation process, especially in rural areas.</p>
	<i>Cultural factors</i>	<p>Traditional upland agriculture has been practised historically for subsistence cropping, characterized by shifting cultivation with long fallow periods. Given the changing context of the agricultural land, traditional practices are not adequate to address the emerging challenges in the agricultural sector. Traditional practices are increasingly being adapted to address challenges such as soil erosion and nutrient depletion through the adoption of agricultural methods such as intercropping and soil conservation practices. The lack of effective agricultural extension services has been a major barrier that has prevented the widespread adoption of improved practices.</p>
Expansion of agricultural land (permanent agriculture)	<i>Economic and market demand</i>	<p>Strong regional markets, especially in neighboring countries, continues to drive the production of key export commodities, thus impacting land use in the programme area. Cultivation of cash crops is seen as a direct ticket out of poverty for households and as an important economic pillar for the provincial governments. While such commodities and markets are important for economic development, weak land use planning and law enforcement and agro-technological factors further contribute to unsustainable conversion of forested land for agricultural cultivation.</p>

¹⁷⁰ WCS and GIZ 2015 in ER-PD 2018

¹⁷¹ Thomas 2015 in ER-PD 2018

	<i>Agro-technological factors</i>	<p>Various agro-technological factors, including low-yield crop varieties, the lack of appropriate management practices and nitrogen loss in soil due to consecutive planting of certain crops lead to the need for additional forest clearing for agriculture. The productivity of the main crops tends to lag behind international standards, requiring the clearing of larger areas to achieve the same yields.</p> <p>While yields have improved with the adoption of contract farming systems, which have provided farmers with improved maize varieties and agricultural inputs, challenges associated with mono-cropping on steep slopes still abound. Increasingly, problems with weeds and pests are occurring, as well as a lack of soil conservation practices in combination with intensive agricultural practices leading to accelerated soil degradation and reduced productivity, and therefore a requirement for additional land to compensate for the reduced production.</p>
	<i>Policy and institutional factors</i>	<p>Land use plans and targets established in the provincial and district Socio-Economic Development Plans (SEDPs) are often unaligned, and lead to an inability to monitor and enforce compliance with plans, policies and regulations. For instance, the Houaphan SEDP established an official target for agricultural area of 70,545 ha by 2020, while aggregation of district SEDP targets provided a total agricultural area which was three-fold the provincial target. Spatial data is available but is often inconsistent with non-spatial data. Inconsistencies in master planning and zoning are a major underlying cause of deforestation as these plans are not reflective of the actual land use activities which are implemented. Limited coordination and unbalanced priorities reflected in the development plans promote unsustainable use of land including forests.</p>
Unsustainable harvesting of wood products	<i>Economic and market demand</i>	<p>Illegal commercial logging is often traced back to the Chinese and Vietnamese export markets, and is especially prevalent in the districts bordering Vietnam.¹⁷² Increasing national regulations and restrictions in the forest sector in China and Vietnam (including a national logging ban in natural forests in Vietnam) have led to increased demand for high-value native tree species in these countries, which has led to an increase in illegal logging in Lao PDR to meet the regional demand for timber. This has, however, reduced in recent years since the issuance of Prime Minister Order No. 15 (described in Chapter 1.7).</p>
	<i>Policy and institutional issues</i>	<p>The Forestry Strategy to the Year 2020 states that “...weak law enforcement of laws and regulations has permitted, or not detected, cases of individuals or firms which go into conservation and protection forests and log or extract NTFPs”.¹⁷³ Given provincial plans for road construction and rural electrification, there is a</p>

¹⁷² Bernama 2014 in Saunders 2014 in ER-PD 2018

¹⁷³ Lao PDR 2005 in ER-PD 2018

		substantial threat of future deforestation if allocated timber quotas are not effectively monitored. The legal framework of subsistence logging by villagers (referred to as harvesting for ‘ <i>customary use</i> ’ in legal documents) in natural forests is somewhat unclear as interpretation tends to vary by province. The on-going revision of the Forestry Law is reviewing this, along with the process of developing the timber legality definition under the Forest Law Enforcement, Governance and Trade (FLEGT) initiative.
Infrastructure development (incl. mining, hydropower, etc.)	<i>Economic and market demand</i>	Hydropower and mining are two of Lao PDR’s cornerstones for economic growth. Growing demand from the rapidly industrializing economies of the region, including Vietnam and China, are a major driver for mining and energy sector development.
	<i>Policy and institutional factors</i>	<p>The Government plans to expand the generation, transmission, distribution and off-grid development of electricity to increase domestic electrification and to fulfill its power supply commitments with neighboring countries (namely with Thailand, Vietnam and Cambodia). The 8th national SEDP sets out a target to complete fifteen hydropower plants. In addition to being a key source of economic development, as proclaimed by the national Climate Change Strategy, hydropower is also seen as an important element in promoting renewable energy choices. In this regard, Lao PDR, in its 7th NSEDP, positioned itself to become the “battery of ASEAN” through hydropower generation, thereby promoting renewable energy nationally and also for the ASEAN region. Deforestation will inevitably take place. The scope for REDD+ to impact these drivers will be through indirect means of improving investment management and mitigating greenhouse gas emissions and other negative impacts as far as possible, including carbon offsetting through reforestation projects in other locations.</p> <p>The absence of integrated spatial planning is again a major underlying cause of deforestation. Governance and law enforcement in the sector are weak, and while efforts are made to ensure compliance with key contractual agreements and environmental regulations, often provincial and district offices do not have sufficient technical or financial capacities to complete technical evaluations of these operations and assess to what extent the companies are complying with their agreements.¹⁷⁴</p>

Source: Adapted from the ER-PD (2018), which used a lot of information from the PRAPs.

¹⁷⁴ WCS and GIZ 2015 in ER-PD 2018

2.2 Barrier analysis

Barriers to addressing drivers are interlinked in complex ways with many of the underlying causes identified in the previous section and as further described in the ER-PD and PRAPs, particularly those associated with institutional and policy contexts. The following table provides an overview of the key barriers and proposed measures to address these barriers:

Table 17: Overview of barriers and proposed interventions to address them

Barrier	Description of barrier	Proposed measures to overcome barriers
Gaps in forest governance and regulations	<ul style="list-style-type: none"> REDD+ not fully mainstreamed into SEDPs, especially in infrastructure, forestry and agriculture which are closely linked to deforestation and forest degradation.¹⁷⁵ Inconsistent interpretation of the regulatory framework for private sector plantation development at national, provincial and district levels Gaps and inconsistencies in forest regulations limit the effectiveness of forest governance (refer to Activity 1.2 below for further information on gaps) Insufficient incentives to incentivize sustainable management of forest resources 	<ul style="list-style-type: none"> Mainstream REDD+ in national, provincial and district SEDPs Raise awareness and build capacities of provincial- and district-level government authorities on REDD+ and forest regulations Strengthen regulatory framework to enable sustainable forest management and private sector investment
Insufficient land use planning, and weak implementation and monitoring of land use plans	<ul style="list-style-type: none"> Disconnect between spatial land use planning, SEDP targets and implemented activities is a major barrier which leads to unimplemented land use plans, and inability to effectively monitor and evaluate their implementation. Ineffective land use planning leads to increased deforestation due to unclear land use rules, unclear demarcation (overlap of ownership claims and inappropriate enforcement), and weak monitoring, evaluation and enforcement. <p>.1. Top-down land use planning may not effectively integrate with traditional / customary use rules, leading to non-compliance with rules which are not deemed appropriate by the local population.</p>	<ul style="list-style-type: none"> Streamline policies to reduce deforestation and forest degradation and improved cross-sectoral coordination within national, provincial and district socio-economic development plans (SEDPs) Integrate of forest landscape restoration (FLR) principles into land use planning guidelines to harmonize planning and promote holistic land use management. Improve land use planning processes for production, protection, conservation and village forests (including integrated spatial planning, participatory land use planning and village forest management), and provision of technical and financial support for the implementation of plans, as well as ongoing monitoring and evaluation. Such a process should be informed by spatial data, while ensuring participatory land use planning (including boundary delineation and clarification).

¹⁷⁵ Lao PDR ER-PD and PRAPs;

	<p>.2. Demarcation of forest-types and boundaries are incomplete; especially in conservation and protection forests, the boundaries for specific zones are often unclear</p> <p>.3. Land use planning is divided into agricultural land and forested land (separate processes), resulting in disconnected management and monitoring</p> <ul style="list-style-type: none"> ▪ Closely linked with the lack of access to finance and awareness of sustainable practices (in agriculture and forestry), as villagers often have insufficient technical and financial support to implement land use plans. Donors supporting land use planning have often had a stronger focus on plan development instead of implementation and monitoring. ▪ Land allocation at the village level may not have been sufficient, and registration has not been completed, leading to reduced livelihood security at the household level. This can lead to non-compliance with land use plans and illegal income-generating activities. 	<ul style="list-style-type: none"> ▪ Land registration and land titling to ensure long-term planning security by land users ▪ Improve access to finance and technical support for villagers to support land use plan implementation (on agricultural land and in village forests, protection forests, production forests and conservation forests) ▪ Identify new financial streams to improve the sustainability of government budgets to support ongoing land use planning, monitoring and evaluation.
Law enforcement	<ul style="list-style-type: none"> ▪ Weak policy coherence and cross-sectoral coordination, including competing priorities (REDD+ versus economic development). Policies continue to focus on key activities in the land use sector (e.g. cash crop cultivation, energy, etc.) to support economic growth, while policies to safeguard forests are not effective or are not widely enforced. ▪ Insufficient mainstreaming of REDD+ and measures to safeguard forest resources into sectoral strategies and SEDPs. ▪ Differentiated awareness of policies. They may be interpreted differently at the national, provincial and district level, often augmented by limited awareness of revised policies (e.g. plantation policy). ▪ Insufficient capacities and resources for the sustainable management of forest resources, forest control/enforcement and REDD+, especially in conservation and protection forests. The 	<ul style="list-style-type: none"> ▪ Streamline policies to reduce deforestation and forest degradation and improve cross-sectoral coordination. ▪ Improve land use planning (including improved provisions for monitoring and implementation of plans) to clarify permitted land use, provide support for the implementation, monitoring and enforcement of land use plans ▪ Improve forest monitoring, law enforcement and governance (strengthening capacities on forest protection and regulations, revising regulations, allocating more resources to forest control/ law enforcement, monitoring systems, strengthening procedures, standards and systems for law enforcement, etc.) ▪ Technical support to improve law enforcement (e.g. best practices for inspections, use of technology [e.g. GPS, GIS]) ▪ Provide budget for law enforcement to control use of forests (protection, production, conservation and village forests).

	<p>existence of villages within forest areas complicates enforcement and monitoring, considering many of these villages do not have land use plans.</p> <ul style="list-style-type: none"> ▪ Often departments are under-staffed and under-equipped (limited vehicles and budget to travel to field, some departments do not have GPS equipment, limited knowledge of GIS and the potential for free software to inform enforcement and monitoring). ▪ Insufficient incentives to safeguard forest resources (including effective monitoring, regulation and law enforcement/control), prioritized economic activities are conducted in a manner which heavily exploit forest resources. ▪ Insufficient law enforcement and forest governance, leading to the illegal clearing of forested lands, including in conservation and protection forests, and insufficient incentives for local people to sustainably use forested lands. 	<ul style="list-style-type: none"> ▪ Financial support for short-term operation of law enforcement, and the identification of financing streams to improve long-term financial sustainability for law enforcement departments at the provincial and district levels. ▪ Awareness-raising for Government staff and local villagers on laws and regulations to improve compliance with law enforcement. ▪ Identify new financial streams to improve the sustainability of Government budgets to support forest law enforcement.
Lack of long-term sustainable financing for forest management and enforcement	<ul style="list-style-type: none"> ▪ Government budgets are often constrained and are highly dependent on donor finance. ▪ Forest sector finance from national budgets is limited and collection of fees, taxes, etc. is weak. ▪ Weak level of collection of legally-mandated fees and taxes (e.g. VAT, income tax, timber harvesting taxes, land taxes). ▪ While there is potential for payment for ecosystem service or conservation schemes (e.g. linked to hydropower), such measures have not been formalized or tapped at scale) ▪ Forest and Forest Resource Development Fund (FFRDF) has low capacities and insufficient systems in place to manage and channel REDD+ finance. 	<ul style="list-style-type: none"> ▪ Mobilize sustainable forest sector finance (in-depth forest sector cluster analysis, analysis of additional and new funding sources, establishment of high-level Government platform and roadmap to improve finance). ▪ Enable the Forest and Forest Resource Development Fund to become the REDD+ Funding Window and manage and channel REDD+ and forest sector finance (redesign governance structure, training and capacity building, on the job training through project implementation). ▪ Environmental Protection Fund (EPF) support and capacity building to manage and channel GCF and other international financing to environmental protection.
Insufficient practical experience and skills for implementing	Commonly-applied land use practices are characterized by low productivity and are often not considered “good agricultural practices”	<ul style="list-style-type: none"> ▪ Mainstream policies in SEDPs, and strengthen the regulatory framework to reduce deforestation and forest degradation and improve forest law enforcement and governance

good agricultural practices	<ul style="list-style-type: none"> ▪ Policies to stabilize shifting cultivation have not been widely implemented / enforced ▪ Strong dependence on agricultural activities and the illegal clearing and degradation of forested lands ▪ Increased competition for commercial agricultural lands is shifting subsistence agriculture (upland rice, vegetables, etc.) and certain cash crops (e.g. maize, Job's tear and cassava) to less suitable upland areas ▪ Increasing soil and land degradation is leading to lower productivity and producers seeking out more productive land, which leads to further deforestation and forest degradation ▪ Lack of effective agricultural extension services results in poor agricultural management practices and drives agricultural area expansions into forest land ▪ Poor access to irrigation results in low productivity of agricultural production ▪ Limited use of sustainable land management practices (e.g. soil conservation measures, climate-resilient practices) due to limited awareness of villagers on sustainable land use practices and alternative business and income generating models ▪ Limited engagement and incentives of the private sector in promoting sustainable land use activities, including good agricultural practices and FLR ▪ Closely linked to the lack of access to finance 	<ul style="list-style-type: none"> ▪ Promotion of deforestation-free agricultural practices and technologies ▪ Knowledge management and sharing of successful experiences for replication ▪ Strengthen capacities on REDD+, good agricultural practices, FLR and sustainable natural forest management for government, civil society organizations (CSOs), private-sector and villagers ▪ Improve quality and accessibility to extension activities to focus on forest protection, climate-smart agriculture, REDD+ and sustainable land use activities (incl. improved access for ethnic minorities, women and youth) ▪ Investments in small-scale irrigation systems ▪ Support agriculture value chain development to promote deforestation-free agriculture (value chain assessments, self-sustaining market information sharing system, public-private dialogue) ▪ Enhance private sector development in deforestation-free value chains (business development support, development of green credit lines, capacity building) ▪ Supporting farmer organizations (and the development of farmer organizations) to increase negotiation power
Insufficient practical experience and skills for implementing sustainable forest management	<ul style="list-style-type: none"> ▪ Weak policy coherence and cross-sectoral coordination including competing priorities ▪ Strong dependence on agricultural activities and the illegal clearing and degradation of forested lands (see above barriers) ▪ Illegal clearing linked to insufficient forest law enforcement and governance, land use planning and monitoring, land allocation 	<ul style="list-style-type: none"> ▪ Mainstream REDD+ across SEDPs and sectoral plans ▪ Strengthen regulatory framework to strengthen FLR and sustainable forest management ▪ Improve law enforcement ▪ Enhance land use planning, implementation of land use plans, monitoring and enforcement

	<ul style="list-style-type: none"> ▪ Degradation of forest landscapes due to over-harvesting and unsustainable land use practices is reducing the quality of forested lands having a major impact on ecosystem services 	<ul style="list-style-type: none"> ▪ Improve forest monitoring (forest inventories, forest management systems) ▪ Improve technical assistance and extension on the ground (training and capacity building, improving informational materials, etc.) ▪ Management planning in village forests, production forests, protection forests and conservation forests (e.g. NPAs), as well as the implementation, monitoring and enforcement of these plans ▪ Capacity building for Government authorities in PONRE, DONRE, PAFO, DAFO, POFI and DOFI ▪ Promote private sector investments in village-based agroforestry (public-private dialogue and match-making platforms, facilitate the formation of village-private sector partnerships, development of incentive mechanism) ▪ Scale-up village-based agroforestry and plantations in degraded production forests to support restoration
Limited access to finance for local villagers and small and medium enterprises	<ul style="list-style-type: none"> ▪ Poverty and lack of alternative livelihood opportunities (e.g. off-farm employment) result in a high dependence on land and forests for household income. ▪ Lack of access to long-term finance for small and medium enterprises, especially forestry and agri-enterprises, for a number of reasons: i) many financial institutions have poor penetration in rural areas, making it physically difficult for remotely located businesses to reach a branch bank; ii) available interest rates are high and discourage lending; iii) financial institutions perceive lending to the agricultural and forestry sectors as risky; and iv) many enterprises lack the capacity to prepare business plans or provide proper accounting, thereby discouraging financial institutions from lending to them. 	<ul style="list-style-type: none"> ▪ Enabling access to low-cost finance for sustainable land use management implementation ▪ Support REDD+ business models through the establishment of a low-cost green credit line for agribusiness financing ▪ Development of incentives to improve investments in village agroforestry and plantations ▪ Focus green credit line activities on areas where financial institutions have local branches ▪ Train enterprises in business planning and financial management

2.3 Programme objective and theory of change

The GCF programme supports the Government and people of Lao PDR in changing the present-day use of forests and landscapes to ensure a transition to sustainable management at scale that supports REDD+ and, ultimately, the transition to low-GHG development pathways. This will reduce more than 57.9 million tCO₂ over the programme duration of 10 years (annual 7.2 million tCO₂) and more than 144.7 million tCO₂ over a period of 20 years.

The theory of change of the programme and Project 1 is presented in the following Figure. It demonstrates how the programme will address the above-described barriers and support the scaling-up of REDD+. The programme targets high-carbon-stock landscapes that are at highest risk of deforestation and forest degradation in six selected provinces (out of 18 provinces and 28 priority districts (out of 51) (see [Section 2.5](#) on selection of programme areas).

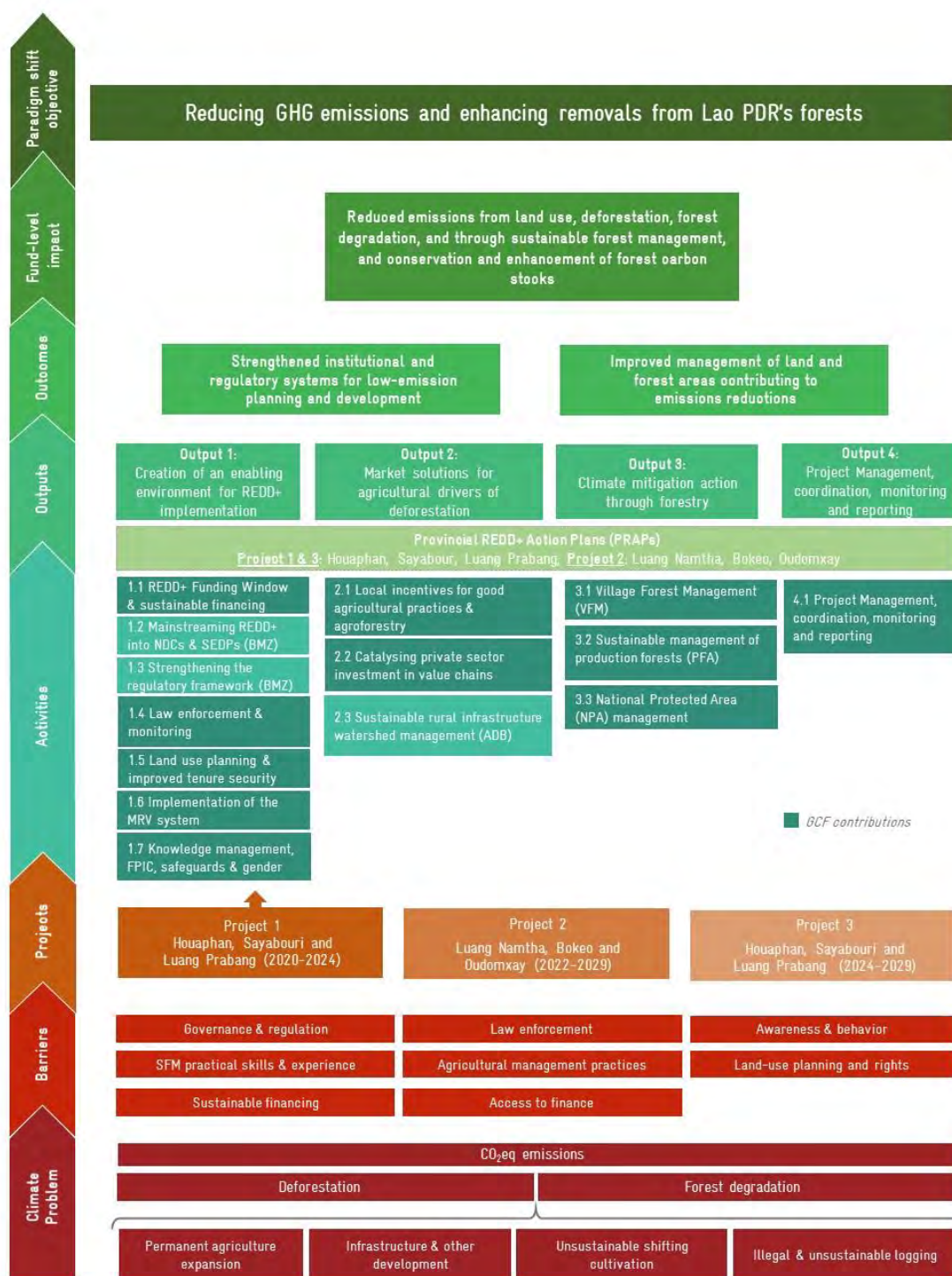


Figure 13. Theory of change for reducing GHG emissions and enhancing removals from Lao PDR's forests

The programme seeks to lower and, where possible, remove the identified barriers to change through its 4 Outputs and 14 supporting Activities, described briefly in the following sub-sections and in more detail in [Chapter 3](#).

2.3.1 Output 1: Enabling environment for REDD+ implementation

Financing volume: EUR 10.0 million GCF and EUR 10.7 million co-financing

Output 1 will support the creation of an enabling environment for REDD+ by investing in mainstreaming REDD+ into national- and province-level socio-economic development plans (SEDPs) for the period 2021-2025 and 2026-2030. It will include the strengthening of regulatory frameworks to enable sustainable forest management and private sector investment in village-based agroforestry / plantation development and to address the related barriers. The creation of an enabling environment will be complemented by improved law enforcement and improved MRV for REDD+. One Activity will also contribute to unlocking additional public and private finance in cooperation with the EPF to sustain the long-term financing of the forest sector and support the institutional strengthening of the Forest and Forest Resource Development Fund (FFRDF) to ultimately house the REDD+ Funding Window.

2.3.2 Output 2: Market solutions for agricultural drivers of deforestation

Financing volume: EUR 17.4 million GCF and EUR 54.6 million co-financing

Output 2 will target the agricultural sector as a key driver of deforestation and aim to reduce the specific barriers, enhance productivity and improve farmers' integration into agricultural value chains and improved access to finance and private sector participation in deforestation-free agriculture. It will be comprised of four key Activities relating to promotion of good agricultural practices in the deforestation hotspots (28 districts) to reduce the pressure on the expansion into forested landscape. The GCF programme will be implemented in 28 districts, while IFAD's Partnerships for Irrigation and Commercialization of Smallholder Agriculture (PICSA) project (currently under preparation to commence in 2020) will implement the activities in the remaining 10 districts. Agricultural sector development and reduction of pressure on deforestation and forest degradation will be complemented by the ADB co-financed "Sustainable Rural Infrastructure Watershed Management Sector Project" to increase agricultural productivity (Activity 2.3). Activities 2.1 and 2.2 will invest in the improvement of agricultural value chains to promote deforestation-free agriculture. Private sector development and improvement of access to financing by the private sector will address financial availability barriers.

2.3.3 Output 3: Mitigation action through forestry

Financing volume: EUR 29.1 million GCF and EUR 21.1 million co-financing

Output 3 will build upon Output 1 (enabling environment) and will reduce emissions through sustainable forest landscape management and promote forest landscape restoration (FLR) of degraded lands. Activity 3.1 will focus in the implementation of sustainable forestry at the village level in the selected target districts. Forested landscapes in villages will be supported in all three forest categories (production forest, protection forest and unclassified forest areas). Activity 3.2 will focus on the sustainable management of production forests in 5 districts where sustainable natural forest harvesting potential exists. Activity 3.3 will focus on the financing and

implementation of protected area management in the six National Protected Areas (located in 17 districts of the selected 28 programme area districts).

2.3.4 Output 4: Programme management, coordination, monitoring and reporting

Financing volume: EUR 3.9 million GCF and EUR 5.6 million co-financing

Output 4 will provide the necessary services to manage, coordinate, monitor and evaluate the programme and ensure that the programme is delivered and implemented on time and on budget. It will be responsible for safeguards, environmental and social management framework (ESMF) and gender action plan implementation and will ensure knowledge is aggregated and disseminated in the programme areas and nationwide.

2.4 Programme implementation period

The programme will be implemented over the period 2020 – 2029.

2.5 Programme location and target area selection

The programme location is identical to the FCPF Carbon Fund project area. The programme will be implemented in six Northern provinces of Lao PDR: Bokeo, Houaphan, Luang Namtha, Luang Prabang, Oudomxay and Sayaboury. Of the 51 districts in the six provinces, 28 districts have been selected for GCF programme support.

2.5.1 Selection approach of the target programme districts

For the selection of districts, a set of criteria was developed. The selection process combined quantitative and qualitative parameters as described below.

Quantitative criteria framework: The framework is based on the assessment of the remaining high-carbon forest¹⁷⁶ area and observed recent deforestation patterns. The remaining forest area with high carbon stocks has the highest GHG mitigation potential compared to already-deforested areas.

A district-level remote sensing analysis was conducted based on the same dataset as was used to develop the Reference Level for the FCPF ER-Program (Forest Type Maps (FTM) 2015). The dataset was complemented by the Hansen tree cover loss 2017 dataset and the forest degradation-related Canopy Disturbance Delta NBR (2017) dataset for 2015-2017. (See [Annex 4](#) for detailed description).

The analysis was carried out at the district level by assessing the remaining high-carbon-stock forest area in the districts and the observed forest area losses from 2015-2017. Forest area loss of the high-carbon-stock forest areas indicates current deforestation hotspots. Three parameters were considered and scored according to a points system (see Table below). Each district was scored overall by calculating an average score. The higher the score, the higher the priority

¹⁷⁶ High carbon stock area determination is based on the land/forest classes classification and emission factor database: See Table 5 ([Section 1.3.1](#)) defined as evergreen forest (EG), mixed deciduous forest (MD), coniferous forest, mixed coniferous and broad-leaved forest (MCB) and dry dipterocarp forest (DD). All have a carbon stock higher than 400 tCO₂/ha

for selection and GCF programme intervention. (The scoring and selection are available as an Excel file – “2018-12-28-Area Deforestation Activity Selection”).

Table 18: Quantitative GCF programme area district selection framework

Remaining high-carbon-stock forest area (in ha)		Total absolute high-carbon-stock deforestation area (in ha)		Average annual deforestation area in %	
% high-carbon-stock forest area of total district area	Score	Total absolute deforestation thresholds (in ha)	Score	Average annual deforestation % (2015-2017)	Score
< 30%	0	< 1000 ha	0	> 0.25%	0
30.1-40%	1	1001 - 2500 ha	1	0.251 - 0.5%	1
40.1-50%	2	2501 - 4000 ha	2	0.501 - 1%	2
50.1-60%	3	4001 - 5500 ha	3	1.01-1.5%	3
60.1-70%	4	5501 - 7000 ha	4	1.501 - 2%	4
>70%	5	> 7001 ha	5	> 2%	5

Qualitative criteria framework: In addition to the quantitative framework, additional parameters were taken into consideration in the selected target districts:

- **ADB-financed “Sustainable Rural Infrastructure Watershed Management Sector Project” districts:** All districts that will be targeted by the co-financing partner ADB with its irrigation project (Activity 2.3) were selected as priority districts. While the ADB project will focus on agricultural irrigation intervention, the GCF programme will invest in watershed forest management in affected areas. In total, 8 districts overlap with the GCF programme (see Figure 14 below).
- **National Protected Areas:** Districts in which an NPA (or part of an NPA) is present are automatically included in the selection of the target districts. These districts normally have a large share of remaining undisturbed forests, while the deforestation pressure may not be as high. It can be anticipated that in the mid-term the pressure is likely to increase.
- **Forested landscape connectivity:** This factor looks at the six provinces and aims to maintain connectivity between the remaining high-carbon-stock forest landscapes. Thus, districts that did not meet the quantities assessment thresholds but which have a connectivity function for forested landscapes were included in the target district selection. A list of the selected districts is summarized in the Table and Map below.

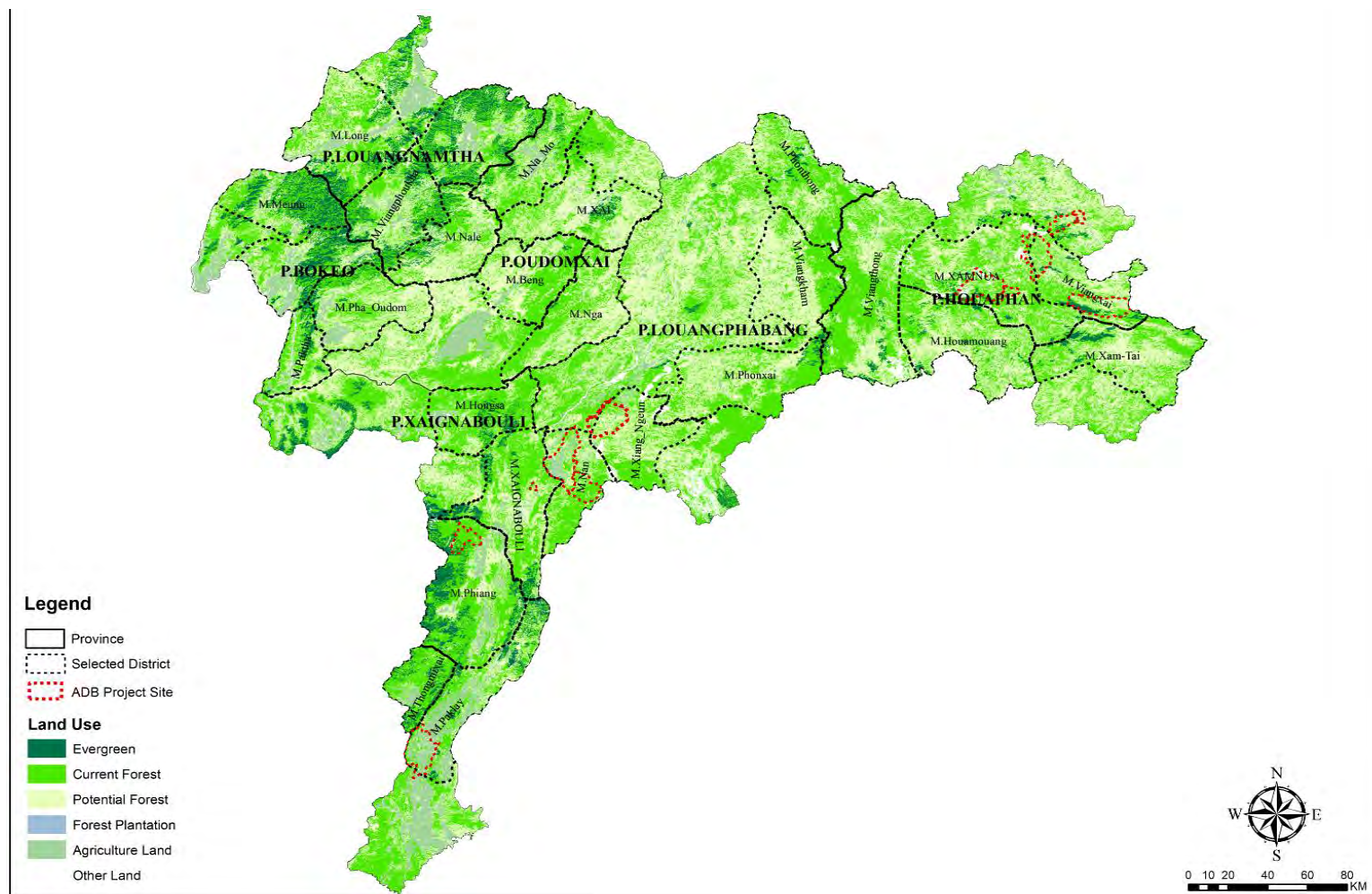
Table 19: Selected priority districts for the proposed GCF programme (28 out of 51 districts)

Bokeo	Houaphan	Luang Namtha	Luang Prabang	Oudomxay	Sayabouri
Pha Oudom	Xone	Namtha	XiengNgeun	NaMo	Sayabouri
Paktha	Hiem	Long	Viengkham	Xai	Hongsa

Meung	Xam Neua	Viengphoukha	Phonxay	Nga	Phiang
Houayxai	Houameuang	Nalae	Nan	Beng	Phaklai
	Viengxay		Phonthong		Thongmixay
	Xam Tai				
	Sopbao ¹⁷⁷				

The selected 28 districts cover 72% of the remaining high-carbon-stock area in the six target provinces (3.1 million ha out of 4.3 million ha).

¹⁷⁷ Protected forest management and watershed protection will be implemented only in ADB project (Activity 2.2) connected project locations.



2.5.2 Selection of target villages for GCF investment

For each selected district, a deforestation risk assessment was conducted to prioritize GCF investments and to ensure the highest possible impact. The risk assessment estimates the probability of deforestation and forest degradation of agricultural expansion in the selected districts (see Annex 4). Factors such as elevation data, distance to roads and current land use classes were taken into account in classifying the risk.

Two district-level maps were prepared for the selection of the target villages. All villages and risks are presented in a separate Excel sheet – “*Villages_Probability_Deforestation_Analysis*”.

One map shows the forest landscape and the national forest categories of each district (Figure below).

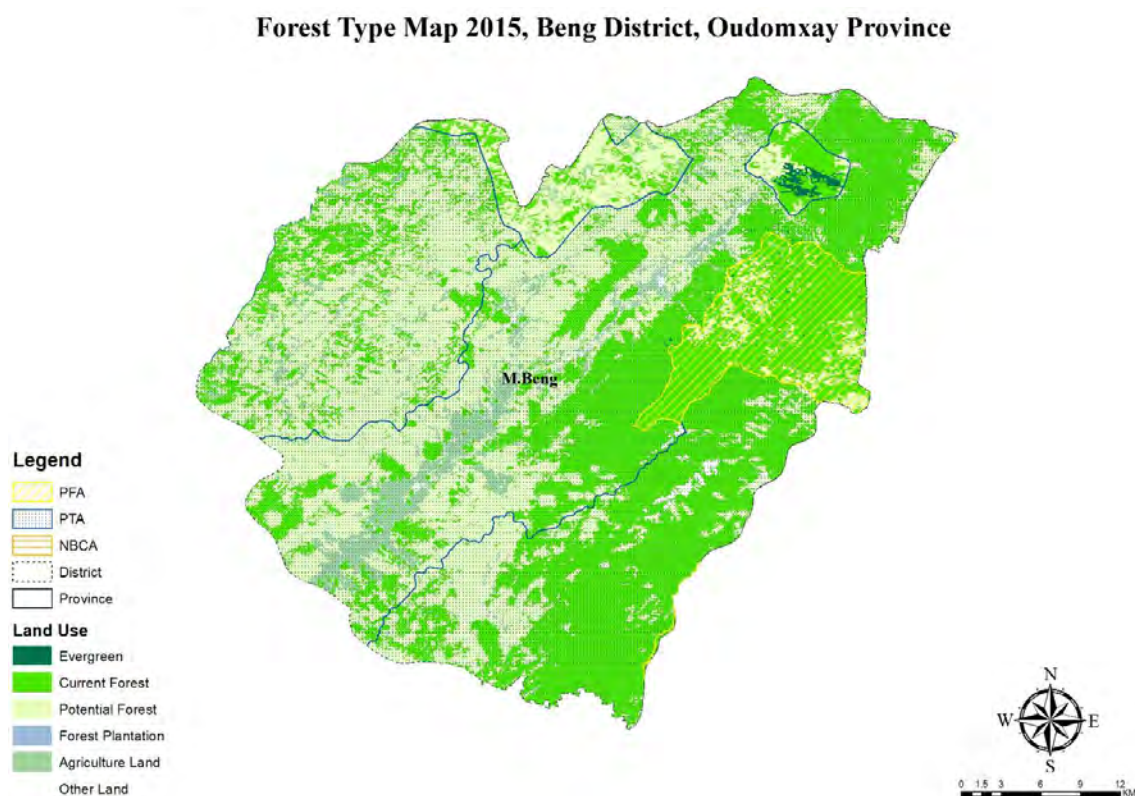
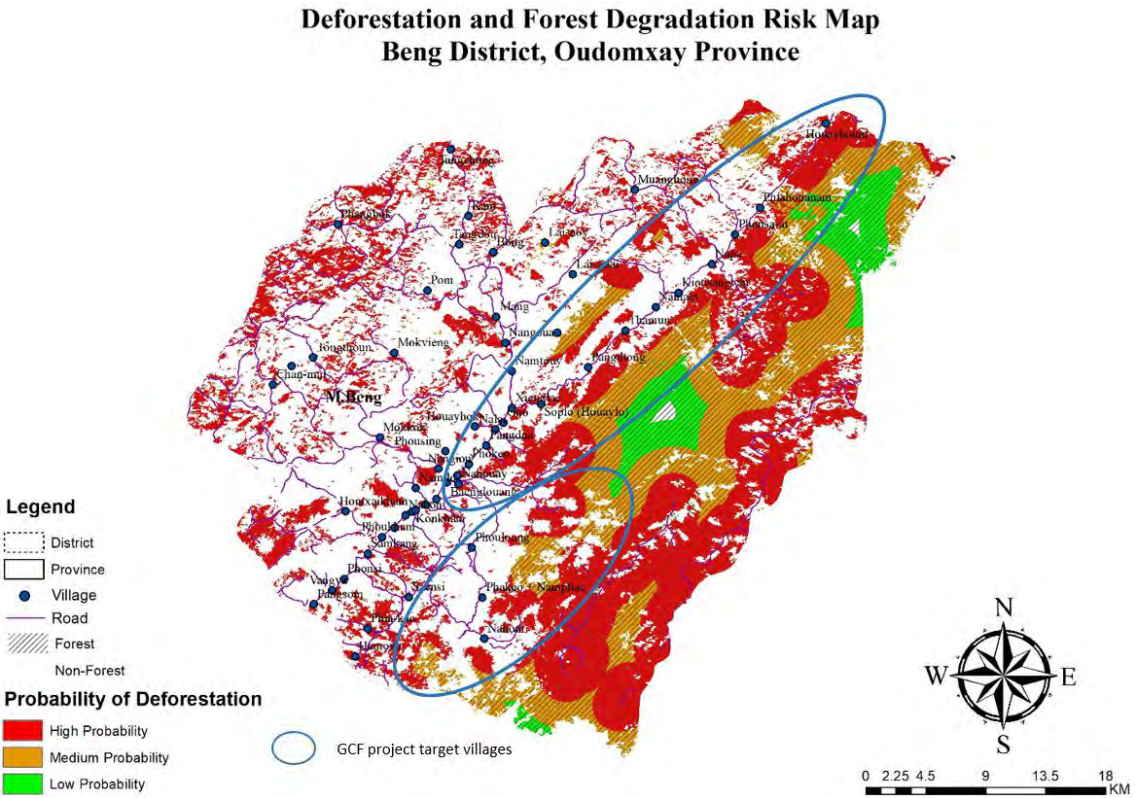


Figure 15. Forest landscape district map (2015), Beng district

The second map (Figure below) displays the village names, the remaining forest area and the expected deforestation probability. Based on this map, villages with high forest cover share and high probability classification are identified as priorities for GCF programme targeting. Villages with lower high-carbon forest share (evergreen and current forest) have a lower priority for the GCF programme.

The full set of maps for each selected district are presented in a separate Annex document.



Source: FIPD, 2018

Figure 16. Deforestation probability analysis in Beng district and target village selection

3 PROGRAMME DESIGN / DESCRIPTION

3.1 Programme versus project approach

The Feasibility Study team recommends a programmatic approach instead of a static project approach. The programmatic approach would allow for:

- Phased geographic upscaling of activities through a sequenced series of interlinked projects, embedded in the programme for different regions/provinces in the accounting area
- A REDD+ funding window as a common financial mechanism at the centre of the programme.
- Common objectives aligning the projects and contributing to the strategic goals of the forestry section in the Lao PDR's NDC
- A stronger emphasis on performance-based financing
- A longer total duration of the programme compared to a project
- Scaling up project activities while building up the capacity of Laotian institutions
- Increasing effectiveness over the course of the programme
- Taking advantage of synergies with other development programmes in the country

The benefits of a programmatic approach include:

- Impact: Greater flexibility through projects to gather data and learn from projects for more effective and adaptive designs and higher impact in subsequent projects (build up know-how and collect lessons learned)
- Sustainability: Higher potential for crowding in more sustainable financing from diversified sources (more ERs, additional domestic revenues, larger endowment for the EPF's REDD+ funding window) utilising a hybrid financing mechanism for the entire programme and thereby increasing long term financial sustainability
- Paradigm shift: More time for communities, businesses, civil servants and regulators to adjust to the desired paradigm shift in the land-use sector though an overall longer duration of a programme compared to a project
- Efficiency: Greater flexibility to improve project management and reduce transaction costs over time in particular through the common financing mechanism (REDD+ Funding Window)
- Integration: Better linkage with the programmatic approach of the FCPF ER-P
- Convergence: A more open platform for coordination and harmonization of existing co-financing contributions (ADB, IFAD, KFW, JICA) towards the NDC forestry objectives as well as a vehicle for attracting additional co-financing.

Scope of the programme

The programme combines a sectoral and geographic scope.

It is **sectoral** in the sense that it supports the GoL in achieving its policy goals as defined in the forestry section of the NDC as well as the NRS and Socio-Economic Development Plans.

It is **geographic** because it operates in the defined accounting area of six northern provinces that were selected based on their mitigation potential under the ER-P design phase. The programme applies a geographic upscaling strategy with subsequent projects including those provinces that are connected at ecosystem level and through other factors such as synergies among co-financing activities.

The proposed structure of the programme and its subprojects is described in

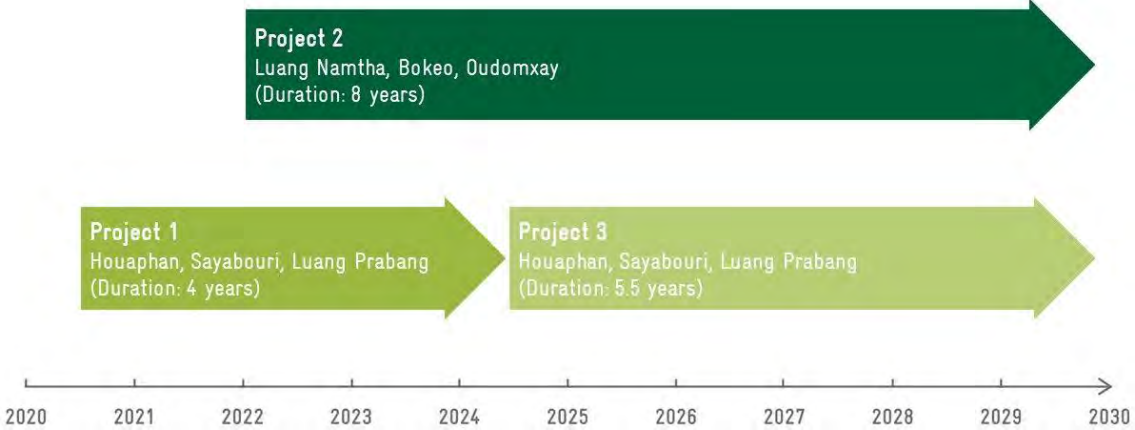


Figure 17.

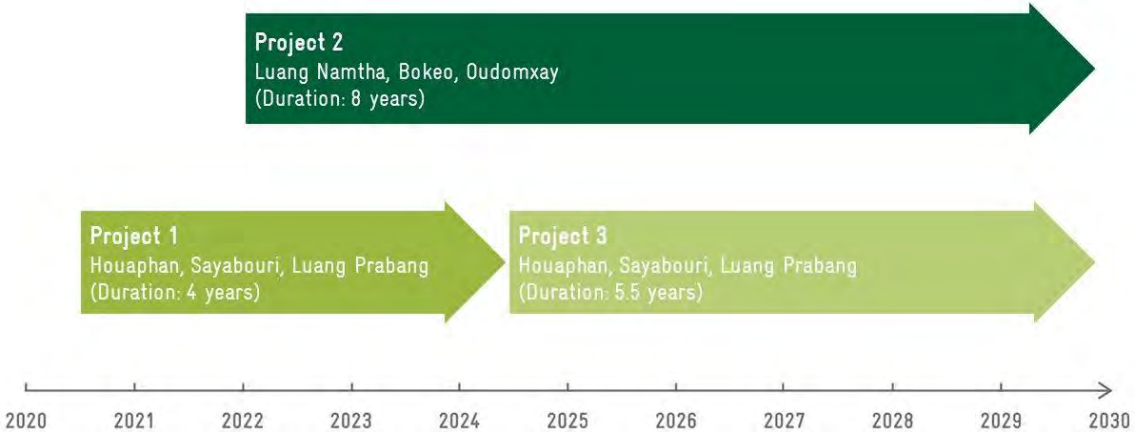


Figure 17. Overview of programmatic approach

The approval of a first payment from the GCF for project 1 will allow the establishment and initial implementation of the programme in the form of project 1. At the core of the programme and its projects are performance-based payments to participating communities and officials to incentivise and fund those types of land-use practices that yield the highest ERs. The programme ties the performance to MRV-able milestones, providing GIZ and GCF the necessary information for the design of project 2 and project 3, for which additional funding may be approved subsequently by the GCF Board.

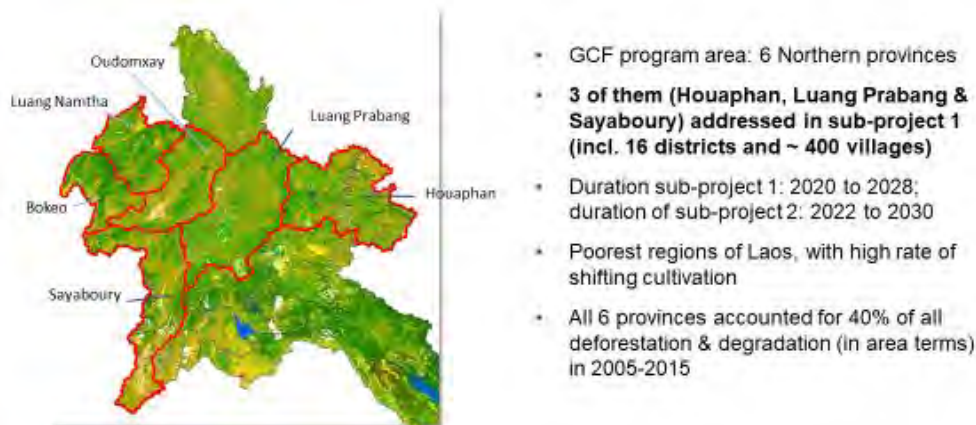


Figure 18. Programme Area

Rationale for the Programme Design

The rationale for the design of Project 1 is:

- Geographic scope: Houaphan, Sayaboury, Luang Prabang
- Districts with the highest deforestation and forest degradation
- Districts with high remaining forest areas at risk of deforestation / forest degradation
- Connectivity of forested landscape
- 3 out of 6 National Protected Areas/NPAs (= 60% of the total NPAs area or > 600,000 ha forest)
- ADB Sustainable Rural Infrastructure and Watershed Management Sector Project (SRIWMSP) and Partnerships for Irrigation and Commercialization of Smallholder Agriculture (PICSA): Geographical overlap in 10 districts (Houaphan: 4x; Luang Prabang: 2x; Sayaboury: 4x) → ADB as co-financer of GCF program / GIZ GCF support watershed management
- Support ongoing CliPAD Village Forest Management activities in Houaphan (70 villages)
- Cooperation with new KfW Village Forestry Management Project (VFMP) in Luang Prabang (District Phonxay) and Sayaboury (District Phiang)
- JICA co-finance the implementation of the GCF project in Luang Prabang
- Project 1 and 3 will be implemented in the same geographical area but with a greater amount of villages and wider scope.
 - Project 1:
 - Will allow for setting up institutional and operational arrangements for the programme including for example the REDD+ Funding Window at central level and the FPIC process at local level.
 - Will allow for testing the programme design in practical terms through defined milestones

- Provides a leaner and geographically more focussed set-up which can help to achieve the first MRV-able results as quickly as possible in order to access results-based payments as soon as possible.
- Project 3:
 - Activities in project 1 will lead to lessons learned that can be applied in and incorporated into the design of the FP for project 3.
 - The targeted transformation of the agriculture, forestry, and land use sectors requires a long-term approach to ensure that changes are fully adopted.

The rationale for the design of project 2 is:

- Geographic scope: Oudomxay, Bokeo, Luang Namtha
- Commencing project 2 in 2022 will allow the programme to benefit from synergies with other initiatives in the programme area.
 - Most noteworthy is the alignment with KfW's ICBF project, which will be developing land use plans in 103 villages in Bokeo and Luang Namtha. These villages are also target villages for the GIZ programme. The KfW-supported activity is anticipated to phase out in 2021. This will be important preparatory work for project 2, commencing in 2022; the villages with land use plans in place will be able to take up this work and move directly to implementation. Villages not covered by KfW's land use planning activities will be able to learn lessons from these activities.
 - Additionally, JICA co-financing activities are commencing in Oudomxay before project 2 starts. JICA will be building up partner institutions and otherwise doing work to prepare the province. This will enable a quicker start for GIZ activities in the province.
- The sequencing of activities will be beneficial for the MAF, DOF, EPF and FFRDF, important Laotian institutions within the programme. Scaling up programme activities over time will enable them to build up their staff's and operational absorption capacities over time.

Applied principles

The following principles apply to the programme and its projects:

Common and specific objective

The programme and all its projects contribute to one common and specific objective: reducing greenhouse gas emissions from deforestation and forest degradation.

The programme objective is closely aligned with GoL policy priorities, including that of the forestry section in the Lao PDR's NDC, National REDD+ Strategy, and Socio-Economic Development Plans.

Coherence among projects

All projects under the programme contribute to reducing emissions and increasing carbon sequestration in forest ecosystems of the accounting area. All funded activities in each project have the purpose of contributing to this goal directly or to improving the framework conditions to implement, sustain and safeguard those activities that contribute directly to the abovementioned goal.

Projects complement each other to achieve outcomes beyond those which could be achieved by GCF support for standalone one-off projects including through:

- Combining the mitigation potential and therefore the potential of accessing results-based payments at scale necessary to sustain mitigation activities without the programme support
- Preventing leakage
- Exchange and learning between participating stakeholders

Projects apply common implementation arrangements including a:

- Joint inclusive Governance Structure
- Centralized national financial mechanism (REDD+ funding window under the EPF) to allocate project financing and RBP according to the FCPF benefit sharing plan
- Common Environmental and Social Framework including a Management Plan and Ethnic Groups Engagement Plan
- Common Monitoring Framework

A programme would therefore be more efficient and effective in terms of both its costs and impacts.

3.2 Target beneficiaries

The target beneficiaries of the programme can be categorized into three major groups:

- The rural population will be the primary programme beneficiary group and, at the same time, are the key agents of deforestation and forest degradation. They are dependent on subsistence agriculture and natural resources. In the 28 districts, the programme will directly target 254,800 people (127,400 men and 127,400 women), which represents 20% of the total rural population in the six provinces. Indirectly, the programme will benefit an additional 412,650 people (32% of the rural population) in the six provinces.
- National-, provincial- and district-level Government agencies responsible for the management of natural resources in Lao PDR. The programme is expected to build the capacities of at least 1,086 Government staff members working mainly in the agricultural and forestry sectors.
- Private sector: At least 280 small and medium enterprises in the forestry and agricultural sectors will benefit from the programme and will support the transformation towards deforestation-free forest and agricultural landscape management.
- Civil society organizations play an important role in allowing for non-governmental influence on the programme. They will: i) participate in the programme steering committee, contribute to local monitoring and evaluation of programme progress, contribute to local implementation of safeguards, and facilitate and/or participate in FPIC and consultations.

3.3 Programme design

The following sections provide a detailed overview of the 4 Outputs, Activities and Actions of the GCF programme. Each Activity is described in detail, including the actions, inputs, performance indicators, technical justification, barriers addressed, implementation arrangements and the financial mechanisms, accompanied by impact quantification and risk assessment.

3.3.1 Output 1: REDD+ Funding Window & sustainable finance

Activity 1.1 REDD+ Funding Window & sustainable finance	
Contribution to GCF outcome(s)	M5.0 Strengthened institutional and regulatory systems M9.0 Improved management of land or forest areas contributing to emissions reductions
Contribution to programme output	Enabling environment for REDD+ implementation is created.
Description of actions	<p>1.1.1. Mobilizing sustainable forest sector financing</p> <p>There is significant potential for Lao PDR to raise substantial, long-term climate finance, including results-based payment mechanisms. It is conceivable that Lao PDR could raise USD 60-80 million through these means. The FCPF is one obvious body that Lao PDR could benefit from. Additionally, impact investors may be attracted by the combination of climate and social benefits that investment in the forestry and agriculture sectors could bring. Finally, the Government of Lao PDR could raise funds internally by collecting fees, royalties, fines and taxes. Supporting a REDD+ Funding Window would enable the country to have a mechanism to attract funding from these diverse actors. Existing institutions, namely the Environmental Protection Fund (EPF) and the Forest and Forest Resources Development Fund (FFRDF), could assume this role within Lao PDR.</p> <p>However, in order to benefit from these multiple funding sources, Lao PDR needs to address existing barriers to financial management. Through the proposed GCF programme, the capacity of both the EPF and FFRDF can be improved and coordination between the two will increase. In this manner, a REDD+ Funding Window to attract new financing sources will be supported.</p> <p>A more detailed assessment will be required to fully quantify the entire potential of new forest sector finance, considering existing regulations and potential new regulations to enhance Government revenue streams. In order to mobilize this new and additional financing, in-depth forest sector analysis will be required to develop a common vision and strategy together with the government of Lao for long-term sustainable financing. Key actions include:</p> <ul style="list-style-type: none"> ▪ An in-depth forest sector cluster analysis will be undertaken, including a detailed situation analysis of existing forest sector production, private sector activity and financing streams in close collaboration with the private sector and Government authorities (Department of Planning and Finance under MAF, MONRE and also the Ministry of Finance). The level of actual collection vs. potential collection of fees and taxes will be assessed and quantified. The assessment will also outline recommendations for actions to increase forest sector financing from existing legally-approved sources. An action plan to increase actual revenue collection will be prepared together with the responsible government entities. This will also include the potential for private sector investment that can contribute to the financing and development of the forest sector. One key focus will be on mobilizing private sector investment in the forest sector in order to mobilize additional (above BAU) financing. Beyond the existing forest sector revenue streams,

	<p>a second in-depth assessment will be carried out to identify potential additional and new funding sources such as payment for ecosystem services from the hydropower industry, roads fees in protected areas, and taxes and other national and international sources, and how such mechanisms can be implemented and enforced in the long-term. Pilots will be established and tested to inform the Government for large-scale implementation. With respect to the expected REDD+ results-based payments, an assessment will be carried out on how to best invest these revenues to leverage additional forest sector financing. Currently, a benefit-sharing assessment for results-based payment is being carried out by the REDD+ Division. The GCF programme will coordinate closely with this assessment and build upon this.</p> <ul style="list-style-type: none"> ▪ Based on the outcomes of the above-mentioned actions, the core of the Activity will be the implementation of a high-level dialogue with relevant Government entities to create awareness of the situation (opportunities and barriers for private sector investment in commercial forestry), and the potential to increase sustainable financing in the forest sector, the opportunities and the potential trade-offs.¹⁷⁸ ▪ After this analysis, strategies will be developed in order to enable fundraising for the REDD+ Funding Window. In order to complete strategy development, market studies will take place to inform potential sources of finance. Based on this, a strategic roadmap will be agreed with the Government to enhance financing. ▪ Based on the roadmap, the programme will support the Government on structuring and piloting of new payments for ecosystem services instruments (e.g. from hydropower companies) and will provide international and national high-level expertise. Based on decisions of the Government, expert input will be provided to develop new regulations, pilot new schemes and to operationalize these. ▪ Additionally, technical assistance for proposal writing will be provided. The programme will support the Government to seek new fundraising sources. <p>1.1.2. Building the EPF and FFRDF to act as a REDD+ Funding Window and finance forest sector development</p> <p>The FFRDF (under the Ministry of Agriculture and Forestry, MAF) has the legal mandate to collect and disburse forest sector financing to the district and village level. However, it currently has limited capacity to manage and disburse significant amounts of financing that meet international fiduciary standards. The Environmental Protection Fund (EPF) (under MONRE) is currently being used as the national financing institution to manage and disburse international grants for forest sector development and environmental protection. The Government of Lao PDR aspires to channel the ER-P REDD+ results-based payments (as well as international donor funding) through the FFRDF, acknowledging that capacities are still lacking (See Chapter 5 on FFRDF capacity needs assessment). Unlike the EPF, the FFRDF is also legally mandated to collect and disburse forest sector revenues (see technical evaluation below), thus is pre-destined to become the REDD+ Funding Window if sufficient capacities are in place. However, such collection and disbursement has been limited to date, primarily due to lack of ca-</p>
--	--

¹⁷⁸ The public-private dialogue, Action 2.2.2, will feed into this and is closely aligned.

	<p>capacity. KfW's Integrated Conservation and Biodiversity project has initiated capacity development of the FFRDF and channels small grants to village groups in proximity to the National Protection Areas (NPAs). In short, FFRDF has the legal mandate and tools to make it the central financing actor in the forest sector – but it is currently unable to fully exercise this capability.</p> <p>The GCF programme will build upon these existing experiences and will enable the EPF to establish a REDD+ Window that will serve as the interim REDD+ Funding Window to receive, manage and disburse REDD+ results-based payments, other international sources and the enhanced national forest sector revenues streams to the province, district and village level. FFRDF will play a role in managing specific activities under the EPF and will have its capacity built up in this manner.</p> <ul style="list-style-type: none"> ▪ EPF will be the direct recipient of GCF funds for a number of programme activities. With the input of the NPMU, EPF will then disburse and monitor funds to programme beneficiaries. Details on role of the EPF and its interactions with the FFRDF are found in the Project Implementation Manual. Additionally, a Project Operational Manual will be developed within the first few months of the programme. ▪ FFRDF will be supported in redesigning its governance structure, developing standard operating procedures (SOPs), manuals and internal guidance documents that meet international fiduciary and safeguards standards. This will also require the introduction of IT infrastructure that allows FFRDF to operate professionally and to undertake financial transfers managed on an electronic basis. ▪ Based on the standard operating procedures, FFRDF staff will be provided with training and capacity development support to build the needed skills. The capacity building will be provided by on-the job coaching. ▪ The NPMU will annually transfer small grants to the FFRDF and slowly increase these based on good performance. FFRDF will be responsible for providing village-based grants for forestry activities in the target villages in the framework of Activities 3.1-3.3 and in compliance with the eligible activities of FFRDF Decree PMO No 38 (2005). ▪ There are three distinct different scenarios for the ways in which the EPF and FFRDF could interact in the future to house the REDD+ Funding Window. If the FFRDF meets more ambitious milestones during the programme duration (for example, passing a GIZ due diligence), then the FFRDF can take on more responsibility from EPF, and eventually the entire REDD+ Funding Window can be transferred to EPF. Another scenarios is that the EPF and FFRDF are merged in order to take advantage of the synergies between the two institutions. A final scenario is the REDD+ Window will remain with the EPF. FFRDF may still receive funding from the EPF to manage smaller transactions, if it meets EPF standards. <p>1.1.3 Identification of existing and/or establishment of Village Banks or Village Development Funds to channel climate finance to target villages</p> <ul style="list-style-type: none"> ▪ Assessment of existing VBs/VDFs in all target villages. ▪ Concept development to address the needs identified in the assessment – with a focus on channeling of climate finance to the target villages. ▪ Support to existing or to-be-established VBs/VDFs, including technical assistance and capacity building.
--	---

	<p>1.1.4 Fundraising for forest and land use transformation</p> <ul style="list-style-type: none"> ▪ To augment the GCF programme preparation, throughout 2019 GIZ is investing in the development of a green credit line that will be linked to the selected in-depth value chain studies and identified “zero deforestation” business models – that boost agricultural productivity and reduce pressure on existing forests. The green credit line will be specifically targeted at the small and medium enterprises in the six GCF programme target provinces that will participate in Activity 2.2, and that will be supported in structuring business plans and investment proposals. Controlling deforestation under the credit line will be executed in line with other programme activities – on a jurisdictional basis in cooperation with local Government bodies. Jurisdictions will demonstrate a high level of political commitment to reducing deforestation in order to be eligible for hosting credit line projects. The green credit line will provide concessional debt finance to the SMEs. ▪ Discussions with the Lao financial institutions, ACLEDA Bank Lao Ltd. and Banque Pour Le Commerce Extérieur Lao (BCEL), are currently underway. A final decision on selection of a partner financial institution (expected in Quarter 1 2019) will be based upon: its fiduciary management capacity and financial health, its experience implementing credit lines with similar selection and monitoring requirements, its geographical relevance and presence in selected districts, and its experience lending to the agricultural sector. A mapping of selected financial institutions’ geographical (district-level) coverage can be found in Annex 1. ▪ The green credit line will mobilize concessional international climate finance of (initially) USD 10-15 million (e.g. from the NAMA Facility, private sector impact investment funds, etc.). The development of the credit line will carefully consider the barriers to agribusinesses accessing finance and investing in green activities. Business financial management capacity, presence of bank branches in rural areas, financial institution perception of risk, high interest rates and other factors will be assessed. The concessional aspects of the green credit will directly address the identified barriers. Capacity building for financial institutions on how to roll out the green credit line (e.g. marketing material) and how to monitor impacts will be an integral part of the activity. ▪ The process for partner banks to approve loans to agribusinesses will be as follows. The partner banks and the GCF programme will negotiate a set of “green-listed” activities that are eligible to be financed via the credit line and will contribute to reducing pressure on forests and will not cause deforestation. Once this is agreed, agribusinesses must prepare a loan application, in which they provide, amongst other items, the history of their business and the proposed use of funds. The proposed use of funds must match green-listed activities, to ensure that the credit line is not financing deforestation. Improved forest governance and bank safeguards will ensure this. Aside from meeting green-list activity requirements, businesses will have to demonstrate that the funding supplied by the green credit line is not available to them on the commercial market; i.e. that the credit line is “additional.” These process will be further elaborated upon in a funding manual, developed in cooperation with partner banks.
Result indicators	<p>Action 1.1.1 Mobilizing additional funding streams for REDD+</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> ▪ EUR 22.4 million government finance provided to the forest sector (baseline to be quantified at programme inception)

	<p><u>Target:</u></p> <ul style="list-style-type: none"> ▪ Increase in annual average Government forest sector finance by at least an additional EUR 100% /year in the programme region compared to baseline <p><u>Means of Verification:</u></p> <ul style="list-style-type: none"> ▪ Annual forest finance budget of the Government to be collected and compiled by the NPMU <p>Action 1.1.2 Transformation of the Forest and Forest Resource Development Fund (FFRDF) towards a REDD+ Funding Window and finance forest sector development</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> ▪ FFRDF started to receive, manage and disburse international financing from KfW in 2018/2019 to support ICBF project implementation (EUR 1.6 million until 2022) ▪ In 2017, EUR 0.18¹⁷⁹ million were collected and disbursed from national forest sector financing (nationally) <p><u>Target:</u></p> <ul style="list-style-type: none"> ▪ FFRDF is operational (according to developed SOPs) and at least EUR 5 million international finance channeled finance to the districts whilst meeting international fiduciary standards ▪ FFRDF increases Government revenue collection (to at least EUR 1 million/year) (>400% increase) and disbursement to support REDD+ implementation (compared to baseline) <p><u>Means of Verification:</u></p> <ul style="list-style-type: none"> ▪ External audit reports of FFRDF, financial records and disbursements <p>Action 1.1.3 Identification of existing and/or establishment of Village Banks or Village Development Funds to channel climate finance to target villages</p> <p>Action 1.1.4 Fundraising for forest and land use transformation</p> <p><u>Baseline:</u> 0 green credit lines implemented by supported financial institutions</p> <p><u>Target:</u></p> <ul style="list-style-type: none"> ▪ At least 1 financial institution provides concessional debt finance to the small and medium enterprises trained by the GCF programme. <p><u>Means of verification:</u> Financial institution green credit line M&E reports to NPMU team; and financial agreements between credit line investors and the financial institution managing the green credit line</p>
Inputs and investment items	<p>1.1.1. Mobilizing sustainable forest sector financing</p> <ul style="list-style-type: none"> ▪ External service providers will be contracted to undertake the analytical forest sector cluster studies and assessment of new financing streams ▪ NPMU expert input to support the execution of assessments and facilitate the Government dialogue on results and implementation of action points ▪ NPMU expert input to support the development of proposals

¹⁷⁹ Information from FFRDF: In 2017, FFRDF's annual budget was expected to be Kip 6.8bn; only Kip 1.8bn materialized (due to the decline in government fee income from timber). In 2018, Kip 4bn was expected; Kip 1.4bn materialized.

	<ul style="list-style-type: none"> International and national expert input on the development and testing of new forest-related financial instruments to inform national roll-out (e.g. PES) Finance for facilitation of dialogue with key Government actors and awareness-raising on forest financing in Lao PDR (workshops, logistics, information material) Strengthen the EPF as a vehicle for fundraising and attracting results-based payments by external service providers <p>1.1.2. Enabling the EPF and FFRDF to manage and channel REDD+ and forest sector finance</p> <ul style="list-style-type: none"> An external service provider will be hired to support the restructuring and building international-standard compliance system and procedures Procurement of IT infrastructure for EPF and FFRDF NPMU expert input and external service provider input for capacity development (up to 3 months annually of international staff time from the NPMU) Capacity building events including workshops, logistics and information material Grants to FFRDF (received from EPF) to be channeled to village level (budgeted under Activity 3.1 and 3.3) Provision of operational budget to manage, monitor and report on fund disbursement (transportation and financial management administration fee) Annual external audits by professional audit companies <p>1.1.3 Identification of existing and/or establishment of Village Banks or Village Development Funds to channel climate finance to target villages</p> <ul style="list-style-type: none"> Assessment of existing VB's/VDF's in all target villages Concept development to address the situation identified in the assessment/sustainable channeling of climate finance to target villages Invest in existing or to be established VB's/VDF's and built the capacities of such institutions to receive climate finance <p>1.1.4 Fundraising for forest and land use transformation</p> <p>The hiring of the external services provider will be under the responsibility of the NPMU, following GIZ procurement rules or international contracts. NPMU will be responsible for managing the international service contract.</p>
Technical evaluation / justification / barriers addressed	<p>With respect to the forest sector, one of the key barriers to be addressed is the lack of financing and the weak level of collection of legally-mandated fees and taxes (e.g. VAT, income tax, timber harvesting taxes, land taxes). Building upon existing analytical analysis, the Activity aims to carry out an in-depth analysis to inform the government of the potential to improve forest sector financing through improved law enforcement and fee collection and, in parallel, to develop alternative financing streams to finance forest sector development and conservation.</p> <p>The Decree on the Forest and Forest Resource Development Fund (No 38/PM, 2005)¹⁸⁰ <i>"determines principles, regulations on the establishment, management</i></p>

¹⁸⁰

https://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKewiY7ICPtOreAh-VEzKQKHSj1Ay0QFjABegQIAxAC&url=https%3A%2F%2Ftheredddesk.org%2Fsites%2Fdefault%2Ffiles%2Fdecreeonforestrydevelopmentfund1_1.doc&usg=AOvVaw01IVBg7Ec9WbIsJB_7IGs

Article 12 The sources of revenues for the Fund

	<p>and monitoring of the Forest and Forest Resource Development Fund, aiming at raising funds from people engaged in forestry operations so that funds can be used for management, protection and development of the forest resources and contributed to the national economic and social development". The FFRDF was established under the Ministry of Agriculture and Forestry.</p> <p>Extracted from ER-PD: <i>"The national REDD+ Readiness process conducted substantive assessment of options and opportunities for setting up a REDD+ Funding Window management framework by looking at existing funds. Through the Benefit-Sharing Technical Working Group (TWG), considered the pros and cons of three existing national funds for hosting the RBPs once received. These are: the Forestry and Forest Resource Development Fund (FFRDF), the Environmental Protection Fund and the Poverty Reduction Fund. Based on the fund characteristics, the FFRDF has been identified as the best potential host for the REDD+ RBPs. At this stage, the Benefit Sharing TWG has recommended that the REDD+ Window will be established as a specialized sub-window within the FFRDF. It has also been agreed that the monetary flow of REDD+ results-based payments can be adapted to the framework used for the benefit-sharing of the timber revenues from harvesting from production forests, as specified in Prime Minister's Order No. 1 (2012).¹⁸¹"</i></p> <p>However, the capacity needs assessment of the FFRDF (Section 5) has demonstrated that the FFRDF does not currently have sufficient capacities to manage funds according to international fiduciary standards, despite being legally a more appropriate institutional to house the REDD+ Funding Window. That has led to the decision to use the Environmental Protection Fund (EPF) as the national Executing Entity in the implementation of the GCF programme and, in parallel, to build capacities of the FFRDF. This Activity intends to build the capacity of the FFRDF and to develop an alternative institution that has the capacity to channel forest sector financing, including REDD+ results-based finance, to a variety of forest sector actors.</p>
Implementation mechanisms	<p>Actions will be led and implemented by the NPMU. It will be responsible for the procurement and management of external services providers needed for the implementation of the Actions. It will also provide expert input and lead communication and dialogue with Government entities.</p>
Fund flow arrangement	<p>Action 1.1.1</p> <ul style="list-style-type: none"> ▪ NPMU will be responsible for the financial management and procurement of the Action ▪ The Government of Lao PDR will provide staff inputs to the dialogues and execution of the Activities. <p>Action 1.1.2 and 1.1.3</p> <ul style="list-style-type: none"> ▪ NPMU will finance the capacity building measures and procure the external services to support FFRDF and VDF capacities and operational infrastructure.

-
- Costs for forest rehabilitation, forest land and forest resources
 - Obligatory costs for tree planting and non-timber forest produce regeneration
 - Costs for forest inventory, forestland and forest resources
 - Contributions from Lao and foreigners who run business on forestry, non-timber forest produce and wildlife
 - Contributions from the state budget, individuals, juridical entities, collectives, Local and international social organization, international institutions including financial institutions.
 - Other revenues including interests or dividends from investors or shareholders
 - Revenues from profit dividends from selling woods in the production forest as per the Prime minister's Decree No 59/PO, dated on 22/05/2002 on the Sustainable Production Forest Management.

¹⁸¹ Revenues from timber harvests are to be shared between the National Treasury (in lieu of timber taxes and royalties) and the FFRDF, with the latter distributing shares to the PAFOs, DAFOs, and villages involved in the logging, based on a set percentage share. (President Decree on Timber Revenue Sharing for PSFM, No. 001/PM, 2012.)

	<ul style="list-style-type: none"> ▪ NPMU will provide grant finance to the FFRDF and VDFs. ▪ FFRDF will undertake the financial management of the grants and channel these to the target villages by applying the newly-established standard operational procedures. <p>Action 1.1.4</p> <ul style="list-style-type: none"> ▪ NPMU and PPMU agribusiness expert inputs ▪ International service contract to support the fundraising action ▪ Travel of staff 	
Co-finance / leverage	<p>Total activity cost: 2.34 million Euro</p> <ul style="list-style-type: none"> ▪ GCF finance: 923,133 Euro ▪ Total BMZ co-finance: 1,311,145 Euro ▪ Total Lao PDR Government co-finance: 106,920 Euro (FFRDF staff) <p>Note on GCF financing: GCF financing will be partly channeled through the FFRDF in the implementation of Activity 3.1 and 3.3.</p>	
Exit strategy / long-term sustainability	<ul style="list-style-type: none"> ▪ The Activity specifically targets the key barrier of insufficient forest sector financing. It aims to mobilize additional financing to finance forest sector development and management and replace reliance on international financing, beyond the programme lifetime. Mobilization of additional financing will help to overcome budget shortfalls that often limit the uptake of REDD+ activities. The financing gap is expected to be partly addressed by the GCF and by REDD+ results-based finance in the short-term while the activity will identify and operationalize alternative domestic public and private financing sources that can be sustained in the long-term. ▪ With the mobilization of new and additional financing, a national forest sector financial management institution's capacity (REDD+ Funding Window) will be built to manage and distribute this financing. Revisions to the FFRDF will ensure that a transparent and accountable fund, with accountable management and operations, is able to channel finance in the future for REDD+. 	
Beneficiaries	The entire population of Lao PDR (6,901,000 total, including 3,458,000 men and 3,443,000 women) will benefit from a REDD+ Funding Window. ¹⁸²	
Impacts and co-benefits	<p><u>GHG mitigation</u>: GHG mitigation will occur indirectly through the implementation of sustainable forest landscape management and restoration following land use plans that will limit deforestation and forest degradation in the design. The FFRDF will channel financing for REDD+ activities and will enable for effective implementation of activities under Output 3 (see Chapter 9 for GHG mitigation quantification).</p> <p><u>Socio-economic</u>: Financing of activities that increase the livelihood of local people.</p> <p><u>Environmental</u>: Fund is eligible to, and able to, finance conservation and protection of watersheds and protected areas, tree planting, forest rehabilitation, wildlife conservation, training and conservation education.</p> <p><u>Gender</u>: A gender policy needs to be developed for the FFRDF that specifically supports women's group activities.</p>	
Risks	Risks	Mitigating measures
	Government interest in mobilized additional forest sector finance conflicts with vested interests	<ul style="list-style-type: none"> ▪ Continued public sector dialogue with different Government actors, including high-level political actors to inform on missed opportunities

		<ul style="list-style-type: none"> ▪ Building upon existing legal mandates to levy fees and taxes collection systems ▪ Developing capacities of a REDD+ Funding Window to management and disburse financing
	FFRDF capacity building progress is too slow, and FFRDRF cannot manage REDD+ results-based finance within the project's timeframe.	<ul style="list-style-type: none"> ▪ Dedicated support by the programme ▪ Continued reliance on EPF as a back-up strategy. The programme has been designed to initially use the EPF to channel the necessary resources, as the capacities and accountability systems are already in place (see capacity assessment in Chapter 5). It is intended that the FFRDF will eventually take over from the EPF once capacities and systems are in place; however, if this is not possible the programme will continue to channel resources through the EPF.

3.3.1.1 Activity 1.2: Mainstreaming REDD+ in NDCs and socio-economic development plans

Activity 1.2: Mainstreaming REDD+ in NDCs and socio-economic development plans (SEDPs)

Contribution to GCF outcome(s)	<p>M5.0 Strengthened institutional and regulatory systems</p> <p>M9.0 Improved management of land or forest areas contributing to emissions reductions</p>
Contribution to programme outputs	Enabling environment for REDD+ implementation and NDCs is created
Description of actions	<p>Government SEDPs at the national, province and district levels are prepared as 5-year plans and are the primary strategic reference for Government entities to fulfill their work. SEDPs and sectoral plans are the basis for Government budgeting, and thus it is crucial that REDD+ related interventions/NDCs are integrated. As mentioned in the section on 'technical evaluation and justification' below, mainstreaming of REDD+ is relatively limited or absent in current SEDPs at the national, provincial and district level. This limits the attention to REDD+/NDCs at all levels, including attention to achieving targets and dedicating Government budget to REDD+ policies and measures.</p> <p>The integration of REDD+ interventions and NDCs into the SEDPs will be a key reference point for future Government co-financing (2021-2025, 2026-2030) and provision of budget for REDD+. Thus, this Activity will improve the allocation of state resources across sectors for REDD+ in combination with Activity 1.6 - sustainable forest sector financing. Furthermore, many sub-national Government authorities are still in the process of building up capacities on REDD+, and thus such support will mainstream REDD+ into plans and planning processes, encouraging targeted action for REDD+.</p> <p>1.2.1. Mainstreaming of REDD+ into NDC</p>

	<p>Provision of technical and logistical support to government staff to integrate the National REDD+ Strategy to ensure interventions are fully considered and budgeted in the NDC.</p> <p>1.2.2. Mainstreaming of REDD+ into provincial socio-economic development plans (SEDPs) (2021-2025 and 2026-2030) Provision of technical and logistical support to Government staff for the integration of Provincial REDD+ Action Plans (PRAPs) into 6 provincial SEDP planning processes (programme area provinces). The PRAPs were developed in 2017/2018 and reflect the national and provincial SEDP planning horizons.</p> <p>1.2.3. Mainstreaming of REDD+ into district socio-economic development plans (SEDPs) (2021-2025 and 2026-2030) Provision of technical and logistical support to Government staff to integrate REDD+, PRAP, and NDCs elements into district-level SEDP preparation in the 28 target districts of the GCF programme.</p>
Result indicators	<p>Action 1.2.1 <u>Baseline:</u> REDD+ is mentioned in the NDC, but there is a need to further mainstream REDD+ related measures (e.g. NPA management, monitoring and evaluation, cross-sectoral coordination, infrastructure planning and monitoring)¹⁸³. <u>Target:</u> REDD+ mainstreamed into the NDC for the periods 2021-2025. <u>Means of Verification:</u> Publicly published NDC</p> <p>Action 1.2.2 <u>Baseline:</u> REDD+ is not explicitly mentioned in existing provincial SEDPs (2016-2020), related measures are not fully integrated and inconsistencies exist (e.g. conflicting targets and priorities). <u>Target:</u> REDD+ mainstreamed into the six provincial SEDPs by integrating PRAP interventions, i) 2021-2025 and ii) 2026-2030 (12 provincial SEDPs in total) <u>Means of Verification:</u> Publicly published 6 provincial SEDPs (2021-2025 and 2026-2030) and PRAPs</p> <p>Action 1.2.3 <u>Baseline:</u> REDD+ is not explicitly mentioned in district SEDPs, related measures are not fully integrated and inconsistencies exist (e.g. conflicting targets and priorities). <u>Target:</u> REDD+ strengthened and further mainstreamed into the 28 target district SEDPs for the periods i) 2021-2025 and ii) 2026-2030 (56 district level SEDPs in total). <u>Means of Verification:</u> Publicly published 56 district SEDPs (2021-2025 and 2026-2030) and PRAPs</p>

¹⁸³ Lao PDR ER-PD and PRAPs

<p>Inputs and investment items</p>	<p>Action 1.2.1</p> <ul style="list-style-type: none"> ▪ Technical inputs from the national REDD+ Task Force and REDD+ Office into the national planning process (participation in planning meetings and provision of technical inputs) ▪ The national programme management unit (NPMU) and the provincial programme management unit (PPMU) (See also Chapter 4 for implementation arrangements) expert staff input to national, Provincial REDD+ Task Force and REDD+ Office to increase their capacities and improve their contribution to the NDC planning process ▪ 2 consultation workshops on integration of REDD+ National Strategy measures into NDC <p>Action 1.2.2</p> <ul style="list-style-type: none"> ▪ Technical inputs from the Provincial REDD+ Task Force and REDD+ Office to the provincial SEDP planning processes ▪ PPMU expert staff input to provincial REDD+ Task Force and REDD+ Office to increase capacities in provincial SEDP planning processes and integrate PRAP interventions into provincial SEDP ▪ 12 province-level workshops to support REDD+ mainstreaming into province - level SEDPs <ul style="list-style-type: none"> -Workshop costs for stakeholder consultations in each province (including venue, transportation, etc.) -Elaboration and printing of training materials <p>Action 1.2.3</p> <ul style="list-style-type: none"> ▪ PPMU expert staff inputs to DRAP units at district level in the planning process (main support will be provided by provincial REDD+ Office and Taskforce) ▪ 56 (2x per district) district-level workshops to support REDD+ mainstreaming into district-level SEDPs <ul style="list-style-type: none"> -Workshop costs for stakeholder consultations in each province (incl. venue, transportation, etc.) -Elaboration and printing of training materials ▪ Transportation for Provincial REDD+ Task Force / REDD+ Office members to districts to be provided and administered by the PPMU.
<p>Technical evaluation / justification / barriers addressed</p>	<p>The 8th National SEDP (2016-2020) and the NDC specifically mention the implementation of REDD+ (see Section 1.7) as a priority activity to mitigate climate change.¹⁸⁴ While this demonstrates strong Government commitment to REDD+, there is a need to further incorporate REDD+ into the future SEDPs (2021-2025; and 2026-2030) that are the primary Government instruments to implement policies and objectives, including ensuring REDD+ mainstreaming across sectors, especially in infrastructure, forestry and agriculture which are closely linked to deforestation and forest degradation.¹⁸⁵ National, province-level and district-level SEDPs tend to be inconsistent and interventions are not fully in line with the objectives of the national REDD+ Strategy and Provincial REDD+ Action Plans (PRAPs) that were developed in the timeframe 2016-2018.¹⁸⁶ This has led to an inability to monitor and enforce compliance with plans, policies and regulations. The SEDPs at the national, province and district levels are prepared as 5-year plans and are the primary strategic reference for Government entities to fulfill</p>

¹⁸⁴ Koch 2016

¹⁸⁵ Lao PDR ER-PD and PRAPs;

¹⁸⁶ Lao PDR ER-PD

	<p>their work. SEDPs and sectoral plans are the basis for Government budgeting, and thus it is crucial that REDD+ related interventions are integrated. The integration of REDD+ interventions into the SEDPs will be a key reference point for future Government co-financing (2021-2025, 2026-2030) and provision of budget for REDD+. Thus, this Activity will improve the allocation of state resources across sectors for REDD+ in combination with Activity 1.6 - sustainable forest sector financing. Furthermore, many sub-national Government authorities are still in the process of building up capacities on REDD+, and thus such support will mainstream REDD+ into plans and planning processes, encouraging targeted action for REDD+.</p> <p>Measures linked to the WB Carbon Fund Emission Reduction Program and the National REDD+ Strategy can be mainstreamed and strengthened within national-, provincial- and district-level SEDPs, thereby addressing potential inconsistencies and improving implementation of REDD+ policies and measures (e.g. how to strengthen cross-sectoral coordination, monitoring, transparency and compliance in key sectors, NPA management plans¹⁸⁷, etc.).</p>
Implementation mechanisms	<p>Action 1.2.1</p> <ul style="list-style-type: none"> At the national level, NDC planning is under the responsibility of the provincial Governor's Office and the Ministry of Planning and Investment (through which the line ministries are represented). The national REDD+ Task Force and REDD+ Office will be responsible for the implementation of this Activity. They will be supported by the NPMU and PPMU, with expert inputs from workshops and meeting events <p>Action 1.2.2 and Action 1.2.3</p> <ul style="list-style-type: none"> At the province and district level, the Provincial REDD+ Task Forces and REDD+ Offices will be responsible for the implementation of the Activity. For all levels, technical support from PPMU expert staff will be provided to support the implementation of these actions. REDD+ Task Forces will be responsible for coordinating with other line ministries and will ensure a consistent approach is applied (e.g. across sectors, provinces and districts). NPMU and PPMUs will provide financial and technical staff support for workshops and travel.
Fund flow arrangement	<ul style="list-style-type: none"> At the national level, only expert input and logistics support from the NPMU will be provided. At the provincial and district level, expert input, workshop costs and transportation costs will be provided and administered by PPMUs
Co-finance / leverage	<p>Activity 1.2 will be exclusively financed by BMZ and by the Government of Lao PDR.</p> <p>Total activity cost: 568,433 Euro</p> <ul style="list-style-type: none"> Total BMZ co-finance: 374,393 Euro Total Lao PDR government co-finance: 194,040 Euro <p><u>Note on co-finance:</u></p> <ul style="list-style-type: none"> Government staff from the REDD+ Task Force, the REDD+ Office and other ministries will provide their work time to implement the interventions.
Exit strategy / long-term sustainability	<ul style="list-style-type: none"> Mainstreaming REDD+ in provincial and district SEDPs in 2021-2025 and 2026-2030 will ensure that REDD+ is integrated into SEDPs beyond the project's lifetime.

¹⁸⁷ Braeutigam 2015

	<ul style="list-style-type: none"> REDD+, once integrated into the provincial and district SEDPs, will become eligible for national and sub-national public financing, and will be fully integrated into the country's budgeting process and reduce reliance on international financing Awareness and capacities on REDD+ will be built within national, provincial and district governments 						
Beneficiaries	<ul style="list-style-type: none"> Directly, Government staff (estimated as being 280 staff members) in different ministries will benefit from the activity, due to increased awareness and strengthened capacities on REDD+. Indirectly, the entire population of Lao PDR (6,901,000 inhabitants, including 3,443,000 women and 3,458,000 men)¹⁸⁸ will benefit from national SEDPs. The entire population of the programme provinces (1,765,276 inhabitants, including 882,638 women and 882,638 men)¹⁸⁹ will benefit from provincial SEDPs. 						
Impacts and co-benefits	<p>GHG mitigation: GHG mitigation will occur indirectly through the implementation of mainstreamed REDD+ measures (see Chapter 9 for mitigation quantification).</p> <p>Socio-economic: Integration into SEDPs will ensure that REDD+ is balanced with the country's socio-economic development priorities, including measures supporting social inclusion and gender equality.</p> <p>Environmental: Integration of REDD+ policies and measures into SEDPs will ensure support to the environmental goals of the country (e.g. increasing forest cover, strengthening biodiversity conservation, etc.).</p> <p>Gender: Gender-proof future measures to implement SFM, FLR and village forestry under SEDP planning processes.</p>						
Risks	<table> <tr> <th>Risk</th><th>Mitigation/ Avoidance Measure(s)</th></tr> <tr> <td>Delay in programme start may not match with the development planning processes in 2020</td><td> <ul style="list-style-type: none"> GIZ will commence support (using BMZ funding) before the GCF programme implementation commences </td></tr> <tr> <td>Investments in large infrastructure deemed national priorities (e.g. dams, roads and mines) could lead to direct deforestation, or result in the relocation of villages to forested areas. Relocations often result in deforestation and forest degradation as villages are often moved to areas with insufficient rice paddy and land allocation for households to ensure food security.</td><td> <ul style="list-style-type: none"> Improved cross-sectoral planning and dialogue, and improvements in monitoring will further increase accountability with infrastructure projects and village relocation. Pre-screening of target districts and villages to ensure the programme focuses on areas without large concessions planned. </td></tr> </table>	Risk	Mitigation/ Avoidance Measure(s)	Delay in programme start may not match with the development planning processes in 2020	<ul style="list-style-type: none"> GIZ will commence support (using BMZ funding) before the GCF programme implementation commences 	Investments in large infrastructure deemed national priorities (e.g. dams, roads and mines) could lead to direct deforestation, or result in the relocation of villages to forested areas. Relocations often result in deforestation and forest degradation as villages are often moved to areas with insufficient rice paddy and land allocation for households to ensure food security.	<ul style="list-style-type: none"> Improved cross-sectoral planning and dialogue, and improvements in monitoring will further increase accountability with infrastructure projects and village relocation. Pre-screening of target districts and villages to ensure the programme focuses on areas without large concessions planned.
Risk	Mitigation/ Avoidance Measure(s)						
Delay in programme start may not match with the development planning processes in 2020	<ul style="list-style-type: none"> GIZ will commence support (using BMZ funding) before the GCF programme implementation commences 						
Investments in large infrastructure deemed national priorities (e.g. dams, roads and mines) could lead to direct deforestation, or result in the relocation of villages to forested areas. Relocations often result in deforestation and forest degradation as villages are often moved to areas with insufficient rice paddy and land allocation for households to ensure food security.	<ul style="list-style-type: none"> Improved cross-sectoral planning and dialogue, and improvements in monitoring will further increase accountability with infrastructure projects and village relocation. Pre-screening of target districts and villages to ensure the programme focuses on areas without large concessions planned. 						

¹⁸⁸ LSB 2018; Official statistical data from the 2017 Statistical yearbook

¹⁸⁹ Ibid.

3.3.1.2 Activity 1.3 Regulatory framework

Activity 1.3 Regulatory framework	
Contribution to GCF outcome(s)	<p>M5.0 Strengthened institutional and regulatory systems</p> <p>M9.0 Improved management of land or forest areas contributing to emissions reductions</p>
Contribution to programme output	Enabling environment for REDD+ implementation is created
Description of actions	<p>1.3.1. Creating an enabling environment for SFM and private sector investment in community-based agroforestry development</p> <p>Revision, modification and drafting of relevant laws, decrees and regulations that incentivises investments which conform with land use plans (including deforestation-free commitments), which act responsibly in the context of local regulatory frameworks and which sustain positive relations with local communities. The strengthened regulatory framework will also enable and strengthen the adoption of SFM, FLR and village forestry:</p> <ul style="list-style-type: none"> Assessment of financial and regulatory incentives and barriers for smallholders to improve smallholder engagement in village-based agroforestry and plantation forestry. Based on the assessment, the programme will support the revision relevant implementation decrees, regulations and guidelines to enable smallholder and private sector engagement in sustainable forestry activities. (The FAO-implemented GCF readiness project is expected to contribute options that will be integrated into this Action.) Revision of regulatory framework for participatory sustainable forest management (SFM) in production forests based on sustainable forest management plans, and targeted measures to support forest recovery and regeneration in production forests. Revision and support legal adoption (in Forestry Law and Land Law) for village forestry to enable sustainable harvesting of timber and NTFPs for commercial purposes based on forest inventories and approved sustainable management plans. Insight will be sought from diverse stakeholders, including CSOs. Representatives from the FLEGT Lao CSO Core Committee will be consulted among others.¹⁹⁰ <p>1.3.2. Capacity building and awareness-raising on the legal forest sector framework</p> <p>Provision of awareness-raising and capacity development on the revised regulations to Government authorities (national, provincial, district and <i>kumban</i> level), civil society organizations (CSOs, including members of the FLEGT Lao CSO Core Committee among others) and villagers. This will ensure that all Government authorities and villages and broader stakeholder groups understand the key regulations related to forest management and apply it consistently.</p>
Result indicators	Action 1.3.1

¹⁹⁰ Many CSOs are interested the development of a mechanism for management of non-commercial timber from Village Use Forests with the expectation that communities will protect the forests best when they have clear rights to benefit from them. CSOs have obtained necessary funding to conduct research on the topic of Village Use Forest timber, among other topics, in order to provide recommendations on how to address this topic in the framework of FLEGT. Thus, their insight will be important for the implementation of this action.

	<p>Baseline:</p> <ul style="list-style-type: none"> ▪ Inconsistent interpretation of the regulatory framework for private sector plantation development at national, provincial and district levels (PMO 9) ▪ Draft Forestry Law and Land Law (currently under Government consultation) do not permit SFM for commercial purposes in village forests ▪ PMO 15 prohibits logging within production forests, and the Forestry Law does not specifically mention participatory sustainable forest management ▪ PMO 9 includes inconsistent incentives for smallholder engagement in village-based agroforestry and plantation forestry ▪ ISP is not applied and/or not applied in a uniform way in national, provincial or district level SEDP planning <p>Target:</p> <ul style="list-style-type: none"> ▪ PMOs 9 and 15 revised and endorsed by Government ▪ Forestry and Land Law, as well as supporting decrees, amended to include provisions to enable participatory SFM in production forests ▪ Forestry Law amended to include provisions for sustainable timber harvesting in village forestry based on sustainable village forest management plans ▪ Laws, regulations and guidelines developed and approved by the Government to facilitate and enhance the implementation of ISP, SFM, FLR and village forestry <p>Means of verification:</p> <ul style="list-style-type: none"> ▪ Government-approved revisions to relevant laws for participatory SFM, FLR/ISP and village forestry <p>Action 1.3.2</p> <p>Baseline:</p> <ul style="list-style-type: none"> ▪ Lack of awareness and inconsistent understanding of the key regulations related to production forests, village forestry and protection forests <p>Target:</p> <ul style="list-style-type: none"> ▪ All Government authorities (nationally, province-level and district-level) and target villages have access to key regulations and consistently apply the regulations <p>Means of verification:</p> <ul style="list-style-type: none"> ▪ PPMU monitoring and evaluation reports, surveys on forestry regulation understanding, and records of conducted trainings (training materials, participation lists, photos, summaries) and awareness-raising campaigns
<p>Inputs and investment items</p>	<p>Action 1.3.1</p> <ul style="list-style-type: none"> ▪ International and national expert inputs (NPMU, PPMUs and consultants) for assessments, revisions and recommendations related to: PMO 15, PMO 9, the Forestry Law, Land Law, SFM, FLR and village forestry ▪ Preparation of training and workshop materials ▪ Stakeholder consultations (including Government officials, Lao Women's Union, Lao Front for National Development (LFND), CSOs, private sector actors, among others) to receive feedback on recommendations <ul style="list-style-type: none"> ○ Workshop and transportation costs to facilitate and strengthen cross-sectoral coordination ○ Material costs (printing, translation of key findings [if necessary]) ▪ Technical assistance for Government officials to make the recommended revisions ▪ Government officials' expert input into the revision and adoption of the revised regulatory framework <p>Action 1.3.2</p>

	<ul style="list-style-type: none"> ▪ Technical inputs by the NPMU, PPMU experts and REDD+ Office (e.g. developing trainings and informative materials) ▪ Meetings with national, provincial and district governments to facilitate cross-sectoral coordination ▪ Trainings (workshops – including venue, travel costs for trainers and participants, training materials) on key laws and regulations (e.g. Forestry Law, Land Law, PMO 9, PMO 15) ▪ Workshop and transportation costs to facilitate and strengthen cross-sectoral coordination ▪ Material costs (printing costs, informative materials, translation/translators) ▪ Trainings and technical assistance for sub-national forest officers at the provincial and district level on how to evaluate investment proposals, provide ongoing implementation support to the private sector, and monitor and evaluate (and enforce) the implementation of investment proposals
Technical evaluation / justification / barriers addressed	<p>The Forestry law (No.06/NA, 2007), like the Land Law, is currently under revision. 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 updating of regulations is needed following revisions to the Law.</p> <p>Regulations for sustainable land use activities are at times complex, contradictory, inconsistent and/or unclear.¹⁹¹ Support is needed to address such gaps and inconsistencies in the regulatory framework to create an enabling environment that incentivizes investments that conform with land use plans (including deforestation-free commitments), act responsibly in the context of local regulatory frameworks and that will sustain positive relations with local communities. The strengthened regulatory framework will also facilitate and encourage stakeholders to adopt SFM, FLR and village forestry.¹⁹² To facilitate engagement with the private sector, the ongoing GCF readiness project implemented by FAO is expected to generate policy options and models for the programme to adopt.¹⁹³ Financed exclusively by BMZ and the Government of Lao PDR.¹⁹⁴ To facilitate engagement with the private sector, the ongoing GCF readiness project implemented by FAO is expected to generate policy options and models for the programme to adopt.¹⁹⁵</p> <p>The proposed measures aim to target the following core topics:</p> <ul style="list-style-type: none"> ▪ Lifting the ban on logging in production forests (PMO No. 15) and ensuring strong regulations are in place that promote participatory sustainable forest management (where possible, understanding that many areas of production forests require regeneration), and enhance FLEGT.

¹⁹¹ E.g. ER-PD ; Lestrelin et al. 2013

¹⁹² Smith, H., Ling, S., Boer, K. (2017), 'Teak plantation smallholders in Lao PDR: what influences compliance with plantation regulations?', *Australian Forestry*, 80(3): 178-187.

¹⁹³ GCF readiness project implemented by FAO: Incentive Mechanisms for Private Sector Engagement Under REDD+ in Lao PDR, https://www.greenclimate.fund/documents/20182/466992/Readiness_proposals_-_Laos_FAO_Strategic_Framework.pdf/e8bde9e1-93d1-d119-e1cf-b6603f57c26a

¹⁹⁴ Smith et al. 2017

¹⁹⁵ GCF readiness project implemented by FAO: Incentive Mechanisms for Private Sector Engagement Under REDD+ in Lao PDR, https://www.greenclimate.fund/documents/20182/466992/Readiness_proposals_-_Laos_FAO_Strategic_Framework.pdf/e8bde9e1-93d1-d119-e1cf-b6603f57c26a

- Revising regulations on village forest management, in order to permit sustainable timber and NTFP harvesting to provide income and some economic incentives to villages to sustainably manage village forests.
- One challenge that remains in the sector, and that needs further analysis, is whether or not “incentives” provided for commercial planted forest activities have unforeseen consequences that are actually disincentives (i.e. revising PMO 9). In particular, considering tax breaks vs. costs of land registration. While currently tax breaks are offered, in order to qualify for them the land owner must have their land registered and pay taxes (however, the current incentive scheme constrains smallholder participation in formal markets – see following info box).¹⁹⁶ This also needs to be further assessed with regard to market access, benefits and initiatives such as the FLEGT-VPA, among others. The following excerpt from Smith et al. (2017) provides more detail on the choices made by local producers when it comes to paying land tax vs. receiving tax breaks.

Info Box 8. Incentives vs. disincentives for village-level plantations¹⁹⁷

The Forestry Law and Land Law comprise the legal framework for forest plantations in Lao PDR. Prime Minister No. 96 (2003) was the original decree providing key considerations and regulations for tree planting and environmental protections, which was recently revised in Prime Minister Order No. 09 (2018), including information on incentives for tree plantation establishment, including the following:

- Land used for plantations is exempt from land tax (3 years after plantation established), if plantations are in accordance with the Forestry Law
- Compensation can be provided to tree growers where land is used for public services/ benefits
- Owners of registered plantations are exempt from: i) reforestation fees, forestry resource fees and other taxes in cases where the felling of planted timber is for household use and public benefit
- Owners of registered plantations are exempt from reforestation and forestry resources fees where the use of timber from plantations is for domestic use and for export; however, income tax must be paid.

Smith et al. (2017) note that “*over time plantation registration has become a basic requirement to establish and demonstrate the legality of plantations and the timber they produce (Smith 2014) and it is now embedded in regulatory steps throughout the timber value chain to the point of export.*”¹⁹⁸ However, increasing regulations associated with registration and other key steps along the value chain have become increasingly complex, and have increased the transaction costs for plantation owners, having a particularly notable impact on smallholders and village plantations.

Despite these regulations, plantation registration is relatively low. While land-tax incentives are intended to promote registration, they are not as effective as intended. Smith et al. calculated the average annual land tax fees for teak plantations in Luang Prabang and compared with the fees for plantation registration and found that villagers would rather pay the land tax fee (6000 LAK) annually instead of paying high upfront costs (up to 300,000 LAK in one payment) for plantation registration, where tax returns can be applied

¹⁹⁶ Ibid.

¹⁹⁷ Note: Information presented in this info box is summarized from the article by Smith et al. 2017

¹⁹⁸ Smith et al. 2017, p. 180

	<p>for based on complex administrative steps and follow-up). Many plantation owners only register the plantation directly prior to harvesting, in order to guarantee that the wood will be sold (i.e. guaranteeing income to offset registration costs)</p> <p>Such complexities are exacerbated by a complicated governance structure, where overlapping jurisdictions often cause challenges and responsibilities are often misinterpreted and misapplied by government authorities (at provincial, district, <i>kumban</i> and village level). Smith et al. 2018 notes that these are barriers that result in “high transaction costs which either serve to constrain individual smallholder participation in the market or encourage participation in informal processes that circumnavigate the rules”. Barriers facing law enforcement, particularly limited budgets and resources, mean that the risk of inspections and sanctions are relatively low which further limit registration.</p>
	<p>Production Forests:¹⁹⁹ Prime Minister Order 31 (2013) prohibited timber harvesting within production forest areas in response to rampant unsustainable harvesting (legal and illegal) within these areas. In the programme area, commercial logging in these areas is not considered a major driver of deforestation due to the absence of marketable tree species of minimum harvestable diameter – largely due to overharvesting in the past.²⁰⁰ Many production forests are highly degraded, and in need of natural regeneration and sustainable management (sustainable harvesting is economically attractive only in 5 district out of 51 in the programme area). While PMO 31 and its eventual extension (PMO 15) have had positive impacts, including reduced deforestation, they have also limited income from production forests – where there is a commercial potential for sustainable harvesting (the potential differs in each forest, where highly degraded forests require more medium- to long-term management for restoration/regeneration to enable future SFM). Furthermore, provincial and district authorities have noted that budgets for Government authorities, including those responsible for managing these forests, have been negatively affected due to reduced revenue from commercial forestry.</p> <p>Village Forests²⁰¹: Village use forests are production forests (including NTFPs) located within the village area and which can be located in the production forest, protection forest or unclassified forest categories, which the Government allocates to a particular village to manage and to preserve. Villagers are permitted to utilize the forest in a sustainable manner in accordance with the law, according to a village forest management plan.²⁰² The plan has to be endorsed by the District Vice Governor based on a proposal by DONRE and DAFO.</p>

¹⁹⁹ Section 6 of the Forestry Law Legal Compendium Document provides an overview of relevant legislation for Production Forest Areas, including Table 2 which provides a list of relevant legal instruments and documents (see Smith and Alounsavath 2015).

²⁰⁰ Lestrelin et al. 2013; Koch 2017

²⁰¹ For additional information on the legal basis for village forests, and key definitions refer to CliPAD 2016 and Smith and Alounsavath 2015.

²⁰² CliPAD 2016; A list of permitted activities for village forestry is provided in Annex 9 of the VFMP guidelines. 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,

	<p>Timber harvested from village forests cannot legally be sold by villagers (it can only be used for domestic use).²⁰³ However, there is a potential for villagers to implement sustainable forest management, where sustainable timber harvesting could provide additional income for villagers and provide increased incentives to sustainably manage their forests.</p> <p>Village-based agroforestry and plantations²⁰⁴</p> <p>Prime Minister Order No. 9 (<i>Concerning the enhancement of governance in the use of concession lands for industrial tree plantation and the plantation of other crops within the country – July 2nd 2018</i>) has created new momentum for the planted forest sector. There are various levels of understanding of the revised regulations at the national, provincial and district level. Private sector actors and local farmers/producers have noted that this complex framework is a major barrier for them to invest in the sector, despite promising growing conditions and the country's proximity to large markets, among other factors.</p> <p>There is need for trainings and information-sharing on the Order, as there is inconsistent awareness and application of the Order, especially at the provincial and local levels.²⁰⁵</p> <p>Further training is needed for Government authorities, especially at the provincial and district level, on revising investment proposals²⁰⁶ and monitoring investments. Support is needed to help differentiate between sustainable and suitable projects and unsustainable/ unsuitable projects, and to promote on-going monitoring of investments to ensure private sector accountability.</p>
Implementation mechanisms	<p>Action 1.3.1</p> <ul style="list-style-type: none"> ▪ The Department of Forestry (DOF) will be responsible for the implementation of the Action (relating to the regulatory framework under MAF umbrella) with support from the NPMU. ▪ All activities related to the Land Law will be under the responsibility of MONRE. ▪ The NPMU/PPMU will provide internal and external expert input to the Action. They will also provide financing for logistics and workshop venues to hold consultations and support preparation of content ▪ CSOs will also contribute to legal framework implementation. <p>Action 1.3.2</p> <ul style="list-style-type: none"> ▪ The NPMU and PPMUs will be responsible for the implementation of the Action. Both will provide expert input and deliver trainings and capacity building services and financing of these at different levels (NPMU will be responsible for the national level, PPMUs for district and provincial levels). ▪ CSOs will also contribute to legal framework implementation.

excessive degradation/ tree cutting(direct seeding in barren highly degraded areas; NTFP management and development; tree planting on national tree planting day).

²⁰³ Smith and Alounsavath 2015; They further state "Article 43 of the Forest Law specifies that the harvesting of wood for construction poles and energy shall be undertaken only in the areas permitted by the State for infrastructure development and clearing for production activities." Table 6 of the Forest Legality Compendium provides an overview of all laws, regulations and decrees related to village forest management

²⁰⁴ Sections 9 and 10 of the Forest Law Legal Compendium (Smith and Alounsavath 2015) provide detailed information on the legal framework for plantations (investment projects) and smallholder plantations (incl. timber plantations and agroforestry). In addition, PMO. 9 (2018) includes the updated revisions and regulations for plantations.

²⁰⁵ Smith et al. 2017; Stakeholder consultations and expert meetings with public and private sector actors in target provinces and at the national level in October 2018.

²⁰⁶ WWF 2018

Fund flow arrangement	<p>Action 1.3.1. and 1.3.2</p> <p>Both Actions will be financed out of the NPMU and PPMU budgets and will thus be administered by the NPMU. The NPMU will procure and manage the external expert inputs services as well as the financing management for the delivery of workshops and trainings.</p>
Co-finance / leverage	<p>Total activity cost: 1.2 million Euro</p> <ul style="list-style-type: none"> ▪ Total BMZ co-finance: 660,969 Euro ▪ Co-finance Lao PDR Government co-finance: 123,420 Euro ▪ Co-finance BMZ through KfW (village forest management programme): 401,750 Euro <p>Note on co-finance:</p> <ul style="list-style-type: none"> ▪ Government authorities will provide the in-kind staff support to the implementation of the activity and participation in the training and capacity building events.
Exit strategy / long-term sustainability	<ul style="list-style-type: none"> ▪ Changes in the regulatory framework will enable the adoption of sustainable land use practices and REDD+, and will enable provide sector participation in REDD+. These changes will last beyond the project's lifetime and enable transformational forest sector change. It will also support the mobilization of responsible private sector investments that will last beyond the project's lifetime. ▪ The implementation of the regulatory framework will have positive impacts for the entire country, promoting REDD+ and sustainable finance throughout the country.
Beneficiaries	<ul style="list-style-type: none"> ▪ Directly, the Government staff in different ministries will benefit from the activity due to increased awareness and capacities on REDD+. ▪ Indirectly, the entire population of Lao PDR (6,901,000 inhabitants, including 3,443,000 women and 3,458,000 men)²⁰⁷ will benefit from an improved legal framework. ▪ The entire population of the programme provinces (1,765,276 inhabitants, including 882,638 women and 882,638 men)²⁰⁸ will benefit from an improved legal framework.
Impacts and co-benefits	<p><u>GHG mitigation</u>: GHG mitigation will occur indirectly through the implementation of sustainable forest landscape management and restoration. Strengthening regulations and guidelines that will facilitate their adoption are closely linked to the implementation of activities under Outputs 2 and 3 (see Chapter 9 for GHG mitigation quantification).</p> <p><u>Socio-economic</u>: Strengthening the enabling environment will help leverage private resources for SFM, FLR and village forestry. Provision of alternate livelihood opportunities through facilitating improved regulations that limit complexity, and which facilitate private sector and local people's investments in related measures (reduce investment risks, incentivize and facilitate the adoption of sustainable land use practices).</p> <p><u>Environmental</u>: Facilitate the adoption of SFM, FLR and village forestry that contribute to REDD+ and biodiversity conservation.</p> <p><u>Gender</u>: New regulations and guidelines are considering gender as a crucial factor in forest protection, monitoring, equal user rights and benefit sharing, as well as resource management.</p>

²⁰⁷ LSB 2018; Official statistical data from the 2017 Statistical yearbook

²⁰⁸ Ibid.

Risks and risk mitigation	Risk(s)	Avoidance/ Mitigation Measures
	Government does not approve proposed policy/regulatory changes (conflicting objectives with different sectors)	<ul style="list-style-type: none"> • Builds on strengthened relationships and cross-sectoral planning established through the REDD+ Task Force. • Strong ownership of REDD+ based on donor projects/ programs, as well as the development of the ER-PD and PRAPs during recent years. • Strong incentive provided by potential FCPF results-based payments.
	Unforeseen trade-offs due to regulation changes	<ul style="list-style-type: none"> • Stakeholder consultations and expert consultation on proposed regulatory changes will help to minimize trade-off • Close monitoring will assess potential trade-offs and identify the need for potential adjustments.

3.3.1.3 Activity 1.4 Law enforcement and monitoring

Activity 1.4. Law enforcement and monitoring	
Contribution to GCF outcome(s)	M5.0 Strengthened institutional and regulatory systems M9.0 Improved management of land or forest areas contributing to emissions reductions
Contribution to programme output	Creation of enabling environment for REDD+ implementation. ²⁰⁹
Description of actions	<p>Action 1.4.1. Strengthening procedures, standards and systems for law enforcement</p> <ul style="list-style-type: none"> • Revision of standard operating procedures (SOPs) for Forestry Law enforcement²¹⁰ that are aligned with the revised regulatory framework (Activity 1.2, including improvement of investigative procedures, establishing whistleblower systems, improvement of anti-corruption safeguards, among others). • Improvement of coordination and exchange among, and the establishment of mixed rapid response teams consisting of, key actors (PAFO, DAFO, POFI, DOFI, PONRE, DONRE, P-WEN, military, police, customs officials) to improve Forest Law enforcement by establishing clear communication and exchange procedures and clarification of roles and responsibilities between different government authorities (rapid response teams on provincial and district levels) • Introduction and use of remote sensing data (LANDSAT or Sentinel), Spatial Monitoring and Reporting Tool (SMART)²¹¹ as well as the Strategic and Tactical Enforcement Patrol Program (STEPP)²¹² as a basis for controlling deforestation / forest degradation through patrolling activities at district level (e.g. detection, investigating and monitoring illegal activities, awareness-raising in hotspots). Results have to be reported to the province and national level according to a uniform monitoring system (STEPP). <p>Action 1.4.2 Training for implementation of enhanced law enforcement</p> <ul style="list-style-type: none"> • Trainings on strengthened standard operating procedures and anti-corruption safeguards for national, provincial and district authorities • Trainings for targeted individuals (with intermediate experience on GIS/mapping) to use remote sensing data, generating maps and supporting monitoring of deforestation (SMART and STEPP) to support POFI and DFIU with monitoring deforestation and forest degradation

²⁰⁹ Note: implementation of law enforcement within protection, production, conservation and village forests is covered within Output 3.

²¹⁰ WSC/CliPAD (2013) *A Law Enforcement Action Plan for Reducing Deforestation and Forest Degradation in Houaphan Province*, and Annex 6: Standard operating procedures for forestry protection taskforces and rapid response teams

²¹¹ SMART (www.smartconservationtools.org) is an interactive, spatially explicit system for managing and analysing law enforcement monitoring data. It was developed in response to the growing demand around the world for a low cost, site-based tool that can provide rapid feedback to managers for use in adaptive management of enforcement operations (Stokes, 2010). In the context of the GCF programme, SMART has potential to be useful for managers of production, conservation and protection forests for monitoring trends in threats to forests and wildlife, planning and evaluating enforcement operations.

²¹² STEPP is a performance-based, strategic and tactical operational enforcement model based around international best practices (Adams, 2013). This involves creation of enforcement plans by POFI managers based around assessment of levels of threat and risk to forests and wildlife in their areas of responsibility. The program should be audited monthly to ensure operational focus is directed to places of highest risk ("hotspots") for illegal activities.

	<ul style="list-style-type: none"> Dissemination of regulations and guidelines on permitted and prohibited clearing and utilization of forest (timber and non-timber) products, as well as streamlined, accessible and effective reporting channels. <p>Note: Implementation of law enforcement related to production, protection, conservation and village forests is covered in Output 3. Trainings for villagers (and village patrols) within target districts and hotspots are also covered within Output 3 activities.</p>
Result indicators	<p>Action 1.4.1</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> No consistent guidelines / SOPs for law enforcement <p><u>Target:</u></p> <ul style="list-style-type: none"> 4 sets of SOPs established and approved for each forest category (protection, production, conservation, unclassified forests), including roles and responsibilities Operational remote sensing data used as a basis for controlling deforestation and planning enforcement operations, including reporting protocols from the village level to the national level clarified (village → district → province → national government) <p><u>Means of Verification:</u></p> <ul style="list-style-type: none"> Government-approved SOPs for Forest Law enforcement DOFI reports on deforestation and forest degradation violations using report sensing data <p>Action 1.4.2</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> Insufficient Forestry Law enforcement skills of POFI, DOFI <p><u>Target:</u></p> <ul style="list-style-type: none"> POFI and DOFI capable of Forestry Law enforcement and monitoring according to SOPs Adoption of modern management tools forestry reporting system, internal monitoring system, document management system <p><u>Means of Verification:</u></p> <ul style="list-style-type: none"> DOFI and POFI reports on deforestation and forest degradation violations using report remote sensing data
Inputs and investment items	<p>Action 1.4.1</p> <ul style="list-style-type: none"> NPMU / PPMU expert input to review standard operating procedures JICA expert inputs to support forest monitoring system development Expert input to design trainings for POFI and DFIU staff (conducting inspections, technology application, monitoring, village awareness-raising) Trainings for POFI and DFIU on remote sensing/SMART and STEPP tools to improve law enforcement at the provincial and district level Equipment investment in information and communication technology (GPS, communication devices, computers for remote sensing) Technical assistance to clarify reporting channels (village → district → province → national government) Technical assistance to facilitate coordination, cooperation and exchange among key actors (e.g. POFI, PONRE, military, police, customs officials, etc.) Meeting costs and transportation for coordination, cooperation and exchange meetings among key actors <p>Action 1.4.2</p> <ul style="list-style-type: none"> Trainings on strengthened standard operational procedures and anti-corruption safeguards for national, provincial and district authorities (DOFI, POFI, DFIU; venue, transportation costs, trainers, training materials)

	<ul style="list-style-type: none"> • Trainings for targeted individuals (with intermediate experience on GIS/mapping) to use remote sensing data, generating maps and supporting monitoring of deforestation to support POFI and DFIUI with monitoring deforestation. • Dissemination of regulations and guidelines on permitted and prohibited clearing and utilization of forest (timber and non-timber) products, as well as streamlined, accessible and effective reporting channels to CSOs, villagers, etc. • Trainings for PAFO, DAFO, PONRE, MONRE, POFI and DFIU staff on reporting channels (venue, transportation costs, trainers, training materials)
Technical evaluation / justification / barriers addressed	<p>Strengthened law enforcement is a key measure to support Lao PDR's commitment to REDD+, as well as other high-level initiatives including PMO 15 and the FLEGT-VPA, among other initiatives described in the sector profile above. The EU started the VPA negotiation process in 2017 and which is supported by the ProFLEGT component of the '<i>Protection and Sustainable Use of Forest Ecosystems and Biodiversity in Laos</i>' (ProFEB), implemented by GIZ, under the supervision of FLEGT Standing Office, department of Forest Inspection, and will continue to support the Lao Government and its stakeholders in their effort towards a VPA with the EU²¹³. One of three pilot province is located in the programme area.</p> <p>Technical justification of measures</p> <p>Illegal logging and unauthorized clearing of forest land still exists and is a challenge for provincial and local districts to address due to limited budgets, technical capacities and staff resources. Enforcement is often limited to driving along main roads; many offices are understaffed and have insufficient equipment and resources. Some offices note that they do not have permanent access to GPS equipment, and often have to borrow from PAFO. Others note that, at times, they do not have sufficient budgets to investigate infractions (e.g. to pay for fuel for vehicles). The majority of provinces do not consistently use spatial technology to support Forestry Law enforcement and monitoring.</p> <p>Many donor projects have supported improved law enforcement in Lao PDR. In SUFORD-supported provinces (Sayaboury, Luang Namtha, Bokeo and Oudomxay), it was noted that while law enforcement staff have established basic skills and established a systematic enforcement program, a major challenge is to ensure sufficient funding given budget constraints. While the use of new tools has been initiated (e.g. national forestry reporting system, internal monitoring system, document management system, budget planning system and the Department of Inspection information management system), it is noted that further support is needed to "ensure that the use of these management tools becomes a routine activity"²¹⁴, which includes for example also the Strategic and Tactical Enforcement Patrol Program (STEPP) and the Spatial Monitoring and Reporting Tool (SMART)</p> <p>In addition to continued support related to capacity development, as well as technical and financial assistance, the roles and responsibilities of key agencies need to be revised to ensure that there is no confusion of responsibilities and that potential loopholes and gaps are closed. Expert support is required to clarify roles and responsibilities within the legal framework.</p> <p>Accountable reporting pathways also need to be clarified and widely disseminated, where reporting pathways at the village-, <i>kumban</i>-, district-, province- and national-level should be clearly outlined and communicated. Such pathways will build on the revised roles and responsibilities of key authorities and will ensure that such information is communicated in a straightforward, culturally appropriate and user-friendly way (including translation into key local languages as necessary).</p>

²¹³ For additional information refer to: <https://flegtlaos.com/>

²¹⁴ World Bank 2018

	<p>Barriers addressed</p> <ul style="list-style-type: none"> ▪ Low capacities on law enforcement ▪ Regulatory gaps and inconsistencies, resulting in unclear roles and responsibilities ▪ Limited budget for law enforcement, including investments in staff and suitable equipment ▪ Limited uptake of improved practices for detection, investigation and monitoring ▪ Limited awareness of regulations, as well as reporting pathways <p>Current lending from commercial banks to agribusinesses is limited for a few different reasons. First, many SMEs have poor financial management skills, such as accounting and preparing business plans. This makes banks hesitant to lend to these SMEs, for fear that poor management results in non-repayment. Another constraint is the poor geographical coverage of many banks in the country; many financial institutions do not have branches in district capitals, let alone in rural areas. There is a physical distance barrier to lending. A final barrier is the credit products on offer from financial institutions. Lending is constrained by the lack of specialized agri-lending credit products, as the sector is not seen as a profitable, low-risk investment. Long-term credit is particularly constrained by the lack of financial products. Moreover, high interest rates available to the sector further discourage lending.</p> <p>These factors result in a low level of commercialization of the agricultural sector, and the lack of enterprises' access to external markets. Many agricultural enterprises have outdated equipment and machinery, resulting in high losses during production, harvest, post-harvest and processing. Rice millers, for example, face difficulties with low-quality rice, leading to equipment break-downs whilst processing. Such a CAPEX investment would be profitable and normally easy to finance with a well-performing financing sector.</p> <p>Green credit lines or "investment accelerator" projects make potential "green" business models and the businesses that implement them bankable, and match these with investors. Together with agribusinesses, the investment feasibility is assessed and a business plan is developed. Investments will be intensively screened for deforestation risks and integrated into eligibility criteria of financing institutions' loan appraisal procedures, and to ensure they have high social and environmental standards. Financial literacy of agribusinesses will be developed over the course of time, whilst their business is made bankable. Women will be specifically targeted in this Activity. This Activity will further facilitate stronger engagement with the private sector.</p>
<p>Implementation mechanisms</p>	<p>1.4.1 and 1.4.2</p> <ul style="list-style-type: none"> ▪ The implementation of both Actions will be led by the NPMU and the PPMUs in close coordination with MAF and MONRE (for nature conservation forest areas and protected forest categories), DOFI and POFI (for production, protection and unclassified forest categories). ▪ Implementation of the law enforcement activities is integrated within the individual actions under Output 3. ▪ Capacity development and trainings will be delivered by the NPMU and PPMUs, in close cooperation with Government authorities. <p>1.4.3</p> <p>This Actions will be contracted out to an external service provider firm. It will be responsible for the implementation of the actions in close collaboration with</p>

	the NPMU and PPMUs. The service provider will be responsible for the engagement with the private sector and provision of capacity building support. The service provider will provide advisory assistance to the NPMU and the financial institutions on the mobilization of climate finance. The PPMUs will be responsible for ensuring linkages to the public and private dialogues.
Fund flow arrangement	1.4.1 and 1.4.2 <ul style="list-style-type: none"> ▪ The NPMU and PPMU will provide the procurement and operational costs for the implementation of the proposed actions. ▪ JICA will support with the development monitoring system to support forest law enforcement
Co-finance / leverage	Total Activity cost: 2.73 million Euro <ul style="list-style-type: none"> ▪ Total GCF grant finance: 2,380,833 Euro ▪ Total JICA co-finance: 161,000 Euro ▪ Total Lao PDR Government co-finance: 162,360 Euro <p>Note on co-finance: Government authorities' staff will spend their working time on the implementation of the activity and participation in the training and capacity building events.</p> <p>Additional finance not part of the GCF programme budget: ProFLEGT component of the GIZ support to the FLEGT VPA negotiation process (approximately 2.1 million Euro 2019-2021 funded by BMZ)</p>
Exit strategy / long-term sustainability	<ul style="list-style-type: none"> ▪ Standard operating procedures based on best practices will be developed and applied, ensuring a minimum high-standard for law enforcement is applied across the programme area. All knowledge (revisions to roles, clarified reporting chains) will be clearly documented and disseminated using diverse communication approaches (written, oral presentations, posters, and radio programs) to reach a diverse audience. Where appropriate, materials will be translated into local languages. This will ensure that the knowledge and procedures remain within organizations even if staff change. ▪ Relevant authorities working on law enforcement will be trained using detailed and consistent information that can be used for knowledge exchange, including educating new staff. ▪ Improved finance for law enforcement (through Activity 1.6. sustainable financing) will help to direct additional resources to law enforcement, addressing past budgetary shortfalls
Beneficiaries	<ul style="list-style-type: none"> ▪ Directly, the Government staff (estimated 210 staff members) in PAFO, DAFO, POFIs, DOFIs, MONRE, PONREs and DONREs will benefit from the activity and have strengthened capacities on law enforcement. ▪ Indirectly, the entire population of Lao PDR (6,901,000 inhabitants, including 3,443,000 women and 3,458,000 men)²¹⁵ will benefit from improved law enforcement. The entire population of the programme provinces (1,765,276 inhabitants, including 882,638 women and 882,638 men)²¹⁶ will benefit from provincial SEDPs. ▪ At least 1 Lao PDR financial institution
Impacts and co-benefits	GHG mitigation: GHG mitigation will occur indirectly through the implementation of sustainable forest landscape management and restoration. Improved law en-

²¹⁵ LSB 2018; Official statistical data from the 2017 Statistical yearbook

²¹⁶ Ibid.

	<p>forcement will facilitate the adoption of the existing regulatory framework and support effective implementation of activities under Outputs 2 and 3 (see Chapter 9 for GHG mitigation quantification).</p> <p>Socio-economic: Improving management of forests and management of timber aligned with FLEGT will help enhance legal and sustainable timber trade with other countries in the region and globally under relevant agreements;²¹⁷ enhanced transparency of domestic and foreign investment, increased revenue for the government due to reduced illegal deforestation and improved legality, law enforcement and transparency of the sector; reduced illegal logging will also reduce encroachment in forests (increasing incentives and income from sustainable forest management for local people); strengthen multi-stakeholder participation in forest legality, law enforcement, governance and trade</p> <p>Environmental: Promote the sustainable management of forest resources, enhancement of biological diversity and natural habitat and reduced losses of soil carbon.</p> <p>Gender: Review the potential for community-based women-led patrolling groups and support their creation with capacity development and awareness raising.</p>	
Risks	Risk(s)	Mitigation/ Avoidance Measures
	Weak rule of law and corruption ²¹⁸	<ul style="list-style-type: none"> ▪ Anti-corruption safeguards strengthened through programme activities. ▪ Transparent reporting system clarified/established, that is effective, accessible and culturally appropriate to permit reporting at village-, <i>kumban</i>-, district-, province- and national-level.
	Revisions (e.g. regarding roles and responsibilities, clarity of reporting chains/ processes) requiring government approval can be challenging to materialize	<ul style="list-style-type: none"> ▪ Continuous engagement by relevant stakeholders within the government to revise and develop revisions and implement this activity. This will lead to strong ownership by relevant departments at all levels, and a high-likelihood that the government will approve proposed changes.
	High reliance on donors and external funding to maintain budget (after programme end)	<ul style="list-style-type: none"> ▪ Improved streams of finance for law enforcement identified in Activity 1.6. ▪ SMART tools (among others) will favor free and open-sourced materials to limit future costs and investments.
	Staff turnover	<ul style="list-style-type: none"> ▪ Documented and disseminated SOPs and other advancements (revisions to roles and responsibilities, etc.) will be documented to provide programme staff with detailed and consistent information that can be used for knowledge exchange, including educating new staff. ▪ Continuous engagement with relevant authorities at the national, province and district level will further help strengthen knowledge exchange and maintain organizational knowledge. National and provincial PMUs will further help to sustain this exchange.

²¹⁷ More information available at: <https://flegtlaos.com/benefits/>

²¹⁸ ER-PD 2018, page 160

	<p>Investment activities lead to deforestation due to poor safeguard capacity of financial institutions</p> <ul style="list-style-type: none"> ▪ Training for banks on safeguard development and implementation ▪ Design eligible investment that prevent this risk
--	---

3.3.1.4 Activity 1.5 Land use planning and improved tenure security

Activity 1.5. Land use planning and improved tenure security	
Contribution to GCF outcome(s)	<p>M5.0 Strengthened institutional and regulatory systems</p> <p>M9.0 Improved management of land or forest areas contributing to emissions reductions</p>
Contribution to programme output	Enabling environment for REDD+ implementation is created
Description of actions	<p>1.5.1. Mainstreaming FLR guiding principles into land use planning manuals and guidelines</p> <p>Current guidelines for land use planning focus on agricultural land and do not integrate principles of forest landscape restoration (FLR). Given accelerating deforestation and forest degradation in the programme area, there is a need to promote holistic and integrated land use planning that considers multiple land use systems and values. Key actions include:</p> <ul style="list-style-type: none"> ▪ Revision of existing legislation and guidelines on land use planning and development recommendations to integrate FLR principles into land use planning guidelines and manuals. ▪ Stakeholder feedback and consultation on proposed changes to manuals and guidelines. ▪ Awareness-raising and capacity building on revised guidelines on province and district levels. <p>1.5.2. Participatory village land use planning (PLUP) in target programme districts (linked with Activity 1.4, Outputs 2 and 3) in hotspot areas²¹⁹</p> <p>PLUP will be implemented in selected deforestation hotspot villages to improve planning to increase the efficiency and productivity of land use, while also promoting the sustainable management of forest areas. (See Section 2.5 for selection of target villages). In villages with existing land use plans, there has in the past been no support provided to implement the plans. Implementation of land use plans will also improve land use monitoring and enforcement. Key actions include:</p> <ul style="list-style-type: none"> ▪ Planning preparation (notifying villages, gathering materials preparing the data management system) ▪ Planning preparation (gathering materials, GIS data, SEDPs, statistics, notifying surrounding villages, data management system preparation). Potentially applying FAO's OpenForis Collect Earth tool, for which the PAFOs of all six target provinces have already received training. ▪ Land and forest categorization and zoning (boundary demarcation, land use mapping based on current land use, land and forest zoning, agriculture and forest production data collection, socio-economic data collection) ▪ Agriculture management planning (agricultural land zoning, land management planning [soil testing, verification of suitability for planned land use]),

²¹⁹ In some district and target villages, GIZ's LMPD project has supported the land use planning. These land use plans will not require a new land use planning exercise and the GCF project will build upon and support the implementation and monitoring of the land use plans.

	<p>action plan for proposed agricultural projects and needed support from extension services)</p> <ul style="list-style-type: none"> ▪ Updating and integration of PLUP data (GPS data, maps, reports, etc.) into data management and record-keeping (digital record keeping systems, storage of paper-based copies in all offices) ▪ Developing short and long-term financing plans for the LUPs to ensure implementation and monitoring. ▪ Establishing or strengthening village land use and forest management committee ▪ Developing and implementing systematic land registration – individual, entity, communal/collective and State ownership – in rural areas based on up-to-date LUPs (to be undertaken by the Department of Land). <p>1.5.3 Monitoring and enforcement for existing land use plans Once plans are established, they should be monitored and enforced to ensure compliance with planned land use. However, in practice the lack of capacities, equipment and budget often limit monitoring and enforcement, which can then lead to unplanned / unapproved clearing of forested areas.</p> <ul style="list-style-type: none"> ▪ Ongoing monitoring (forest-related enforcement linked with Activity 1.4), supported by technical assistance, capacity building and equipment procurement, closely aligned with the implementation of activities under output 2 and 3
Result indicators	<p>Action 1.5.1 <u>Baseline</u> FLR principles are not integrated into land use planning manual and guidelines</p> <p><u>Target</u> FLR principles integrated into land use planning manual and guidelines, endorsed by the Government</p> <p><u>Means of Verification</u> Land use planning guidelines and manuals</p> <p>Action 1.5.2 <u>Baseline</u> 0 (in target areas without land use plans) Villages do not implement existing land use plans (in target villages with land use plans)</p> <p><u>Target</u> 420 village land use plans established and implemented (in target areas without land use plans, assuming average of 15 villages /district)</p> <p><u>Means of Verification</u> 420 approved land use plans; satellite images / GIS / remote sensing</p> <p>Action 1.5.3 <u>Baseline</u> Monitoring and enforcement of land use plan implementation is not conducted</p> <p><u>Target</u> Implemented land use plans in 28 districts and all programme target villages have at least 70% compliance with the planned activities and land use</p> <p><u>Means of Verification</u></p>

	Regular assessment of land use plan compliance and enforcement by Department of Land district staff, monitoring reports in 28 districts
Inputs and investment items	<p>Action 1.5.1</p> <ul style="list-style-type: none"> ▪ Experts to mainstream FLR guiding principles into land use planning manuals and guidelines ▪ Stakeholder consultations on guidelines ▪ Development of training materials for revised manuals and guidelines ▪ Workshops for national and sub-national authorities, CSOs and development cooperation partners (especially agencies supporting land use planning processes) on revised guidelines ▪ Materials (e.g. printing copies of guidelines), and translation of materials (English and Lao) <p>Action 1.5.2</p> <ul style="list-style-type: none"> ▪ National consultants for supporting land use planning processes described above (government staff will carry out the planning) (data collection, socio-economic data, agriculture and forest production data; collection of GIS data, SEDPs, statistics) ▪ Consultations for target villages based on the principles of FPIC to engage them in voluntary land use planning processes ▪ International and/or national experts to support with land use zoning and mapping (GIS/remote sensing) ▪ National consultants to support district authorities with boundary demarcation (marking trees with paint, tape), writing PLUP report ▪ Trainings for village land use and forest management committee ▪ Equipment (materials for boundary demarcation – signboards, metal signs, ropes, painting, etc.; GPS, soil testing kits, etc.), vehicles (cars and motorbikes) ▪ National consultants for agriculture management planning (agricultural land zoning, suitability) ▪ Finance to support systematic land registration <p>Action 1.5.3</p> <ul style="list-style-type: none"> ▪ Investments in equipment to conduct monitoring and equipment and operational costs (motorbikes, fuel, daily allowance to field staff) (1 motorbike per target district) ▪ Training of Department of Land district staff to execute monitoring and enforcement of land use plans
Technical evaluation / justification / barriers addressed	<p>Current land use planning guidelines focus on agriculture. FLR is not considered in land use planning guidelines. Guidelines on village forestry²²⁰ exist, however there is a gap in a consolidated process that integrates both sustainable forest and agricultural land use. There is further need to “clarify and harmonize land-use planning and land allocation processes”.²²¹</p> <p>Land use planning in Lao PDR builds on over 20 years of experience in donor-funded projects (e.g. KfW, GIZ, German AgroAction and SIDA, Tabi, AgriSud, among others) and national initiatives to conduct land use planning. A challenge</p>

²²⁰ “Village Forest Management is the management, preservation, development and use in a sustainable manner of the forest areas inside the village jurisdictional area which the government has allocated to the village and which has been classified into village conservation forest, village protection forest, village use forest and other forests. The management of the forest areas has to follow a management plan” – Forest Law 20017

²²¹ Lestrelin et al. 2018

	<p>is moving from the development of LUPs to the actual implementation, monitoring and enforcement of these plans. The GIZ LMPD project has provided support in various districts to develop land use plans, but implementation and monitoring have not been part of the project. The GCF programme will use these plans and will support the implementation and monitoring.</p> <p>Additional support is needed for villages without LUPs in hotspot areas and/or within NPAs (the latter linked with Activity 3.3) to encourage the adoption of suitable sustainable land use activities, while also improving monitoring and enforcement of land use activities. The GCF programme will provide support to do so.</p> <p>Technical package / proof of concept</p> <p>These measures build on the manual and approach developed for Participatory Agricultural Land Management at the Village Level (PALM) developed by the Ministry of Agriculture and Forestry in 2018,²²² and Village Forest Management Planning Guidelines from 2016.²²³</p> <p>While the overall planning approach builds on decades of experience with land use planning, a challenge remains how to implement these plans and support ongoing monitoring and enforcement of plans. Often, support for villages was limited to plan development with little (if any) focus on implementation.</p> <p>Other challenges with land use planning include pressure on forested areas by marginalized households with insufficient agricultural land (resulting in upland agriculture) or pressure from encroaching forest users – often in areas where boundaries are not clear. Thus, this measure will need to be closely linked with Activity 1.4 (law enforcement) as well as Outputs 2 and 3 to ensure that land use plans can be fully implemented.</p> <p>Lestrelin et al. (2013) note that a “<i>persistent shortage of financial and human resources has impeded the effective implementation of such initiatives</i>”, emphasizing the need for financial support, institutional strengthening and capacity building. Similar observations were made by the consultant team in consultations for both PRAP and GCF feasibility study preparation.</p> <p>While new land use planning processes are needed in areas without LUPs, especially areas within deforestation and degradation hotspots or in or border NPAs, the GCF programme supports the implementation and monitoring of LUPs developed by other donors and programs, to address past challenges related to limited implementation of LUPs. A major challenge is that many donor projects focused on the development of land use plans, but then did not support the implementation or monitoring of these plans – ultimately limiting their effectiveness.</p>
<p>Implementation mechanisms</p>	<ul style="list-style-type: none"> ▪ The principal agency responsible for land use planning is the Department of Land (DoL) under MoNRE, with its line section under PoNREs at province level. ▪ In addition, the Department for Agricultural Land Management (DALaM) under MAF, and its corresponding section within PAFO at the provincial level, will lead the process related to agricultural land management. ▪ Staff from PAFO and DAFO in each province working on forest management will also participate in the land use planning process. <p>Action 1.5.1</p>

²²² Guideline: Ministry of Agriculture and Forestry, Department of Agricultural Land Management and the Department of Land. 2018. Participatory Agricultural Land Management (PALM) at Village Level. Manual. Supported by GIZ. Vientiane, Lao PDR.

²²³ CII PAD-TC. 2016. Village Forest Management Planning Guideline. Vientiane, Lao PDR.

	<ul style="list-style-type: none"> The Action will be led by the NPMU. The Land Management section of MONRE will be the Government counterpart to implement the Action. <p>Action 1.5.2</p> <ul style="list-style-type: none"> The Action will be under the responsibility of MONRE (Department of Land, Land Management section) and implemented by PONRE and DONREs (Land Management sections). PAFO and DAFO staff members for agricultural land management and forestry will participate in the land use planning process. Capacity development will be provided by the NPMU and PPMUs, and financing for equipment and travel will be provided through EPF, based on approved annual plans by Government entities. <p>Action 1.5.3</p> <ul style="list-style-type: none"> Implementation will be under responsibility of DONREs (Land Management section). Capacity building support will be provided by PPMUs. Financing will be channeled through EPF.
Fund flow arrangement	<ul style="list-style-type: none"> DONREs in the selected target district will prepare annual implementation plans and budget to be submitted to EPF (with the support of the PPMUs) and apply for financing support (for equipment and travel costs). EPF will be responsible for the revision and approval of the annual plans and budget transfers to the respective district authorities based on annual operational plan and budgets and to be approved by the NPMU.
Co-finance / leverage	<p>Total activity cost: 10.35 million</p> <ul style="list-style-type: none"> Total GCF finance: 4,440,312 Euro Total Lao PDR Government co-finance: 5,337,290 Euro Village beneficiaries: 32,421 Euro JICA: 540,000 <p>Note on co-finance:</p> <ul style="list-style-type: none"> Government staff from MONRE, PONRE and DONRE among other Government staff will provide their work time to implement the interventions. Villagers will provide their time and participation in the land use planning process and related meetings
Exit strategy / long-term sustainability	<ul style="list-style-type: none"> Addressing past gaps in projects that stopped at the development of LUPs (i.e. limited support for implementation, monitoring and enforcement) Planning processes to help villagers get the most out of their land (i.e. identifying suitable activities, and providing linkages to improved extension services) Promoting a holistic approach to land use planning, by integrating FLR principles into land use planning guidelines and manuals that will be utilized beyond the project's lifetime. Exit beyond programme is linked to Activity 1.1 to mobilize sustainable financing for the implementation of law enforcement in the long-run.
Beneficiaries	<ul style="list-style-type: none"> Directly, the Government staff (estimated 107 staff members) in MONRE, PONREs and DONREs (Departments of Land), PAFO and DAFO will benefit from the activity and will have strengthened capacities on land use planning and implementation. At least 163,800 people in 420 villages will benefit from improved land use planning.
Impacts and co-benefits	<p><u>GHG mitigation</u>: GHG mitigation will occur indirectly through the implementation of sustainable forest landscape management and restoration following land use plans that will limit deforestation and forest degradation. The land use plans</p>

	<p>are a pre-requisite for effective implementation of activities under Outputs 2 and 3 (see Chapter 9 for GHG mitigation quantification).</p> <p><u>Socio-economic</u>: Land use planning will help local producers to maximize their land use while promoting the sustainable management of their forest resources. For example, land use planning guidelines (MAF 2018 guideline on participatory agricultural land management) include measures that assess the suitability of their land and provide suggestions and advice to target suitable land use activities, improve productivity and ultimately strengthen local livelihoods. Improved guidelines will also try to maximize social benefits from the sustainable management of forest and agricultural land (e.g. increased energy security, forest products, diversification, increasing yields, etc.).</p> <p><u>Environmental</u>: Land use zoning and planning will ensure that biodiversity-rich forested landscape will be assigned for protection or maintenance under forest cover.</p> <p><u>Gender</u>: The programme will proactively ensure fully inclusive land use planning processes in the target communities.</p>	
Risks	Risk	Mitigation/ Avoidance Measure
	Some households do not follow / comply with land use plans	<ul style="list-style-type: none"> Monitoring and enforcement activity will mitigate the risk. Improved planning will help households to enhance the productivity of their land. Outputs 2 and 3 will further mitigate the risk by providing alternate sustainable livelihood support activities
	Insufficient enforcement of land use plans	<ul style="list-style-type: none"> Training and awareness-raising for sub-national authorities and villagers on plans, the benefits of sustainable land use and the provision of finance.

3.3.1.5 Activity 1.6 Implementation of MRV system

Activity 1.6. Implementation of MRV system	
Contribution to GCF outcome(s)	M5.0 Strengthened institutional and regulatory systems M9.0 Improved management of land or forest areas contributing to emissions reductions
Contribution to programme output	Enabling environment for REDD+ implementation is created
Description of actions	<p>The Activity will be fully integrated into the national forest monitoring system and is fully aligned with the FCPF Carbon Fund-supported Emission Reduction Program MRV approach. It will be also used for NDC reporting on REDD+. It will measure and report on achieved GHG emission reductions for the ER-Program as well as for the GCF programme and the reporting on NDC implementation (Biannual Update Reports and National Communications).</p> <p>Action 1.6.1. Execution of the 4th (2020/2021) and 5th (2024/2025) national forest inventory</p> <ul style="list-style-type: none"> • The forest inventories will provide the needed data for the estimation of the emission factors and the verification of the satellite imagery to quantify activity data • In 2020/2021, the 4th national forest inventory will be undertaken, following the methods and design of the 3rd national inventory (2015-2017). This will include the re-measurement of 730 plots within the different forest types and 120 plots within regenerating vegetation. The Lao PDR National Forest Inventory Standard Operating Procedures (SOPs) Manual for Terrestrial Carbon Measurement will be used (fully consistent with the method applied for the development of the Reference Level). The guidance was developed in the frame of the second national forest inventory and will ensure comparability and consistency. The national approach is required in order to ensure consistency of the MRV system across national and sub-national levels and to be able to assess potential leakage effects. <p>Action 1.6.2. Assessment and development of the forest-type map for 2021/2022 and for 2024/2025:</p> <p>The same land classification system will be applied as has already been used for the national and ER-Program Reference Level. This is fully aligned with the IPCC land use categorization system.</p> <ul style="list-style-type: none"> • Identification and sourcing of freely-available satellite imagery package for Lao PDR that is compatible with the land use maps used in the past (e.g. Rapid Eye, SPOT 4/5). • Data processing and classification for pre-processed satellite imagery and accuracy assessment by using ground control points from national forest inventory (Action 1.5.1) and high-resolution satellite images. • Change detection: Based on the Forest-Type Maps (FTM), a change detection will be carried out. • Stratification of land / forest classes to reduce uncertainty of emissions and removals and to enhance the accuracy of sampling and uncertainty assessment. • Analysis and preparation of maps and activity data for the estimation of the GHG emissions and removals in the programme area.

	<p>Action 1.6.3. Calculation of emission and removal factors</p> <ul style="list-style-type: none"> Based on the data from the forest inventory, the emission factors for the different forest and non-forest classes will be revised and modified, reflecting the changes over the past years. The emission factor development will focus on the reported carbon pools (above-ground biomass and below-ground biomass). <p>Action 1.6.4. Assessment of leakage effects from the programme area to reference area (entire country of Lao PDR)</p> <ul style="list-style-type: none"> This Action will specifically assess the GHG emission and removals within and outside of the programme areas. To do so, a national forest inventory (Action 1.6.1.) and assessment approach is required to ensure consistency and comparability of the MRV system. The assessment will compare to what extent the deforestation and forest degradation and carbon removals patterns have increase/decrease within the programme area compared to other part of the country. This Action will also coordinate closely with a regional UN-REDD programme currently under development that will analyze international (cross-border) displacement of unsustainable forestry practices in the Lower Mekong region.²²⁴ Increasingly, leakage effects are taking on a regional (multi-country) dimension. The reduction in timber exports from Lao PDR (due to PMO 31) to Vietnam – a globally significant exporter of wood furniture – has, for example, been compensated in recent years by increased exports from Cambodia to Vietnam. <p>Action 1.6.5. Reporting on reduced GHG emissions and enhanced carbon stocks</p> <ul style="list-style-type: none"> The reporting on the achieved GHG emission reductions and enhanced carbon stocks will be conducted for different purposes and will ensure that Lao PDR REDD+ data is consistently used for GCF programme reporting, for FCPF Carbon Fund reporting to receive results-based payments, for NDA reporting and for reporting on the NDC, Biannual Update Reports (BURs) and National Communications (NCs) to the UNFCCC. The reporting will be subject to a technical assessment by the FCPF Carbon Fund to ensure compliance with the 5 IPCC accounting principles (transparency, consistency, comparability, completeness, and accuracy). Based on the technical assessment, the reporting team in the Forest Inventory and Planning Division (FIPD) under MAF will modify and address feedback and recommendation for improvement. The reporting team will closely coordinate with the relevant national MAF Departments, the NPMU and the NDA to provide the requested reports and data. <p>1.6.6. Implementation of the national forest monitoring system</p> <ul style="list-style-type: none"> Development of web-based national forest information system (NFMS) Design and installment of carbon registry (DMS and transaction registry) and Operation of NFMS and improvement for new requirements
--	---

1 ²²⁴ UN-REDD (2018), *REDUCING DEFORESTATION AND FOREST DEGRADATION THROUGH SUSTAINABLE LAND-BASED INVESTMENTS: A FOCUS ON THE LOWER MEKONG REGION*, DRAFT PROJECT CONCEPT NOTE.

	<ul style="list-style-type: none"> Capacity building for localization of system operation and maintenance <p>1.6.7 Digital solutions for community-based monitoring</p> <ul style="list-style-type: none"> Development of a monitoring system fed by community input (See Annex 9 for details on system)
Result indicators	<p>Action 1.6.1. <u>Baseline:</u> 2nd (2017) and 3rd (2018) national inventory finalized <u>Target:</u> 4th (2021) and 5th (2025) national forest inventory finalized <u>Means of verification:</u> Forest inventory reports by Forest Inventory and Planning Department (FIPD) (supported by JICA)</p> <p>Action 1.6.2. <u>Baseline:</u> Forest-Type Maps for the year 2005, 2010, and 2015 <u>Target:</u> Forest-Types Maps for 2021, 2025 and 2027 <u>Means of verification:</u> Maps prepared and integrated into technical reports to report on results to Carbon Fund</p> <p>Action 1.6.3. <u>Baseline:</u> Emission factors as summarized in Reference Level²²⁵ <u>Target:</u> Updated emission factors that reflect changes <u>Means of verification:</u> Emission factor report and technical reports to report on results to Carbon Fund</p> <p>Action 1.6.4. <u>Baseline:</u> 0 tCO₂ leakage effects <u>Target:</u> Reported XY tCO₂ leakage effects <u>Means of verification:</u> Leakage assessment report by FIPD (supported by JICA)</p> <p>Action 1.6.5. <u>Baseline:</u> FCPF Carbon Fund-approved Reference Level <u>Target:</u> Reported GHG emission reduction and carbon removals that are comparable to the Reference Level <u>Means of verification:</u> Technical MRV report and technical assessment by Carbon Fund technical assessment panel</p> <p>Action 1.6.6. <u>Baseline:</u> No National Forest Management System (NFMS) in place <u>Target:</u> NFMS established and operational <u>Means of verification:</u> Online web-based platform with up to date information on the status of national forests and GHG emissions</p> <p>Action 1.6.7 <u>Baseline:</u> No community-based monitoring system in place <u>Target:</u> System established and operational <u>Means of verification:</u> Online web-based platform with up to date information on the status of national forests and GHG emissions</p>
Inputs and investment items	<p>Action 1.6.1. Execution of the 4th (2020/2021) and 5th (2024/2025) national forest inventory</p> <ul style="list-style-type: none"> 6 months of expert input from JICA staff for inventory design and guidance

²²⁵ https://www.forestcarbonpartnership.org/sites/fcp/files/2018/March/Annex%2011%20-%20LaoPDR_ERPD%20EF%20%20Report_0323.pdf

	<ul style="list-style-type: none"> • International travel (8X) • 2 local contract for experts • Drying of field samples • Execution of field inventory by 6 teams (logistics, field work time input, analysis) <p>Action 1.6.2. Assessment and development of the forest type map for 2021/2022 and for 2024/2025</p> <ul style="list-style-type: none"> • 11 months of expert input from JICA staff • International travel (6X) • 2 local contracts for experts • Execution of a ground truthing survey <p>Action 1.6.3. Calculation of emission and removal factors</p> <ul style="list-style-type: none"> • 0.5 months of expert input from JICA staff (in 2021 and 2025) <p>Action 1.6.4. Assessment of leakage effects from the programme area to reference area (entire country of Lao PDR)</p> <ul style="list-style-type: none"> • 3 months' expert input from JICA staff for inventory design and guidance (2022, 2025) • 9 months' FIPD staff input (2022, 2025, 2027) <p>Action 1.6.5. Reporting on reduced GHG emissions and enhanced carbon stocks</p> <ul style="list-style-type: none"> • 4 months' expert input from JICA staff for inventory design and guidance (2022 and 2025) • International travel (2X) • 12 months' FIPD staff input <p>Action 1.6.6. Implementation of the national forest monitoring system</p> <ul style="list-style-type: none"> • 5 months of expert input from JICA staff • International travel (6X) • Staff input from FIPD • Local contract for system development • Local contract for localization of system operation and maintenance <p>Action 1.6.7 Digital solutions for community-based monitoring</p> <ul style="list-style-type: none"> • Input from external consultant • Travel costs • Hardware costs
Technical evaluation / justification / barriers addressed	<p>The MRV approach builds upon the national forest monitoring system that was conceptualized in the framework of the ER-Program design and complies with the FCPF Carbon Fund methodological framework²²⁶. As a basis for results-based payments, a Reference level was developed. The reference period is 2005-2015: GHG emissions and emission reductions achieved during the programme implementation will be compared against this reference period. Above-ground and below-ground biomass GHG emissions and removals will be accounted for. Measurement and Reporting of four GHG emissions and removals will be monitored:</p> <ul style="list-style-type: none"> • GHG emissions from (avoided) deforestation

²²⁶ <https://www.forestcarbonpartnership.org/carbon-fund-methodological-framework>

	<ul style="list-style-type: none"> • GHG emissions from forest degradation • Carbon removals from restoration • Carbon removals from reforestation <p>The detailed methodological approach, a summary of the reference level, activity data and emission factor technical report can be found on the FCPF Lao PDR website (https://www.forestcarbonpartnership.org/lao-people%E2%80%99s-democratic-republic)²²⁷. The Reference Level approach and result were approved by the Carbon Fund.</p> <p>Also, the Forest Reference Emission Level and Forest Reference Level for Results-based payments under the UNFCCC²²⁸ (submitted in January 2018 to the UNFCCC) was prepared by applying the same approach. This approach will be also applied to report to the NDC and in the National Communication. Thus, it is crucial to adopt a national forest monitoring system approach. The implementation of Activity 1.5. is also required to report to the FCPF Carbon Fund and in order to access results-based payments in 2022 and 2025 to allow Lao PDR to receive results-based payments (ERPA with Carbon Fund for 2019-2024 is currently under negotiation).</p> <p>While the GCF programme will not necessarily require a national forest inventory and an inventory would be sufficient in the six target provinces, GCF is requested to support one national forest inventory in 2021/2022. On the one hand, this will enable the country to adopt a consistent approach for the national-level REDD+ MRV and, on the other hand, will enable an assessment of potential leakage effects and effectiveness of the programme compared to the remaining national area.</p>
Implementation mechanisms	<p>Over recent years, JICA has been supporting the Government of Lao PDR in developing and executing the national forest inventory and preparation of the MRV-related components for the ER-Program. JICA also supported the preparation of the reporting to the UNFCCC on the Reference Level to the UNFCCC. In order to ensure consistency in the approaches, JICA has committed additional co-financing to support the Government of Lao and the GCF programme to implement Activity 1.6.</p> <p>Actions 1.6.1 - 1.6.7:</p> <p>The entire Activity will be implemented under the responsibility of the Forest Inventory and Planning Division (FIPD) under DOF. It will be implemented in close coordination with technical and financial support from an expert team from JICA. The JICA expert team will provide the technical guidance and capacity development support to FIPD. The set up will be the same as during the development of the ER-PD and development of the Reference Level for the FCPF ER-Program.</p>
Fund flow arrangement	<p>Action 1.6.1. – 1.6.7.</p> <ul style="list-style-type: none"> • FIDP, as the lead entity, will provide expert staff for the implementation of the entire Activity. • JICA will provide permanent technical expert staff. The cost for the expert staff and associated logistics will be provided by JICA as co-financing. • GCF finance will be managed by the NPMU, which will provide the financing for the execution of the national forest inventory and local consulting contracts

²²⁷ https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR_ERPD_FinalDraftMay.2018-Clean.pdf

²²⁸ https://redd.unfccc.int/files/2018_frel_submission_laopdr.pdf

Co-finance / leverage	Total activity cost: 3.35 million Euro <ul style="list-style-type: none"> Total GCF finance: 789,293 Euro Total JICA co-finance: 918,400 Euro Carbon Fund results-based payment co-finance: 450,000 Euro (for 5th national forest inventory) Total Lao PDR Government co-finance: 1,289,640 Euro 	
Exit strategy / long-term sustainability	The measurement and reporting system will be fully integrated into the conceptualized national forest monitoring system (NFMS) and will be operated by FIPD under DOF, thus fully Government-owned and operated. The TA support from JICA will be required to train and enable FIPD to manage the NFMS by itself. The financing of the MRV system from 2025 onwards is expected to be provided by REDD+ results-based payments.	
Beneficiaries	<ul style="list-style-type: none"> At least 5 Government staff members will be trained on the operation of the MRV system 	
Impacts and co-benefits	No direct GHG impact will be generated. The Activity will support the monitoring and reporting of the impacts and co-benefits, and therefore enable the country to report on GHG mitigation from REDD+ and access REDD+ results-based payments. <u>Gender</u> : Capitalize on local women's extensive knowledge about community forests in making them an integral part of community contributions to the National Forest Monitoring System.	
Risks	Risks	Mitigating measures
	<ul style="list-style-type: none"> High staff turnover within FIPD and loss of key technical skills 	<ul style="list-style-type: none"> Training of at least 5 staff members Development of SOPs for onboarding for new staff members that ensure replication by new staff members

3.3.1.6 Activity 1.7 Knowledge management, FPIC, safeguards and gender

Activity 1.7 Knowledge management, FPIC, safeguards and gender	
Contribution to GCF outcome(s)	M5.0 Strengthened institutional and regulatory systems M9.0 Improved management of land or forest areas contributing to emissions reductions M9.0 Improved management of land or forest areas contributing to emissions reductions
Contribution to programme output	programme is managed, coordinated, monitored and reported
Description of actions	1.7.1 Knowledge management and communication This Action will provide comprehensive communication and exchange of information about topics of crucial relevance for the land users, politicians and the broader public to understand the purpose and benefits of REDD+ and the need for behavioral change of business-as-usual land use. It will also provide the needed information to create awareness about the need for institutional change and financial sustainability. The key interventions will include: <ul style="list-style-type: none"> Coordination with Designation National Authority (DNA) at MONRE (the same institution as the GCF NDA) for provision of relevant information to the DNA for its BUR and National Communication. The M&E system and Activity 1.5 MRV will provide key information for this.

	<ul style="list-style-type: none"> • Lessons learned and information sharing will be conducted at the political level to inform national stakeholders and policy-makers on the programme progress and the key lessons learned that can support the implementation of national REDD+. • One campaign will be organized and managed over the programme implementation period on awareness-raising of laws and the regulatory framework pertaining to the forestry and agricultural sectors (closely linked to Activity 1.3 (improved law enforcement)). • One campaign will be organized to create awareness of REDD+ in the local media (local newspapers in all districts of the six programme provinces) to emphasize the need to reduce deforestation and forest degradation. It will include the negative impacts of deforestation and the potential strategies to sustainable land use. • One campaign on the importance of sustainable land use and REDD+ will be targeted at schools by preparing and providing relevant information and education materials. The materials will be distributed in the target districts and local teachers will be trained on the information materials. • Communication and collaboration with the national universities and to provide key lessons and relevant education materials and to support the universities in developing/acquiring research projects related to REDD+. • Development and management of a programme website. • Close cooperation will be sought with CSOs for awareness-raising, including members of the FLEGT Lao CSO Core Committee, as well as others active nationally and in the target provinces. • Development of mobile and web-based Management Information System for the program, based on community-based data collection (detailed description available in Annex 9). The community-based monitoring system is expected to improve the monitoring and evaluation of the program, providing detailed insight into the programs impacts, whilst enhancing the ownership of local people, among other benefits.²²⁹ <p>1.7.2 Implementation of the Environmental and Social Management Plan (ESMP) and Gender Action Plan (GAP) and ensuring compliance with FPIC and safeguards</p>
Result indicators	<p>Action 1.7.1 <u>Baseline:</u> No knowledge and communication plan implemented <u>Target:</u> Knowledge and communication plan implemented <u>Means of verification:</u> Annual M&E reports to GCF</p> <p>Action 1.7.2</p>

²²⁹ In addition to improving program monitoring and reporting, there are numerous co-benefits associated with such systems: Improved engagement and ownership of local people in program implementation and monitoring; Feedback systems through MIS system can provide local people with production information, market information, management suggestions, and other advice (activity-based approach enables diverse activities, understanding the dynamic nature of the land use sector and shifting smallholder farmer priorities, while balancing MRV needs); Identification of training needs, facilitating the design of targeted trainings based on local interests and priorities; Efficient and cost-effective MRV design; Improved data collection related to climate change adaptation and mitigation at the local level, which can be scaled-up and inform national-level and even international target-setting and reporting. This also strengthens the accuracy of monitoring and reporting; Improved data collection on climate-related themes, can in turn also improve the use of climate-related data in decision making and planning, strengthening both low-carbon and climate-resilient land use at the local level through feedback mechanisms and targeted training (incl. digital extension); Improved program-learning and strengthened knowledge management that ultimately enable adaptive program management, and strengthen future planning and decision making.

	<p><u>Baseline:</u> No ESMP and gender action plan</p> <p><u>Target:</u> Measures associated with the ESMP and gender action plan executed. Programme is implemented in compliance with GCF safeguards</p> <p><u>Means of verification:</u> Monitoring report of ESMP and gender safeguards compliance by NPMU and PPMUs; external monitoring and evaluation reports</p>	
Inputs and investment items	<p>Action 1.7.1</p> <ul style="list-style-type: none"> ▪ National and international expert input from NPMU and PPMUs ▪ Awareness-raising campaigns ▪ External service providers for IT, website service, publishing, etc. ▪ Travel and logistics ▪ CSOs will participate in knowledge exchange events <p>Action 1.7.2</p> <ul style="list-style-type: none"> ▪ National and international expert input from NPMU and PPMUs ▪ Travel and logistics ▪ CSOs will participate in implementation of ESMP, GAP, and FPIC 	
Technical evaluation / justification / barriers addressed	See capacity needs assessment and the need for an external NPMU and PPMUs to support programme implementation.	
Implementation mechanisms	<p>Action 1.7.1.: The Action will be managed and coordinated by the NPMU and PPMUs. PPMUs will be responsible for coordinating with the province- and district-level partners. Communication and awareness-raising actions will be closely aligned with the remaining programme implementation activities and, wherever possible, integrated into implementation.</p> <p>Action 1.7.2.: The NPMUs' safeguards and gender personnel will be responsible for the implementation of the ESMP and the gender action plan, and will ensure that programme implementation integrates gender actions and social and environmental safeguards.</p>	
Fund flow arrangement	The NPMU will have the operational responsibility for the GCF funding. One of its core tasks is the management and provision of financing to the implementation partners.	
Co-finance / leverage	<p>Total activity cost: 2.43 million Euro</p> <p>Total GCF cost: 2,427,231 Euro</p>	
Exit strategy / long-term sustainability	The Government of Lao PDR will assign Government staff to become members of the NPMU and PPMUs to support day-to-day programme operations. It will ensure that skills/knowledge are maintained after the programme ends and that programme management know-how remains within DOF and other implementation partners.	
Beneficiaries	Government staff and all direct and indirect beneficiaries.	
Impacts and co-benefits	<p><u>GHG mitigation</u>; <u>Socio-economic</u>; <u>Environmental</u>; <u>Gender</u>:</p> <p>Indirectly, through implementation of all programme Outputs and Activities.</p>	
Risks	Risks	Mitigating measures
	High staff turnover in the NPMU and PPMUs or among Government staff leads to loss of implementation continuity and knowledge gaps	<ul style="list-style-type: none"> ▪ Clear guidelines and protocols, documentation of trainings and strengthening knowledge management systems

		<ul style="list-style-type: none"> ▪ Ongoing trainings, engaging diverse staff from national, provincial and district levels (building capacities at all levels) ▪ Supporting close cooperation between GIZ, NPMU, PPMU and other programme partners to continually exchange information
--	--	--

Based on the ESMP and the GAP, the plans will be implemented in close coordination with the implementation of Outputs 1-3.

3.3.2 Output 2: Implementation of deforestation-free agriculture

3.3.2.1 Activity 2.1. Market solutions for agricultural drivers of deforestation

Activity 2.1: Local incentives for good agricultural practices and agroforestry	
Contribution to GCF outcome(s)	M5.0 Strengthened institutional and regulatory systems M9.0 Improved management of land or forest areas contributing to emissions reductions
Contribution to programme outputs	Output 2: Deforestation-free agriculture is implemented Sustainable forest landscape management and landscape restoration is implemented
Description of actions	<p>The approach for the implementation of Output 2, Activities 2.1 and 2.2, will be closely coordinated with the IFAD project, 'Partnership for Irrigation and Commercialization of Smallholder Agriculture' (PICSA) (See detailed description Section 1.9.6). The PICSA project will overlap in 10 out of the 28 GCF programme districts. Thus, GCF-financed implementation of Activities 2.1 and 2.2 will be implemented in 28 districts, while the IFAD PICSA project will be implemented in the remaining 10 districts.²³⁰ IFAD activities are different than proposed GCF-financed activities; the different approaches will allow for comparison and the incorporation of lessons learned into subsequent projects.</p> <p>FAO has been promoting sustainable intensification of agricultural production under the banner of 'Save and Grow'²³¹, emphasising the need for more efficient use of production resources and better management of agro-ecological processes. In 2013, FAO initiated a Regional Rice Initiative (RRI) for the purpose of working with countries, including Lao PDR, to apply Save and Grow concepts, principles and associated good practices in rice-based production landscapes.²³² Under RRI, Save and Grow concepts and good practices were introduced in Lao PDR by building on existing farmer training implementation networks associated with the National Integrated Pest Management (IPM) programme and through the use of Farmer Field School (FFS)-based education interventions.²³³ In the period 2015-2017, over 1,500 farmers – including from the GCF programme target provinces – participated in the FFSs and learned about efficient management and how to grow high-yielding crops with fewer inputs. Farmers were also trained how to use paddy-based farming systems to produce multiple goods and services at the same time through management of aquatic biodiversity in combination with improved agronomic practices such as wider plant spacing and reduced seeding rates, improved water management and the application of IPM and natural biological controls.</p> <p>2.1.1. Capacity building on good agricultural practices.</p>

²³⁰ PICSA has an initial focus on 15 irrigation schemes in 12 (potentially 16) districts in 4 provinces. (**Houaphan**: Xamneua, Viengkay and Sopbao Districts; **Xiengkhouang**: Paek, Khoun and Kham Districts; **Luang Prabang**: Nan, Xieng Nguen and Luang Prabang Districts; ; , Phiang and Paklai Districts).

²³¹ <http://www.fao.org/ag/save-and-grow/>

²³² <http://www.fao.org/bodies/council/cl149/side-events/regional-rice-initiative/en/>

²³³ <http://www.fao.org/in-action/good-agricultural-practices-help-raise-farmers-incomes-in-lao-pdr/jp/>

	<ul style="list-style-type: none"> • The <i>Training of Trainers</i> approach will be implemented. Agriculture specialist(s) of the PPMU and NPMU will deliver programme TA (capacity building, training and <i>continuous coaching</i>) to existing agriculture extension staff of DAFO and Technical Service Centers (TSCs). Training materials on agronomy, livestock production and agribusiness development will be used. Close cooperation with Agricultural Universities/Colleges will be sought. • Village heads and committee members will be included in programme TA to ensure their understanding of the programme objectives and approach. • Target villages will be selected using the district committee and the deforestation hotspot analysis (where areas with high remaining forest cover and high deforestation risk will be prioritized). • After awareness-raising activities by the PPMU/DAFO staff, farmers interested in participation will be identified. Jointly, farmers within a village will decide which activities (e.g. maize, Job's tear and livestock rearing) will be implemented and supported as part of the land use planning actions in Activity 1.5. Results from the in-depth value chain analyses (Activity 2.3) will help inform the selection of activities. Activities will be confirmed with village authorities. • A district activity plan for outlining activities, participants, inputs and an annual budget plan (by TSC) will be developed, subject to approval by DAFO and PPMU, based on land use plans from Activity 1.5 and village consultations. • DAFO and TSC staff will provide extension services and build the capacity of lead farmers. Two trainings will be provided: one at the start of the season, and one (pre-) harvest (including post-harvest stage). The curriculum will include all stages of crop/livestock/forestry production, cropping calendar and post-harvest stage. Gender-inclusive approaches for training and capacity building (e.g. by female trainers, appropriate timing of trainings) will be considered. • Farmers will be supported for three years on good agricultural practices, on-farm production and commercialization. Subsequently, each farmers will be supported with training on financial literacy and establishment of effective market linkages. • Farmers interested in value chain development (input and service provision, trading, value addition) will be supported with TA and continuous coaching on business plan development, negotiation skills, access to markets, credit and processing. Youth and women will be specifically targeted. • Note: Measurement, monitoring and reporting of adjacent forest areas will be conducted within Activity 1.6. Avoidance of deforestation and degradation will be enforced, as supported by Activity 1.4 and implementation of enforcement in different forest categories within Output 3. <p>2.1.2 Investment in GAP and agroforestry</p> <ul style="list-style-type: none"> ▪ Building on the capacities and partnerships developed, this activity will invest into VDFs with a combination of upfront and performance-based payments. ▪ DPMUs and VDFs will agree upon appropriate "white lists" of activities. These will be matched to the activities 2.1.1. ▪ VDFs in these districts will be eligible for grants covering establishment and management costs of GAP. VDFs must, with the support of the DPMU, develop a brief investment plan and budget needs to implement their agricultural management plan. Criteria for eligibility of payments include: i) completion a site-specific FPIC, ii) an application is successfully completed, iii) a
--	--

	<p>LUP is completed, iv) and the activities fall within an approved white list of activities.</p> <ul style="list-style-type: none"> Performance-based payments will be disbursed after two years based upon adherence to the PLUP that has been developed, particularly the protection of forest cover according to the PLUP. If forest cover is 95% or greater than the forest cover in the PLUP, VDFs will be eligible to receive the remainder of the funds. If forest cover is between 75-95% of the forest cover in the PLUP, VDFs will be eligible to receive 50% of the agreed upon funds. If forest cover is less than 75% of the PLUP, VDFs will not be eligible to receive funds. Based on the formalized and approved private-sector village partnership agreements (PSVPAs) developed in Activity 2.2.3, SMEs will be eligible for grants covering 50% of the establishment costs for village-based agroforestry and plantation forests (up to EUR 200/ha, approximately 50%). The remaining 50% will be financed by the companies themselves, as per the PSVPA. Implementation will be based on the existing experience and expertise of companies that have already established and managed several thousand hectares in Lao PDR (see technical justification section below). In degraded production forests, the private sector companies may invest without village participation if land is available. <p>2.1.3 Knowledge management and sharing of successful experiences for replication</p> <ul style="list-style-type: none"> According to the cropping calendar, exchange workshops between FFSs in each <i>kumban</i> and district will be organized. The exchange workshops will contribute to knowledge exchange and sharing of lessons learned by each of the FFSs. Successful experiences and lessons learned from implementation of the capacity-building approach will be documented and disseminated for promotion and upscaling within the provinces and Lao PDR. Existing structures and media of national, provincial and district governments will be used. Translation of materials and trainings will be made available as necessary.
Result indicators	<p>Action 2.1.1</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> DAFO and TSC staff have limited up-to-date knowledge on good agricultural practices and implementation of FFS. 0 training programmes implemented in the target programme areas. Good agricultural practices are not implemented on-farm. Baseline yields are XXX tonnes/ha, disaggregated by crop. Baseline household income is USD XX per year (to be quantified at inception phase). <p><u>Target:</u></p> <ul style="list-style-type: none"> At least 129 DAFO and TSC staff (GCF only); with IFAD project as well, a total of 164 staff to be trained on good agricultural practices. Trainings have occurred in a total of 18 districts (with IFAD project in 420 FFSs) with EUR 0.95 million GCF grant disbursed Good agricultural practices adopted and increased average yields of at least 50% tonnes/ha, compared to baseline, disaggregated by crops. Household income has increased by at least 50% compared to baseline. <p><u>Means of verification:</u> Monitoring, reporting and evaluation reports by PPMUs.</p>

	<p>Action 2.1.2</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> ▪ VDFs receiving zero resources from external sources for GAP ▪ Existing village-level partnerships covering approximately 2,000 ha of reforested land ▪ 0 existing results-based financing investment for plantation establishment made to private sector <p><u>Target:</u></p> <ul style="list-style-type: none"> ▪ XXX\$ disbursed to VDFs ▪ Additional 10,000 ha reforested through PSVPAs ▪ 2,000,000 Euros of results-based financing for plantation establishment <p><u>Means of verification:</u> Grant disbursement monitoring and evaluation reports and private sector companies' reports</p> <p>Action 2.1.3</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> ▪ No exchange workshops between FFSs are organized. ▪ Successful experiences with FFSs and implementation of good agricultural practices are not exchanged at national, province and district level. <p><u>Target:</u></p> <ul style="list-style-type: none"> ▪ 160 <i>kumban</i> and district-level exchange workshops to be conducted. ▪ 10 user-targeted knowledge products in different media to be developed. ▪ Successful experiences and lessons learned to be disseminated in 21 districts (only GCF financed; 28 with IFAD project implementation). <p><u>Means of verification:</u></p> <p>Monitoring, reporting and evaluation reports by PPMUs and NPMU.</p>
Inputs and investment items	<p>Action 2.1.1. Capacity building on Good Agricultural Practices</p> <ul style="list-style-type: none"> ▪ Training of Trainers: external capacity building on CA/good agricultural practices. Training of trainers (TOT) at provincial level ▪ Development of training materials in cooperation with Agricultural Universities/Colleges (external service contracts) ▪ PPMU (district field coordinators) and Government extension staff time inputs ▪ Transportation for district and provincial staff to visit villages (transportation costs, cars, motorbikes) ▪ Translators for consultations, translation of materials to local languages (as necessary) ▪ Exchange in <i>kumbans</i> and districts between field staff ▪ Documentation of lessons learned and field experiences ▪ TSC ▪ Staff inputs: 2 extension officers per district, responsible for max. 5 <i>kumbans</i> (including farmer group formation, group capacity building) ▪ Transport, per diems and accommodation per extension officer and field coordinators (motorbike, maintenance and repairs and fuel) ▪ Expert input (1 business advisor/trainer/province) ▪ Exchange in <i>kumban</i> and district (lump sum) ▪ Training materials <p>2.1.2 Investment in GAP and agroforestry</p> <ul style="list-style-type: none"> ▪ Provision of results-based grant finance for GAP and forest landscape restoration (FLR) investments

	<ul style="list-style-type: none"> ▪ Farmers' own investment in GAP alongside programme investments ▪ Private sector provision of finance and expertise to implement FLR. (Remaining labor costs of Euro 1,200 Euro/ha over 7 years is the labor to be provided by the villagers) ▪ Informative materials (printing guidelines and manuals, lessons learned information sheets, translation of materials) ▪ Personnel and equipment to support the ongoing monitoring, evaluation and enforcement of investments (personnel, transport for field visits/spot-checks, transportation (cars, motorbikes) <p>2.1.3 Knowledge management and sharing of successful experiences for replication</p> <ul style="list-style-type: none"> ▪ Expert input and government extension staff input ▪ Documentation for dissemination of successful experiences ▪ Travel for action implementation
<p>Technical evaluation / justification / barriers addressed²³⁴</p>	<p>The agricultural sector is one of the main drivers of deforestation in Lao PDR, as described in Chapters 1 and 2. Major barriers identified that contribute to deforestation include the lack of alternative livelihood opportunities, low productivity and yields, poor planning (and the resulting high environmental impact) and insufficient extension services and technical support.</p> <p>The agriculture sector in Lao PDR is highly fragmented. On-farm production is characterized by low productivity and profitability, which (among others) can be explained by low soil fertility, limited access to high quality seeds, limited access to irrigation, and limited reach (due to limited budget, mobility) and effectiveness of agriculture extension services. Only a very few farm organizations exist in the country. Production for subsistence is common. Commercial production tends to be for export markets (particularly China and Vietnam), rather than domestic trade.</p> <p>A range of technical options have been successfully tested in the Northern Uplands of Lao PDR over the last decades to support the transition from mainly subsistence to commercial agriculture. Promotion of the adoption of Good Agricultural Practices, such as Conservation Agriculture (intercropping, mulching, no-tillage), is not new to the country. There are, however, a number of barriers that hinder farmers from adopting Good Agricultural Practices. One of the key lessons learned from past World Bank projects, for example,²³⁵ is that interventions that help improve on-farm productivity are only effective when an enabling environment for market-driven agriculture is achieved.</p> <p>One of the key barriers is the high cost of production and operational inefficiencies among multiple players in the value chains of agricultural products, particularly in rice production. Compared to international standards in neighboring countries, "farmers receive relatively high farm-gate price, yet high production cost eats their profits. The high production costs pertain to low productivity and quality management at the farm and immediate post-farm level."²³⁶</p>

²³⁴ Note: Extensive background information on the agriculture sector in Lao PDR, and specifically in the six provinces, barriers faced, and how the interventions presented here will address these, is provided in Chapter 1.4 and 2 of the feasibility study document.

²³⁵ World Bank (2018) Lao PDR Agriculture Competitiveness Project, Project Appraisal Document.

²³⁶ World Bank 2018 available at:

<http://documents.worldbank.org/curated/en/418261529002464394/pdf/127222-REVISED-Lao-PDR-Economic-Monitor-Report-June-2018-for-Website.pdf>

	<p>Concepts of deforestation-free and Good Agricultural Practices (See Annex 3 on detailed list of practices) will be integrated with the principles of Responsible Agricultural Investment to embed broader social, environmental and economic safeguards and perspectives, together with the climate-related concerns central to deforestation-free agriculture. This is designed to significantly curb expansion into forested landscapes and increase household incomes and resilience to climate risks (drought, floods, soil erosion, etc.).</p> <p>Access to high-quality inputs and services, professional advisory services, post-harvest management and investments into the value chain can all contribute to the adoption of Good Agricultural Practices on-farm. These elements are all considered in the design of the Activity. Programme Activities 2.1 and 2.2 are thus all strongly related to each other and ensure an enabling environment for market-driven agriculture in districts and provinces.</p> <p>The investment will be supported through more effective extension services in Activity 2.1.1 to the target groups, strengthening their value chain integration through promotion of processing, provision of marketing support and market information and stronger engagement with the private sector. Women, youth, ethnic groups and other vulnerable groups will receive special attention.</p> <p>The investment and reducing deforestation / forest degradation impact will be achieved by a combination of the enabling environment investment, in particular related to land use planning and law enforcement (counter affect the potential expansion into forest landscapes due to increased profitability), combined with improved access to markets and enhanced productivity of existing farm land instead of expanding into forest landscapes.</p> <p>It is important that the programme support commodities that are locally appropriate and where there is significant market demand to support increased protection. Job's tears, maize, rice, cardamom, forest tea, green beans and other vegetables, and other commodities have been identified as meeting these criteria. The value of maize exports has increased 88% between 2010-2016; the value of rice exports has increased 181% between 2014-2016; and the value of green beans exports has increased 538% between 2014-2016. Quantitative analysis demand for other commodities is not available; however, consultations with approximately 40 agri-traders in the six programme provinces reveals anecdotal evidence that demand for the identified commodities is high and growing. It is noteworthy that demand is highly dependent on Chinese and Vietnamese markets and is therefore vulnerable to downturns in these economies.</p> <p>This Activity builds on good practices supported by Lao PDR's FIP Investment Plan,²³⁷ especially Component 2 of the Investment Plan which focuses on developing alternative livelihoods for villages interested in engaging in smallholder forestry (including agroforestry) in areas where select private sector enterprises are licensed to operate. The FIP specifically focuses on providing opportunities for smallholders to participate in agroforestry models that are linked to private enterprise production and value addition operations. Participation of private enterprises will be limited to those that meet Government requirements and IFC engagement criteria.</p> <p>Of particular relevance is a project with Burapha Agroforestry Co. Ltd (hereafter 'Burapha'). Burapha implements and operates eucalyptus agroforestry plantations in Vientiane Prefecture and the Provinces of Vientiane and Saysomboun. At the current time, Burapha has successfully planted approximately 3,500 ha</p>
--	---

²³⁷ Lao PDR FIP Investment Plan (20119: https://www.climateinvestmentfunds.org/sites/cif_enc/files/fip_4_lao_pdr_ip.pdf; Another example is from 2017 related to the FIP supporting cooperation between the IFC and MTP: <http://annx.asianews.network/content/ifc-partners-mekong-timber-plantations-strengthen-forest-plantation-sustainability-74895>

	<p>across 23 villages in 6 districts and plans to scale-up its plantations to 15,000 ha by 2021. The Burapha agroforestry model was first introduced in 2006, providing agricultural development opportunities for local villages through plantation design that comprises 30% of land for tree plantations and 70% for agriculture (with a focus on planted land, i.e. not including riparian buffers and steep slopes that are protected and maintained).</p> <p>Burapha's land use rights are currently acquired from village lands following the FPIC process. Agroforestry plantation are certified by the Forest Stewardship Council (FSC). Burapha has expressed interest participating in Actions under Activity 2.2.</p> <p>The Activity further builds on positive experiences working with the private sector in the Center and South of Lao PDR, with companies such as Stora Enso which manages more than 2,000 ha in Lao PDR.</p> <p>An innovative, performance-based payment approach is chosen for Activity 2.1.2 in order to provide flexibility to programme beneficiaries, while allowing the programme to fill data gaps. Beneficiaries will be able to use payments for any activities that fall within a white list of eligible activities, assuming they adhere to LUPs. This activity design will also give farmers greater autonomy and encourage innovation. An overall challenge for programme design has been the lack of data about agricultural practices in remote, isolated areas of the country. Allocating funds on a performance basis will enable the programme to collect data on best practices, and better allocate funds throughout the lifetime of the programme.</p>
Implementation mechanisms	<p>Action 2.1.1</p> <ul style="list-style-type: none"> At the national level, implementation of these actions is under the responsibility of the Ministry of Agriculture and Forestry (Department of Agriculture). At the provincial and district level, PAFO, Department of Agriculture, DAFO and TSCs (one per province) are responsible for implementation. A partnership agreement will be implemented at the provincial and district level, including PAFO, DAFO and TSC. An activity plan including a list of activities, expected results and budget will be developed, and supported by the PPMUs. At all levels, technical assistance will be provided by the NPMU and PPMU expert team, including (international and national) technical experts. <p>Action 2.1.2</p> <ul style="list-style-type: none"> The Action will be implemented by the VDFs and the private sector companies entering into partnerships. The implementation draws upon the experiences and capacity development executed by the private sector. EPF will serve as a grant provider to VDFs and SMEs and implement the incentive mechanism. Registered agribusinesses are eligible to receive matching grants under the programme. <p>Action 2.1.3</p> <ul style="list-style-type: none"> This Action will be implemented under the responsibility of the PPMU and knowledge management and communication specialists.
Fund flow arrangement	<p>Action 2.1.1</p> <ul style="list-style-type: none"> Finance will be managed by the PPMUs and approved by NPMU. The PPMUs will provide financial support for the training and logistical support for Government staff members to participate in trainings.

	<ul style="list-style-type: none"> ▪ DAFO/TSC in each province will prepare annual budgets for their support to be submitted to EPF for approval and disbursement under the REDD+ Funding Window for Government entities (for detailed description of the REDD+ Funding Window, see the EPF report on the REDD+ Funding Window). PPMUs will provide them with support on the preparation of the annual activity plans and budgeting. ▪ Capacity building related activities will be based on the preparation of annual operational plans and budgets to be submitted to the EPF by DAFO/TSC, subject to approval by PPMUs and disbursement by EPF. PPMUs will provide support in the preparation of planning and budgeting for capacity building. <p>Action 2.1.2</p> <ul style="list-style-type: none"> ▪ Agroforestry activities will be funded by 50% GCF grant finance and by 50% matching funding from the private sector. GCF grant finance will be managed by the National REDD+ Window. Splitting costs 50% / 50% with the private sector is done in order to encourage businesses to invest in activities that are innovative and which they would otherwise consider to be too risky. Grants will be provided following the regulations and conditions of the EPF standardized operational manual for villages and village-based programme activities. ▪ GAP activities will be financed partially upfront, and partially on a performance basis, as described above. Funds will be managed by the EPF REDD+ Window. ▪ Based on an agreement with a private sector company or approved PLUP, VDFs will apply for grant finance. They will be supported by PPMU expert staff to develop a project proposal, where successful proposals (with a PSVPA in place) will be eligible to receive the incentive. ▪ The private sector company will pay 50% of the required finance for the investment, matching the grant provided to the SMEs (as per the PSVPA). Private sector companies will be reimbursed for the remaining 50% of expenses based on receipts. Communities' input will be sought to guard against receipt fraud. ▪ Villagers will contribute their own capital and labor to implementing GAPs. <p>Action 2.1.3</p> <ul style="list-style-type: none"> ▪ This Action will be fully financed by the PPMU budget, to be approved by the NPMU.
Co-finance / leverage	<p>Total Activity Cost: 35.5 million Euro</p> <ul style="list-style-type: none"> ▪ Total GCF grant finance: 16,391,540 Euro ▪ Co-finance from IFAD PICSA project - loan to Lao PDR: 6,224,365 Euro ▪ Co-finance from Government of Lao PDR (Government staff from the Ministry of Agriculture and Forestry, PAFO, DAFO and TSC will provide their work time to implement this Activity): 4,494,801 Euro ▪ Co-finance from private sector (farmer-in-kind contribution in participation and implementation): 10,718,596 Euro ▪ Co-finance BMZ: 22,828 Euro ▪ Co-finance JICA: 155,400 <p>Note on co-finance:</p>

	<p>While the programme will support the establishment of public-private dialogue platforms at national and provincial levels (network strengthening), capacity building, enabling environment support and 50% of the costs for key investments (seedlings and fertilizers), the leading sustainable private sector actors will supply the remaining 50% of the costs for inputs (seedlings and fertilizers). The remaining labor cost for management of plantations will be provided by the villagers.</p>
Exit strategy / long-term sustainability	<ul style="list-style-type: none"> ▪ Based on land use planning exercises (Activity 1.5) that ensure selected activities are suitable based on the local context (environmental conditions/soils, villagers' interests). ▪ Capacities of MAF, PAFO, DAFO and TSC staff will be built throughout the implementation of this Activity. This will contribute to <i>organizational development</i> of each of these actors. Turnover of staff within each of these organizations, and thus loss of knowledge and capacities built, will be mitigated by involving all staff members in exchange workshops and other knowledge dissemination activities (including clear documentation and information management to ensure knowledge is continually transferred and built upon). ▪ Operations and maintenance of farmer field schools will be maintained by the farmers. ▪ The programme will strengthen villagers' interest in agroforestry and forest plantations, with clear market linkage and strengthened capacities of village groups. ▪ It will lead to improved management of village-based agroforestry and forest plantation systems and strengthen village ownership of forest resources and ability to market products and negotiate with companies. Income from timber revenues will help incentivize villagers to sustainably manage forest resources and re-invest in sustainable practices. ▪ Village-based agroforestry and plantations will provide enhanced tax revenues for Government that can be fed back into the sector and help overcome budget/financing gaps.
Beneficiaries	<p>Direct beneficiaries: 37,800 people (6,300 farmer households) in 21 districts (18,900 men; 18,900 women) With IFAD co-finance in 28 districts: 50,400 people, (8,400 farmer households); 25,200 man; 25,200 women)</p> <p>Government staff trained in good agricultural practices: at least 129 in 21 district and 164 in 28 districts</p> <p>Indirect beneficiaries (by assumed replication of 5 household per farmer group 189,000 people (31,500 households) (18,900 man; 18,900 women) in 21 districts With IFAD co-finance programme in 28 districts: 252,000 people, (42,000 farmer households); (126,000 man; 126,000 women)</p> <p>Direct area under good agricultural practices management Area under good agricultural management direct participating farmers: 7,875 ha (28 districts: 10,500 ha) (assumed adoption rate of 80%).</p> <p>Indirect area under good agricultural practices management Area under good agricultural management indirect participating farmers: 37,800 ha in 21 district (28 districts: 50,400 ha) (Replication factor = 5 farmers reached by one farmer participation).</p>

	<p>Agroforestry 6,667 beneficiary households (40,000 people; 20,000 women and 20,000 men) implement village-based agroforestry and forest plantation systems on 10,000 ha</p>								
Impacts and co-benefits	<p><u>GHG mitigation:</u> Adoption of Good Agricultural Practices will increase soil carbon stocks in degraded agricultural landscapes (not to be monitored). Increased productivity and land use plans will reduce the pressure on area expansion into forested landscapes. This will result in reduced deforestation / forest degradation and enhancement of carbon stocks in degraded forest (regenerating vegetation lands). GHG mitigation quantification is provided in a separate Chapter (see Chapter 9 for mitigation quantification).</p> <p><u>Socio-economic:</u> (a) Generation of economic benefits for male and female farmers. (b) Generation of employment opportunities for youth, women, villagers within the agricultural value chain.</p> <p><u>Environmental:</u> Adoption of Good Agricultural Practices will contribute to reduced use of chemical fertilizer, reduced pollution of soils and waterways, reduced soil erosion, reduced deforestation and forest degradation and thereby contribute to biodiversity conservation.</p> <p>Village-based agroforestry and forest plantation investments within this activity will be targeted at areas that are: i) not included in protected areas, iii) areas where at least 80% of the lot area is acceptable for industrial tree plantation establishment (e.g. in areas with slopes less than 35°, in degraded or barren forest, outside of riparian areas, high conservation value forests or sensitive forest areas, as well as Government restricted areas, village protection forests or other conservation areas), iv) where there are no permanent settlements or permanent agricultural plots within the borders, within 50m of sites of cultural or archaeological value, areas planned for tourism. As such, detailed planning will ensure that plantations and activities are implemented in suitable areas, and in such a manner that they promote the protection of natural forest resources. Benefits from plantation establishment in degraded or fallow areas include: erosion control, climate stabilization, enhanced soil carbon stocks, improved water retention of soils and restoration of degraded lands (among other benefits).</p> <p><u>Gender:</u> The Activity will pay particular attention to building capacities for gender-inclusive approaches in on-farm production, input and service provision, trading and marketing, to ensure equitable benefit of men, women and youth from activities supported by the programme. Gender-inclusive approaches for training and capacity building (e.g. by female trainers, appropriate timing of trainings) will be considered. Youth will be specifically targeted for value chain activities such as input and service provision, trading and value addition. The activity will further ensure women’s equal and equitable access to and benefit from the promotion of new agricultural practices and value chains. All feasibility studies for the development of new value chains or agricultural practices will review the estimated gendered impact of the desired change (access, needs, barriers, potentials, work load, benefits).</p>								
Risks and risk mitigation	<table><tr><th>Risk</th><th>Mitigation measure</th></tr><tr><td>Delay in financing of programme activities</td><td><ul style="list-style-type: none">PPMUs will provide budgeting and planning support to ensure timely fund disbursement</td></tr><tr><td>Staff turnover in PAFO, DAFO or TSC staff</td><td><ul style="list-style-type: none">Include all PAFO, DAFO and TSC staff in knowledge exchange activities</td></tr><tr><td>Drought/heavy rainfall/ extreme weather events negatively affect crop yields, affecting farmer participation</td><td><ul style="list-style-type: none">Inclusion of drought-resilient crops and varietiesCapacity building on water harvesting techniques</td></tr></table>	Risk	Mitigation measure	Delay in financing of programme activities	<ul style="list-style-type: none">PPMUs will provide budgeting and planning support to ensure timely fund disbursement	Staff turnover in PAFO, DAFO or TSC staff	<ul style="list-style-type: none">Include all PAFO, DAFO and TSC staff in knowledge exchange activities	Drought/heavy rainfall/ extreme weather events negatively affect crop yields, affecting farmer participation	<ul style="list-style-type: none">Inclusion of drought-resilient crops and varietiesCapacity building on water harvesting techniques
Risk	Mitigation measure								
Delay in financing of programme activities	<ul style="list-style-type: none">PPMUs will provide budgeting and planning support to ensure timely fund disbursement								
Staff turnover in PAFO, DAFO or TSC staff	<ul style="list-style-type: none">Include all PAFO, DAFO and TSC staff in knowledge exchange activities								
Drought/heavy rainfall/ extreme weather events negatively affect crop yields, affecting farmer participation	<ul style="list-style-type: none">Inclusion of drought-resilient crops and varietiesCapacity building on water harvesting techniques								

	and risking programme sustainability	
	Pests (e.g. rats, grasshoppers) negatively affect crop yields, affecting farmer participation and risking programme sustainability	<ul style="list-style-type: none"> ▪ Capacity building of farmers on sustainable pest and disease management ▪ Capacity building on improvement of soil quality, boosting the soil's capacity to combat pests and diseases ▪ Capacity building on farm diversification, reducing farm risk
	Crop and livestock price volatility, negatively affecting farm profitability and household income	<ul style="list-style-type: none"> ▪ Information gathered during the feasibility study demonstrates positive price trends for the promoted crops; in addition to strong domestic demand, Chinese, Thai, and Vietnamese markets are increasingly seeking the supported crops from Lao PDR ▪ Development of a market information system (Activity 2.3) ▪ Capacity building of farmers on market research ▪ Strengthening value chain actors on terms and conditions and forward contracting ▪ Promotion of farm production diversification
	Inefficient and insufficient quality provision of technical extension services	<ul style="list-style-type: none"> ▪ Provision of capacity building to DAFO and TSC staff by technical experts from PPMU and NPMU ▪ Develop, disseminate and train DAFO and TSC staff in good practice guidance, and Good Agricultural Practices implementation
	Plantations can present biodiversity risks if not appropriately planned and managed	<ul style="list-style-type: none"> ▪ Only use of approved species that are locally adapted, and planning conducted based on the principle of site-species matching by forestry experts. ▪ Heterogeneous landscape planning will ensure that plantations occur on non-forested land (taking into account stringent site criteria²³⁸), ensuring that no primary natural forest or permanent agricultural land is utilized for plantation activities. On land used for village-agroforestry and plantations, 70% will be industrial trees, 20% will be a buffer zone and 10% of planted trees will be native

²³⁸ According to law plantations can be placed on either production forest land or 'other land' (based on the Forest Law and Land Law). In addition we propose to also apply the following criteria, based on best practices in Lao PDR: areas that are not included in protected areas, iii) areas where at least 80% of the lot area is acceptable for industrial tree plantation establishment (e.g. in areas with slopes less than 35°, in degraded or barren forest, outside of riparian areas, high conservation value forests or sensitive forest areas, as well as Government restricted areas, village protection forests or other conservation areas), iv) where there are no permanent settlements or permanent agricultural plots within the borders, within 50m of sites of cultural or archaeological value, areas planned for tourism.

		tree species (promoting forest restoration).
	Inconsistent law interpretation by national-, provincial- and district-level authorities	<ul style="list-style-type: none"> ▪ Capacity building and trainings for Government officials at many levels on laws, policies and procedures related to private sector investment (land acquisition, key laws and decrees, monitoring, etc.). ▪ Public-private dialogue will improve coordination and communication between government officials and private sector actors, raising awareness of key gaps and barriers and improving action to address and overcome these challenges.
	Insufficient access to land. Private sector actors may lose interest if land evaluation and acquisition processes are too complex and time-consuming.	<ul style="list-style-type: none"> ▪ Enabling environment activities focus on how to improve the investment climate, including improving access to land and improving investment support to private sector actors and links to district and village groups.
	Villagers do not want to participate	<ul style="list-style-type: none"> ▪ Participation in village-based agroforestry and forest plantation schemes is entirely voluntary. Consultations are fully documented and conducted based on the principles of FPIC. ▪ The grievance mechanism is clearly communicated in culturally appropriate ways, and villagers are able to access the mechanism to file any grievance. ▪ The business opportunity of agroforestry will be presented to the villagers. ▪ Grant finance as incentive to engage in the forestry sector as a business.

3.3.2.2 Activity 2.2 Agricultural value chain development

Activity 2.2 Catalyzing private sector investment in value chains	
Contribution to GCF outcome(s)	M9.0 Improved management of land or forest areas contributing to emissions reductions M9.0 Improved management of land or forest areas contributing to emissions reductions M5.0 Strengthened institutional and regulatory systems M5.0 Strengthened institutional and regulatory systems
Contribution to programme output	Output 2: Deforestation-free agriculture is implemented
Description of actions	<p>The approach for the implementation of Output 2, Activities 2.1 and 2.2, is closely coordinated with the IFAD project, Partnership for Irrigation and Commercialization of Smallholder Agriculture (PICSA) (See detailed description Section 1.9.6). The PICSA project will overlap in 7 districts of the 28 covered by the GCF programme. Thus, GCF-financed implementation of Activity 2.1 and 2.3 will be implemented in 21 districts, while the IFAD PICSA project will be implemented in the remaining 7 districts²³⁹.</p> <p>This Activity is designed to mobilize private sector investment in the programme area and to develop village-private sector partnerships. The Activity also builds on the private sector engagement models and policy options for deforestation-free investments that will be generated by the GCF readiness project being implemented by FAO.</p> <p>2.2.1 In-depth value chain assessment of key agricultural commodities</p> <ul style="list-style-type: none"> In-depth value chain studies for key existing and alternative agricultural commodities (~3 commodities per province) will be implemented at the provincial level. The specific role of women will be assessed to promote enhanced participation of women in agricultural production and trade. Further criteria for the assessment and selection of key agricultural commodities will include: (i) potential for competitiveness; (ii) potential for growth (by quality or quantity); (iii) potential for value addition, (iv) potential for upscaling; and (v) cross-cutting issues such as GHG mitigation or biodiversity impacts.²⁴⁰ Following the in-depth value chain studies, a workshop will be organized to share and agree on study results with NPMU, PPMUs, PAFO, DAFO and TSC staff, and selected lead farmers. Results of the in-depth value chain studies will inform and will be linked with capacity building activities by DAFO and TSC staff (Activity 2.1). <p>2.2.2 Establishment of public-private dialogue to promote village-based agroforestry</p> <ul style="list-style-type: none"> Building on the related efforts under the GCF readiness project implemented by FAO, establishment of a private-public sector dialogue platform to improve communication and coordination of actors on village-based agroforestry in Lao PDR, and to support the implementation of an incentive mechanism that provides grants to VDFs / VLUFMCs for village-based agroforestry and plantation establishment. CSOs will also be invited to participate in dialogue platforms, including representatives from the FLEGT Lao

²³⁹ PICSA has an initial focus on 15 irrigation schemes in 12 (potentially 16) districts in 4 provinces. (**Houaphan**: Xamneua, Viengkay and Sopbao Districts; **Xieng Khouang**: Paek, Khoun and Kham Districts; **Luang Prabang**: Nan, Xieng Nguen and Louang Prabang Districts; Phiang and Paklai Districts.)

²⁴⁰ Criteria aligned with the IFAD-funded PICSA project.

	<p>CSO Core Committee, among others, who can bring long-standing insight to support local villages to sustainably manage forest resources and strengthen local livelihoods. Funding for VDFs / VLUFMCs will be approved and disbursed according to the same processes described in other Activities. The dialogue platform will be implemented at the national level and will support the identification of strategic investment areas (e.g. considering availability of land, market access, regulatory issues, etc.).</p> <ul style="list-style-type: none"> ▪ Identification of private sector companies in the forestry sector that are willing to invest in sustainable village-based agroforestry and plantations in the target areas. To undertake such investments, companies will require information about suitable degraded land that can be reforested. Activity 2.2 will source information on degraded land and suitable lands in production forest areas and village land (on non-forested land), in accordance with the country's legal framework. ▪ Support match-making between private sector companies, districts²⁴¹ and villages (developing private sector-village partnerships). This will entail awareness-raising of villages on the potential of village-based agroforestry and plantations as a business case and building villages' capacities to negotiate with the private sector. ▪ Documentation and dissemination of experiences and lessons learned to inform the regulatory framework and enhance potential for replication beyond the programme scope (closely linked with Activity 1.3). <p>2.2.3 Formalization support for village and private sector partnerships²⁴²</p> <ul style="list-style-type: none"> ▪ The private sector will be supported in identification of village-based investment areas – on highly degraded land in production forests and on non-forest land. The process will be led by the private sector companies. Villages will be supported by the PPMU staff in the land identification and contract negotiation process. The resulting contracts will be 'private sector-village partnership agreements' (PSVPAs) that will be signed by individual village members that commit to plant and manage forest plantations. ▪ The villages will be supported by PPMU staff in preparing applications for the grant finance to be provided through the EPF REDD+ Window. ▪ This Action is anticipated to be implemented with technical advisory inputs from FAO, based on its work through the GCF readiness project as well as its global expertise on forest landscape restoration. <p>2.2.4 Multi-Stakeholder Platforms (MSP) on value chain development²⁴³</p> <ul style="list-style-type: none"> • Identification and mobilization of private sector companies (traders, input suppliers, processors, farmer organizations, financial institutions, etc.) and other value chain actors (e.g. farmer representatives, farmers' organizations, government representatives), to participate in district-level multi-stakeholder platforms (MSPs). The platforms will contribute to improved networking and coordination across the value chain. The design and functions of the platforms will be informed by the lessons-learned from a series of public-private dialogues that are being organized by the ongoing GCF readiness project for REDD+ implemented by FAO.
--	--

²⁴¹ Note: capacity building on investment evaluation and monitoring will be supported within Activity 1.2.

²⁴² Note: capacity building on investment evaluation and monitoring will be supported within Activity 1.2.

²⁴³ Aligned with the MSP activities within the IFAD funded PICSA project.

	<ul style="list-style-type: none"> Based on the in-depth value chain studies (2.2.1), actions for value chain development will be identified. The MSPs will be supported in action implementation by programme TA (PPMU agribusiness staff). Regular MSP exchange meetings on activities implemented, results achieved and support required will be organized. <p>2.2.5 Business development support to farmers/value chain actors</p> <ul style="list-style-type: none"> Identification of relevant businesses and agribusiness experts who will work closely together with DAFO and TSC staff. Significant time will be invested in canvassing businesses, building interest and buy-in in the programme activities. Agribusinesses affecting key parts of the value chain will be prioritized: input and service providers, processors and traders. Businesses will then be grouped according to their position in the supply chain and the commodity that they work in. The agribusinesses themselves will then prioritize key business and financial management skills that need be addressed through training. Agribusinesses will be selected based upon: their demonstrated long-term interest, their relevance to locally-relevant value chains, their proximity to producers, their activities in selected districts, and the likelihood that they receive subsequent financing via Action 2.1.2. Business groups will be trained by national consultants, with support from international consultants, on identified issues relating to business management and financial literacy: production costs, risks, creating business plans, bookkeeping, credit use, financial management, and saving accounts. Women will be specifically targeted in this Action.
<p>Result indicators</p>	<p>Action 2.2.1 <u>Baseline:</u> No up-to-date, in-depth value chain studies for key current and new commodities exist in the six provinces. <u>Target:</u> 18 in-depth value chain studies for key current and new commodities in the six provinces conducted. <u>Means of verification:</u> 18 value chain reports and action plans.</p> <p>Action 2.2.2 <u>Baseline</u> <ul style="list-style-type: none"> National public-private sector platform managed by IFC (end of funding in 2018) Scattered information on forest sector and investment opportunities <u>Target:</u> <ul style="list-style-type: none"> One operational public-private dialogue with at least 3 commercial forest development companies <u>Means of Verification:</u> <ul style="list-style-type: none"> Meeting minutes of the frequent meetings prepared by NPMU </p> <p>Action 2.2.3 <u>Baseline:</u> 0 private sector – village partnership agreements (PSVPAs) <u>Target:</u> <ul style="list-style-type: none"> 67 signed private sector – village partnership agreements (based on average 100 ha per village and planted 1.5 ha per household) <u>Means of Verification:</u> Reports on grant applications and disbursement and monitoring reports by PPMU, Signed PSVPA between companies and villagers</p> <p>Action 2.2.4 <u>Baseline:</u> No farmers benefit from improved relations with value chain actors (e.g. by value addition).</p>

	<p>Target: 8,400 (in 28 districts) farmer households benefit from improved relations with value chain actors.</p> <p>Means of verification: Value chain analysis will estimate changes in added value within the chain after programme duration.²⁴⁴</p> <p>Action 2.2.5</p> <p>Baseline: 0 business plans by targeted businesses /SMEs</p> <p>Target: 210 SME business plans developed (average 10 per target district in 21 district) (280 in 28 districts)</p> <p>At least 70% request financing</p> <p>Means of verification: SMEs will submit business plans to PPMU team</p>
Inputs and investment items	<p>Action 2.2.1 In-depth value chain study for key agricultural commodities</p> <ul style="list-style-type: none"> ▪ Expert inputs from NPMU and PPMUs ▪ External services providers, consultants to carry out value chain assessment ▪ Workshops, training and results dissemination <p>2.2.2 Establishment of public-private dialogue and match-making platform to promote village-based agroforestry</p> <ul style="list-style-type: none"> ▪ NPMU and PPMU experts and administrative staff to engage with the private sector and formalize the public-private dialogue platform (e.g. organization of meetings, preparation of content etc.) ▪ Coverage of operational costs for the platform (planning meetings, enabling communication, website, knowledge-sharing, workshops, events) – assuming four per year, national-level) ▪ Service contract for the preparation of an agroforestry and plantation potential sector study to match private sector needs with district- and village-level opportunities for investments ▪ PPMU and DAFO forestry staff to support reforestation opportunity identification (in close coordination with private sector companies) ▪ Travel for district and provincial authorities to support the identification of suitable investment areas and interested villages ▪ Monitoring and evaluation studies (external service contracts) on the key lessons learned and potential for scaling-up and replication <p>2.2.3 Formalization support for village and private sector partnerships</p> <ul style="list-style-type: none"> ▪ PPMU national experts to support the formalization of the incentive mechanism (working closely with the NPMU and Government counterparts in MAF) and to support village-level application processes for grant finance ▪ Travel costs for field work and consultations at the village level ▪ Preparation of training materials and execution of village-level trainings and capacity building on contract negotiation ▪ Consultation costs for preliminary consultations with villages (in suitable areas) to raise awareness about opportunities and gauge their interest to participate in village-based agroforestry and plantation schemes (including transportation costs, workshop fees, materials and translation services [where applicable]) ▪ Trainings on negotiation and marketing skills for villagers (workshop costs, travel costs, supporting materials, translations – if necessary) <p>Action 2.2.4 Multi-stakeholder platform</p>

²⁴⁴ Aligned with the IFAD funded PICSA project.

	<ul style="list-style-type: none"> ▪ PPMU agribusiness staff support to mobilize public and private sector for multi-stakeholder platforms (MSPs) ▪ Meetings, logistics of participants, venues ▪ Private sector time inputs in participation <p>Action 2.2.5</p> <ul style="list-style-type: none"> ▪ NPMU and PPMU agribusiness expert inputs ▪ International service contract to support the SME training and capacity development ▪ Private sector staff inputs to participation in training and business plan preparation ▪ Travel of staff
<p>Technical evaluation / justification / barriers addressed²⁴⁵</p>	<p>The agricultural sector is one of the main drivers of deforestation in Lao PDR, as described in Chapters 1 and 2. Major barriers identified that contribute to deforestation include the lack of alternative livelihood opportunities, low productivity and yields, poor planning (and resulting high environmental impact) and insufficient extension services and technical support. In addition, weak agricultural value chains mean that those employed within the sector and throughout the value chain lose value and economic opportunities.</p> <p>An agricultural value chain encompasses all activities from primary production, transformation, trade and marketing/sales to consumers. Specifically, <i>“the development of value chains aims to improve the competitiveness of agriculture in national and international markets and generate greater value added within the country or region.”</i>²⁴⁶</p> <p>A recent World Bank study²⁴⁷ suggest the need for public investments to structurally improve the value chain integration of farmers by “(i) facilitating value chain linkages between farmers and millers through productive partnerships and contract farming; (ii) enhancing access to finance of farmers and millers; and (iii) improving quantity and quality of public services critical to reduce the currently high production costs and enhance commercialization - for example, through seed, applied research, mechanization, cooperatives, and good agricultural practices”. The World Bank notes that “reduction of farm production costs is probably the most important challenge and opportunity at this point of time for Lao PDR.”</p> <p>Deforestation-free value chains are those that can demonstrate that no deforestation has occurred throughout the value chain – from primary production until sale to the consumer. Within Lao PDR, there is the potential to strengthen deforestation-free agricultural value chains to add value and provide additional incentives to reduce pressure on existing forested areas (directly through sustainable practices and also through generating additional income-generation activities and employment). The design of Output 2 builds on (among others) analytical work being undertaken by FAO through the GCF readiness project for REDD+. A forthcoming report under the readiness project will assess the gaps and opportunities associated with supporting in-country deforestation-free value chains and models of production.</p>

²⁴⁵ Note: Note: Extensive background information on the agriculture sector in Lao PDR, and specifically in the six provinces, barriers faced, and how the interventions presented here will address these, is provided in Chapters 1.4 and 2.

²⁴⁶ GIZ (2018) Available online at <https://www.giz.de/expertise/html/3201.html>.

²⁴⁷ World Bank 2018, available at: <http://documents.worldbank.org/curated/en/418261529002464394/pdf/127222-REVISED-Lao-PDR-Economic-Monitor-Report-June-2018-for-Website.pdf>

	<p>Value chain analysis is thus undertaken to identify (the absence of) linkages between value chain actors, quantify value-added along the value chain, and identify gaps, potential efficiency and profitability gains, and thereby contribute to inclusive value chain competitiveness.</p> <p>A public-private sector dialogue platform has been discussed with members of the private and public sectors and the idea has been positively received. IFC provided finance for 2 years to support an expert round table on Lao Plantation Forestry and Industrial Tree Plantations. Given that funding ran out at the end of 2018, it will be advantageous for the GCF programme to build on these positive experiences and scale-up an inclusive platform to engage both the private and public sector on sustainability within the sector, with a focus on scaling-up sustainable investments.</p> <p>Value chain analysis at provincial level will analyze both existing as well as potential new value chains. Existing value chains will be updated and improved, whilst new deforestation-free value chains will be promoted.</p>
Implementation mechanisms	<p>Actions 2.2.1</p> <ul style="list-style-type: none"> ▪ The NPMU/PPMUs will tender out and select consultants for in-depth value chain studies and development of the market information system. ▪ GIZ Laos will act as an intermediary between private sector entities, village groups, and others, but will not be party to contractual relationships for this activity. <p>Actions 2.2.2, 2.2.3, and 2.2.4</p> <ul style="list-style-type: none"> ▪ The Actions will be under the responsibility of the NPMU and PPMUs, which will provide the key staff and material cost coverage (travel, trainings, and workshops). The public-private dialogue will be led by the NPMU and PPMUs. ▪ The implementation of dialogue platforms will be closely coordinated with Government authorities and private sector actors to ensure their participation and inputs. ▪ GIZ Laos will act as an intermediary between private sector entities, village groups, and others, but will not be party to contractual relationships for this activity. <p>Action 2.2.5</p> <p>These Actions will be contracted out to an external service provider firm. It will be responsible for the implementation of the actions in close collaboration with the NPMU and PPMUs. The service provider will be responsible for the engagement with the private sector and provision of capacity building support. Under Action 2.2.4, the service provider will provide advisory assistance to the NPMU and the financial institutions on the mobilization of climate finance. The PPMUs will be responsible for ensuring linkages to the public and private dialogues.</p>
Fund flow arrangement	<p>Actions 2.2.1 Both Actions will be implemented by external consultant service contracts under responsibility of the NPMU and PPMUs following GIZ EE procurement rules.</p> <p>Actions 2.2.2, 2.2.3, and 2.2.4</p> <p>The NPMU and PPMUs will be responsible for the financing of the interventions (workshops, trainings travel, and input materials), provision of expert staff and procurement of external service contracts.</p>

	<p>Action 2.2.5</p> <p>The hiring of the external services provider will be under the responsibility of the NPMU, following GIZ procurement rules or international contracts. NPMU will be responsible for managing the international service contract.</p>
Co-finance / leverage	<p>Total Activity Cost: 11.5 million Euro</p> <ul style="list-style-type: none"> ▪ Total GCF grant finance: 3,495,885 Euro ▪ Co-finance from IFAD PICS project: 3,059,537 Euro ▪ Co-finance from BMZ: 123,269 Euro ▪ Co-finance from Government of Lao PDR: 469,326 Euro ▪ Co-finance from private sector participation in multi-stakeholder platforms: 4,366,511 Euro <p>Note on Lao PDR co-finance:</p> <ul style="list-style-type: none"> ▪ Government staff from the PAFO, DAFO, TSC, PICs and DICOs will provide their work time to implement this Activity.
Exit strategy / long-term sustainability	<ul style="list-style-type: none"> ▪ The central focus of this Activity is to link farmers to deforestation-free value chains and incentivize the private sector – including input and service providers, traders, millers and marketing companies – to enhance accountability, efficiency and improve transparency in the value chain. ▪ Knowledge documentation and dissemination will ensure that information generated by this Activity (including studies, meeting minutes from public-private dialogue platforms, etc.), is available and accessible to inform diverse stakeholders and future actions. ▪ Farmers and other agriculture value chain actors will become more business-oriented and increase their profitability and income streams through sustainable livelihood activities. They will be enabled in self-managing business growth and undertaking a higher level of commercially-oriented agricultural investments. ▪ Activities will be linked with land use planning processes in Activity 1.5, which will ensure the suitability of practices supported.
Beneficiaries	<p>Direct beneficiaries: See Activity 2.1 on farmer household beneficiaries</p> <ul style="list-style-type: none"> • At least 210 (in 21 districts) (280 small and medium enterprise in 28 districts with the IFAD project). • 210 private sector value chain SMEs (on average 10 per district) (280 in 28 district), of which an estimated 70% male and 30% female
Impacts and co-benefits	<p>GHG mitigation: GHG mitigation in the agricultural sector will be achieved through a combination of Activities 2.1-2.3, accompanied by enforced land use planning (Activity 1.4 and 1.5). Attributing a direct GHG mitigation benefit to these Activities is difficult because of the challenge in estimating individual impacts as part of a set of synergetic activities.</p> <p>Adoption of Good Agricultural Practices and improved product quality and reduced losses due to improved post-harvest and value-addition practices will increase household income and reduce the pressure on deforestation. GHG mitigation quantification is provided in a separate Chapter (see Chapter 9 for mitigation quantification).</p> <p>Socio-economic: (a) Increased income for farmers and other agricultural value chain actors due to improved quality, value addition and reduced post-harvest losses. (b) Generation of employment opportunities for youth, women, villagers within the agricultural value chain. (c) Health benefits due to improved product quality and food safety (appropriate post-harvest practices / storage will reduce product moisture content and thereby reduce fungi).</p> <p>Gender: The Activity will pay particular attention to building capacities for gender-inclusive approaches in on-farm production, input and service provision,</p>

	trading and marketing, to ensure equitable benefits to men, women and youth from activities supported by the programme. It will support the creation and capacity development of local women's collectives to venture into the production, processing, and marketing of new value chains. Any microfinance institutions or funds will be set up using an empowerment approach for local women to develop practical business skills alongside the loan-taking. <u>Environmental:</u> Investments will reduce pressure to expand agricultural activities into forests, reducing deforestation and forest degradation.	
Risks	Risk	Mitigation measure
	Delay in finance of programme activities	<ul style="list-style-type: none"> PPMUs will provide budgeting and planning support to ensure timely fund disbursement
	Crop and livestock price volatility, negatively affecting farm profitability and household income	<ul style="list-style-type: none"> Capacity building of farmers on market research Strengthening value chain actors on terms and conditions and forward contracting
	Lack of participation in the public-private dialogue meetings	<ul style="list-style-type: none"> Engagement of private sector via FFSs and agribusiness specialist staff time to engage with private sector to understand needs and MSP added value to participants
	Lack of uptake of value chain action and implementation plans	<ul style="list-style-type: none"> Integrate value chain action and implementation plans in the definition of business models for support with grant and credit finance (see Activity 2.2)
	Lack of professionalism by private sector value chain SMEs	<ul style="list-style-type: none"> The resources and technical assistance provided by the programme will make enhance capacities and investment readiness by SMEs

3.3.2.3 Activity 2.3. ADB Sustainable Rural Infrastructure Watershed Management Sector Project²⁴⁸

Activity 2.2: Watershed forest management to support small-scale irrigation investments	
Contribution to GCF outcome(s)	M5.0 Strengthened institutional and regulatory systems M9.0 Improved management of land or forest areas contributing to emissions reductions
Contribution to programme outputs	Output 2: Deforestation-free agriculture is implemented
Description of actions	Activity 2.3 builds on the planned ADB initiative, "Sustainable Rural Infrastructure and Watershed Management Sector (SRIWSM)" project. The ADB project seeks to address sustainable rural economic growth and watershed management in the

²⁴⁸ Within the overarching ADB activity, it is mentioned that GCF co-finance will support Output 2 "land use management within PRI scheme watersheds improved." Related activities and actions are covered within Output 3, especially Activities 3.1 and 3.3 where implementation areas include districts in the ADB watersheds, among others.

	<p>provinces of Luang Prabang, Xiengkhouang, Sayaboury and Houaphan. However, it should be noted that co-financing for the GCF programme only focuses on actions implemented in Luang Prabang, Sayaboury and Houaphan.</p> <p>The Activity aims to support sustainable market-oriented agriculture production and sustainable natural resources management in select watersheds. Specifically, the Activity will ensure that the forested landscapes in the catchment areas remain intact through improved land management (including good agricultural practices), and reduced pressure from drivers of deforestation and degradation by addressing key underlying causes (e.g. lack of alternative livelihood opportunities, poverty, low agricultural productivity, lack of value adding activities, weak negotiation/marketing skills).</p> <p>The Activity has a special and close link to Activity 3.1 (Implementation of village forest management), since watershed conservation measures within the project (individual irrigation scheme) areas should be mainly addressed through adequate land use planning and village forest management (see corresponding ADB Output 2: “Watershed Ecological Service Protected”). Beside this, other Activities in Outputs 1-3 are also connected to this measure (e.g. improved law enforcement, implementation of deforestation-free agriculture, and implementation of SFM and FLR, among others). Hence, all eight districts that will be targeted by Activity 2.3 were also selected as priority districts for the GCF programme (see 2.5.1 Selection approach of the target programme districts and Figure 14). From its earliest inception phase, SRIWSM has been designed with the GCF programme as an integral component.²⁴⁹</p> <p>As a contribution to the proposed GCF programme, the ADB co-financed actions include:</p> <p>Action 2.3.1 Market oriented production²⁵⁰</p> <p>The Activity applies a value chain / market linkage strategy as a means to reduce the market and business risk faced by dry-season irrigators. Farmers will be assisted to plan and produce their dry season crops and livestock on the upgraded irrigated schemes based upon better information about market demand, quality requirements and prices.</p> <p>Better market connections will consist of identified market demand with associated producer connections, logistics services, information flows, and post-harvest agri-enterprise, trader and retailer relationships. Once opportunities in the market are identified, additional investment is required in on-farm technology, farmer learning about new production technologies, additional labor and producer capital. Market assessments and support to strengthen market linkages will also help with value creation and quality assurance with certification and traceability.</p> <p>The Action will result in:</p> <ul style="list-style-type: none"> ▪ At least 15 market assessments for dry season and upland crops ▪ Strengthened market linkages for market-led crop diversification ▪ Grants for on-farm and post-harvest enterprises
--	--

²⁴⁹ See the Aide Memoir between ADB and the Government of Lao PDR – Annex 6b.

²⁵⁰ Note: In the overarching ADB project, this Action is entitled “Output 1 Irrigated and upland farmers with increased income from high-value crops and livestock”.

	<ul style="list-style-type: none"> ▪ Strengthened capacities due to the provision of farmer-to-farmer extension support. <p>Action 2.3.2 Watershed ecological services protected²⁵¹</p> <p>Programme investment in irrigation scheme upgrading will provide secure access to water during the dry season that will provide: i) farmers with better opportunities to grow higher value crops, and finish cattle, both of which are in demand by the market; ii) increased, and more reliable, farm household incomes; and iii) improved affordability for the costs of operating the irrigation scheme and increased business opportunities and income. As with the previous Action, such measures will provide new opportunities for agricultural producers to strengthen their income and reduce pressure on natural forests. The Action includes:</p> <ul style="list-style-type: none"> ▪ The modernization of irrigation infrastructure in 11 irrigation schemes²⁵² to enable water management within the command area during the dry season and to support crop diversification. ▪ The provision of infrastructure²⁵³ and strengthening the irrigation schemes' operational capacity to provide reliable and controllable water within entire command area throughout the dry season in three small riparian zones in Luang Prabang, Sayabouri and Houaphan. Limited upgrading will be provided within the main canal to reduce the losses and damaged sections to increase water delivery through the lower reaches of the command area adjacent to the canal end. Additional water control measures will be applied through buried secondary distribution pipes, and offtake points for piped, hand held hoses or sprinkler/trickle or drip applications. ▪ The strengthening of operational capacity and the development of sustainable irrigation service fees to ensure the longevity, effectiveness and efficiency of the irrigation schemes. Such measures will target water user groups. <p>Action 2.3.3 Improved nutritional status²⁵⁴</p> <p>The Action builds on the concept of linking agriculture to nutrition and natural resources, aiming to strengthen nutritional status whilst also promoting good agricultural practices and REDD+. Particular focus will be given to social and behavioral change conditions, and to improving women's status and empowerment. A baseline study financed by ADB, including information on Knowledge, Attitudes, Perceptions, Practices (KAPP), will identify the nutrition-related practices that need to be supported and promoted at the household level. From the offset, village nutrition-related data will be shared with the communities to instill ownership.</p> <p>The Action will strengthen the nutrition status of targeted villages in 3 districts of Houaphan province through the establishment of District Nutrition Committees and Village Nutrition Teams.</p>
--	---

²⁵¹ Note: In the overarching ADB project, this Action is entitled "Output 3 Productive rural infrastructure upgraded to be climate resilient, efficient and sustainable operation and maintenance".

²⁵² Note: The overarching ADB project will work in 15 irrigation schemes; however, four are located in Xiengkhouang, which is not included within the GCF programme.

²⁵³ Note: All engineering design and survey work for the additional subprojects will be provided by the Provincial Irrigation Section or Public Works and Transport Department (PWDT) for non-irrigation infrastructure. The TRTA findings are that there is more than adequate technical engineering capability within each Province. The major gap is the ability to identify needs-based PRI requirements: i.e., what is to be designed and the decision process by which this is decided (as opposed to technical design input).

²⁵⁴ Within the overarching ADB project, this Action is entitled "Output 4: Nutrition Sensitive Agriculture in the targeted PRI communities"; EU and IFAD co-finance will also support the implementation of this Action.

	<ul style="list-style-type: none"> ▪ District Nutrition Teams (DNTs) will be formed in each of the target districts, comprised of 4 members of the District Department of Health and 4 members of the Lao Women Union (LWU). Each DNT will be responsible for working with 10 to 15 villages. They will therefore be able to get to know each village with their particular issues and problems. ▪ Village Nutrition Teams (VNTs) will be formed to support the implementation of activities and follow-up with households on progress and challenges. VNTs and communities will discuss key nutrition indicators, such as the number and diversity of crops produced, the number and percentage of latrines, the knowledge of nutrition and hygiene concepts, the percentage of children with malnutrition and the dietary diversity for different members of the households. Actions Plans are then jointly developed. These plans have proven to give effective guidance to village members on doable actions to improve their nutrition situation, whilst strengthens the linkage between the other actions implemented (e.g. diversification of crops and improved marketing/ value addition, among others).
Result indicators	<p>Action 2.3.1</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> ▪ 0 market assessments conducted <p><u>Target:</u></p> <ul style="list-style-type: none"> ▪ 11 market assessments conducted for dry season and upland crops <p><u>Means of verification:</u></p> <ul style="list-style-type: none"> ▪ Final market assessment reports; ADB project reports (annual reports, expert assessment reports, mid-term reviews, final reports) <p>Action 2.3.2</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> ▪ 11 targeted irrigation schemes are not modernized (inefficient, broken) <p><u>Target:</u></p> <ul style="list-style-type: none"> ▪ Irrigation infrastructure in 11 irrigation schemes modernized in a command area covering 2,959 ha.²⁵⁵ <p><u>Means of verification:</u></p> <ul style="list-style-type: none"> ▪ ADB project reports, irrigation works implemented/developed <p>Action 2.3.3</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> ▪ 0 – The National Nutrition Strategy and Plan of Action (NNSPA) is not implemented in 3 target districts in Houaphan Province <p><u>Target:</u></p> <ul style="list-style-type: none"> ▪ NNSPA implemented in 3 districts with nutrition-sensitive agriculture <p><u>Means of verification:</u></p> <ul style="list-style-type: none"> ▪ ADB project reports
Inputs and investment items	<ul style="list-style-type: none"> ▪ Irrigation infrastructure (modernization), construction equipment, WASH infrastructure

²⁵⁵ Note: Four schemes are located in Xienkhoung, which have been removed from the target. In total, the entire overarching ADB project will work in a command area of 3,876 ha.

	<ul style="list-style-type: none"> ▪ Training and capacity building ▪ Informative materials ▪ Expert inputs (e.g. development of market studies, supporting market linkages etc.) ▪ Transportation for staff and experts
Technical evaluation / justification / barriers addressed²⁵⁶	<p>The Activity is aligned with the agriculture sector strategy vision, “Ensuring food security, producing comparative and competitive potential agricultural commodities, developing clean, safe and sustainable agriculture and shifting gradually to the modernization of a resilient and productive agriculture economy, linking with rural development contributing to the national economic basis”. Given the reliance of irrigation investments on access to water and watershed health, it is important that the ADB project is aligned with the proposed GCF programme. Reducing deforestation and improving forest management will protect watershed health and ultimately the water flowing through ADB irrigation investments. In other countries, payment for ecosystem services (PES) schemes have been used in similar situations. This was considered in Lao PDR; however, it was determined that it was not appropriate in the local context. Having one source of financing, rather than introducing a different source with different governing procedures, was found to be for effective. Additionally, implementing PES schemes would stretch the capacity of local institutions.</p> <p>It aims to maximize the impact of the investment in irrigation infrastructure and agricultural training and support, whilst having strong co-benefits to reduce poverty, empower women and enhance nutrition. Ultimately, the Activity will:</p> <ul style="list-style-type: none"> ▪ Provide farmers with better opportunities to grow higher-value crops ▪ Increase and ensure more reliable farm household incomes ▪ Improve affordability for the costs of operating a climate-resilient irrigation scheme ▪ Increase business opportunities for small and medium provincial and district based agri-enterprises. <p>Combined, the proposed Actions will provide alternative and improved income generation activities, which will reduce the need of local people to clear forested land for other activities that are inefficient, with low yields, require substantial labor and are characterized by low profitability. It addresses key barriers identified in Chapters 1 and 2, including: lack of awareness on value-adding opportunities and good agricultural practices, lack of negotiation capacities and limited knowledge of market opportunities and trends, and challenges associated with seasonal precipitation trends and out-of-date and inefficient irrigation systems.</p> <p>The outcome for the modernized irrigation schemes at the ADB project level is indicated by:²⁵⁷</p> <ul style="list-style-type: none"> ▪ Agricultural profitability increased to \$1060/ha. (2018 baseline \$494/ha), ▪ 50% increase in household income levels from high value crops (HVC) and livestock production. (2018 baseline = 5,070) ▪ 3,500 women using appropriate technologies to produce HVC crops and livestock (baseline = 570 women), ▪ 1.25 million days’ paid employment in the command areas during dry season (baseline = 520,000 days),

²⁵⁶ Note: Extensive background information on the agriculture sector in Lao PDR, and specifically in the six provinces, barriers faced, and how the interventions presented here will address these, is provided in Chapter 1.4 and 2 of the feasibility study document.

²⁵⁷ Note: Statistically valid baseline data (FNSS 2015, co-financed by EU) are available for 2 northern uplands provinces (Baseline 2017 =40%).

- Up to land area of 18,000 ha of at risk or degraded forest and agriculture land converted to rehabilitating or conservation forest. (2018 baseline = 0),
- 60% of women meet minimum dietary diversity.

Market-oriented production increased

The proposed investment will develop the market connections between irrigation and upland farmers, helping them to earn higher value markets for their dry season products.

Promoted Actions represent a substantial change in the direction of the current thinking and skill sets within PAFO. The design aims to build increased knowledge and strengthen linkages between the public sector and the private sector that underpin commercial agriculture. It addresses key financing barriers by supporting producers to add value in key deforestation-free value chains, improving capacities on market information, and provide a clearer direction for market development in the agribusiness sector and functional provincial agencies.

Detailed implementation plans have been prepared by ADB that will guide activity implementation (refer to the ADB supplementary report “Output 1 Design Document” for more detailed information).

Command area irrigation reliability improved

The following table provides an overview of planned investments in increasing the reliability of command area irrigation:²⁵⁸

Province	RSP (No.)	ASP (No.)	Est Cost (\$mill)	Com- mand Area (ha)	Villages (No.)	House- holds (No.)
Houa- phan	1	3	3	552	23	1,756
Luang Prabang	1	2	4.1	1011	32	1,290
Saya- boury	1	3	1.9	1,396	22	1,820
Subtotal	3	8	9	2,959	77	4,866
Standby						
LPB Nam Khan		1	0.9	180	4	315
Total	3	9	10	3,139	81	5,181

Note: RSP – Representative Subproject, ASP Additional Subproject
Source: ADB 2018

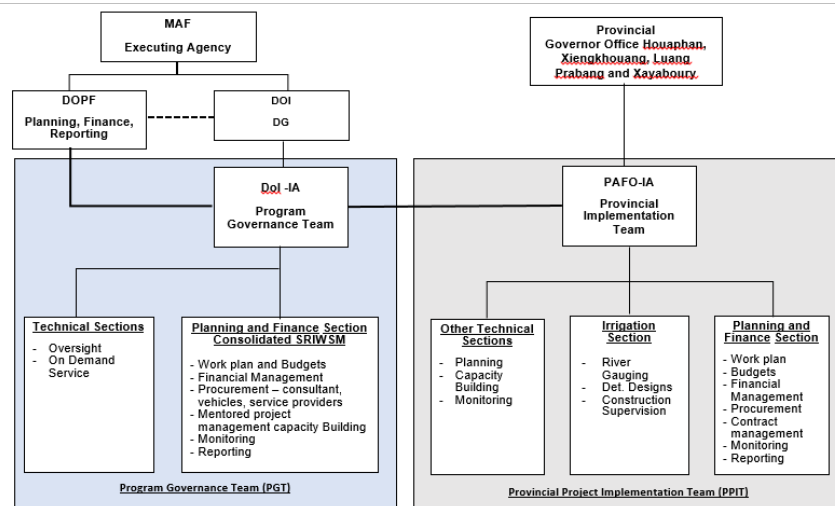
The Action will result in improved water use efficiency along with increased water control that will enable dry season water²⁵⁹ to be delivered for a 12-hour irrigation day on a 5-day rotation. It will increase reliability of wet season irrigation and remove the yield losses to the wet season rice crop in dry years. Further, the area will

²⁵⁸ Note: Additional investments are included within the overarching ADB project in Xiengkhouang province; however, these have been removed from the table as they are not included within the project’s co-financing.

²⁵⁹ Without dry season cropping there is no justification for ADB investment based on a wet season rice cropping system. Further, even where wet season irrigation is actually in use as supplemental irrigation for dry periods, the incremental gain from wet season rice is inadequate to justify investment now that Lao PDR has achieved food security.

	<p>be serviced during the dry season for high-value crop use. In summary, the Action is expected to:</p> <ul style="list-style-type: none"> ▪ Reduce the yield losses of wet season rice due to limited conveyance of wet season water ▪ Increase dry season command area that receives reliable water ▪ Deliver dry season water using pipes throughout the command area where individual farmers can connect into using hose pipes, leaky pipes or sprinkler systems ▪ Intensification of dry season production through reduced inter-row spacing as a result of moving from furrow to hose- or pipe-based irrigation systems ▪ Controlled dry season water through scheduling a 12-hour irrigation window delivering water every 5 days to match crop water needs more efficiently <p>As a result, pressure on forested areas is expected to decline due to improved alternative livelihood opportunities.</p> <p>Nutrition status improved</p> <p>The Action aims to maximise the impact of the investment in irrigation infrastructure and agricultural training and support, whilst also supporting the SDGs, especially those related to nutrition. Thus, it aims to connect key nutrition indicators (including the number and diversity of crops produced, etc.), with sustainable agricultural production and land management, as well as livelihood development (e.g. value-adding opportunities). Thus, it focuses on the convergence of agriculture, nutrition, sustainable land management and REDD+.</p> <p>It builds on piloted activities by other donors, including SNV, and is further supported by EU and IFAD co-finance. Through district and village nutritional teams, villagers will be provided with technical support:</p> <ul style="list-style-type: none"> ▪ to enhance their capacities to increase and diversify productive agricultural systems (including food crops and small livestock for home consumption, as well as to store, process and market crops and generate cash income from food crop value chains). ▪ in water, sanitation and hygiene to ensure that communities have permanent access to clean water and live in a clean and healthy environment ▪ to develop and implement a social and behavioural change strategy for women and men to improve nutrition, whilst ensuring a strong linkage with the other Actions (e.g. diversified sustainable production systems, etc.).
Implementation mechanisms	<p>ADB will be responsible for the implementation of the Activity, as well as the management, monitoring, evaluation and reporting associated with Activity implementation. Activity implementation will be embedded in the overarching ADB project implementation mechanism (described below).</p> <p>Overarching ADB Project Implementation Mechanism.</p> <p>An overview of the implementation arrangements (embedded within the overarching ADB project) is provided below: ²⁶⁰</p>

²⁶⁰ Note: Activity names have been adjusted to reflect the proposed GCF proposal. Within the ADB project they are referred to as Output 1, Output 3 and Output 4.



At the national level, MAF is the Executing Agency that is ultimately responsible for project performance.

Provincial Agriculture and Forest Offices (PAFOs) will serve as the implementing agency. The project will provide project management and administration systems for work planning, budgeting, financial management and accounting and procurement and reporting within PAFO offices in targeted provinces.

The Planning and Finance Section of PAFO will provide the provincial-level project administration and management support roles. Project implementation will be delivered through the irrigation section for Action 2.2.2 with the section staff providing the required hydrological study, engineering designs and construction supervision.

For Action 2.3.1, a contracted staff position in each province will provide agribusiness support and will report to the DDG PAFO assigned to SRIWSM by the DG PAFO.

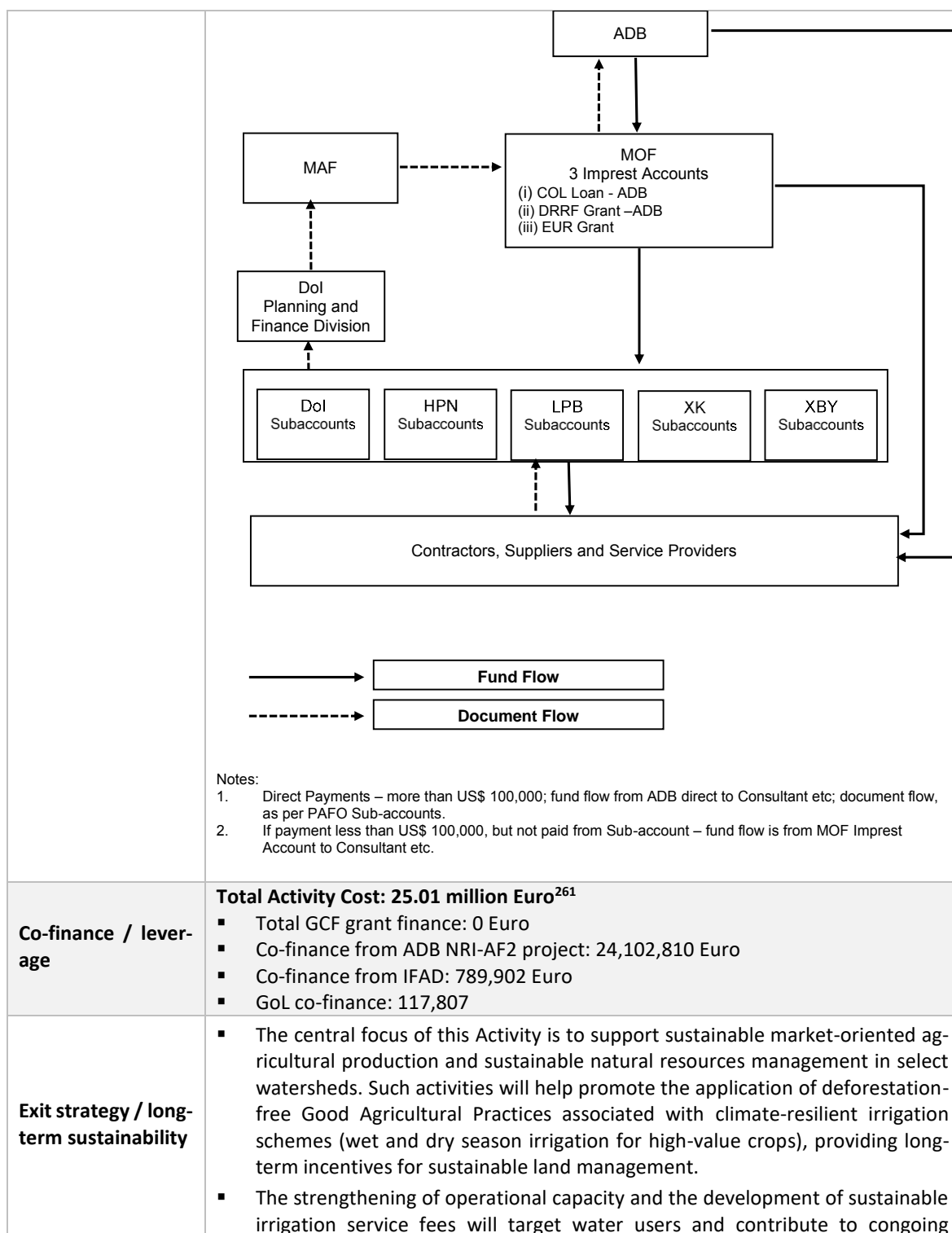
At the national level, the DOI will form a Project Governance Team for the overarching ADB project – with an oversight and integrity function to ensure ADB and Government requirements are consistently applied.

Each PAFO DDG will be supported with a project management advisor who will provide a diminishing level of support through the 9.5-year period of the programme.

Safeguards related to the Activity, and the overarching ADB project in general, will be supported by a contracted staff role that also reports to the DDG. The overarching ADB project's Gender Action Plan will be supported by a PAFO focal point from the Women Advancement Unit of PAFO. PAFO will enter into an MoU with PONRE to monitor and report the implementation of the EMMPs.

Fund flow arrangement

Since the Activity is fully implemented with ADB co-financing, the Activity will be managed using the overarching ADB project's fund flow structure. An overview of the fund flow arrangement is provided in the following Figure:



²⁶¹ **Total ADB NRI-AF2 Project Cost: USD \$41.01 million**

- Loan of USD \$30 million from ADB concessional ordinary loan resources, with a 25-year term, including a 5-year grace period, and an interest rate of 2% per annum
- Grant of USD \$5 million from ADB's Disaster Risk Reduction Fund
- Co-finance from EU: grant of USD \$ 4.5 million
- Co-finance from Government of Lao PDR: USD \$2 million

	<p>maintenance and improved awareness of the importance of sustainable management.</p> <ul style="list-style-type: none"> Activities (marketing support for high-value crops in dry-season irrigation systems, irrigation investments) will support villagers to receive higher prices for production related to dry-season irrigation Village and district-based nutrition teams will ensure knowledge is maintained in the districts and villages on nutrition, and will strengthen the link between improving nutrition and ensuring sustainable land management and strengthening livelihoods, providing additional incentives and targeted measures to support social and behavioral change. 				
Beneficiaries²⁶²	At least 4,866 farmer households in Sayabouri, Luang Prabang and Houaphan, with a population of approximately 29,196 people (14,598 men, 14,598 women), ²⁶³ will directly benefit from the implementation of the Activity.				
Impacts and co-benefits	<p><u>GHG mitigation</u>: Reduced deforestation and forest degradation due to improved agricultural practices and irrigation infrastructure</p> <p><u>Socio-economic</u>: Nutrition of local people improved, enhanced local livelihoods (additional income-generating opportunities, increased production strengthens agriculture-based income), improved food security</p> <p><u>Environmental</u>: Reduced deforestation and forest degradation, enhanced biodiversity, adaptation co-benefits (e.g. improved water management in dry season / droughts, development of climate-resilient infrastructure)</p> <p><u>Gender</u>: A Gender Action Plan has been developed by ADB for the overarching project, which will also be applied for the Activity. Examples of measures within the GAP include: the inclusion of women farmers in the selection of service providers, the identification of leading women farmers to provide farmer-to-farmer training, ensuring equal employment opportunities for female and male unskilled local labor is a provision in contractors' contracts, among others.</p>				
Risks and risk mitigation	<p>Since the proposed Activity is nested in an overarching ADB project and covered by ADB co-finance, ADB will be responsible for ensuring social and environmental safeguards and other risks are adequately and timely monitored and addressed.</p> <p>Risks identified by ADB have been assessed by a social and environmental safeguards expert, and are presented in an environmental and social impact assessment and environmental and social management plan, along with mitigation, avoidance and possible compensation measures (where necessary).</p> <p>The following table provides an example of some key risks associated with the Activity and its Actions, as well as mitigation and avoidance measures proposed within the ESMP.</p> <table border="1"> <thead> <tr> <th>Risk</th><th>Mitigation measure</th></tr> </thead> <tbody> <tr> <td>Inappropriate or faulty construction of infrastructure could limit the effectiveness of the Activity and could pose additional environmental and social risks.</td><td> <ul style="list-style-type: none"> ADB has developed a detailed plan to ensure ongoing and high-quality construction supervision throughout the project. Detailed terms of reference and guidelines have been developed. </td></tr> </tbody> </table>	Risk	Mitigation measure	Inappropriate or faulty construction of infrastructure could limit the effectiveness of the Activity and could pose additional environmental and social risks.	<ul style="list-style-type: none"> ADB has developed a detailed plan to ensure ongoing and high-quality construction supervision throughout the project. Detailed terms of reference and guidelines have been developed.
Risk	Mitigation measure				
Inappropriate or faulty construction of infrastructure could limit the effectiveness of the Activity and could pose additional environmental and social risks.	<ul style="list-style-type: none"> ADB has developed a detailed plan to ensure ongoing and high-quality construction supervision throughout the project. Detailed terms of reference and guidelines have been developed. 				

²⁶² Note that beneficiary data includes activities also conducted in Xiengkhouang district within the ADB project

²⁶³ Assumed 6 people per household, as utilized in the ER-PD.

		<ul style="list-style-type: none"> Construction supervision for all irrigation works will be assigned to the irrigation section, which will assign staff to undertake key supervision roles For the first 3 construction seasons, LIC will mobilize a construction supervision expert to audit and supervise the supervision works. Supervision will include the completion of environmental and LARP monitoring checklists Supervision shortfalls and failures will be addressed with urgency and if they persist the allowances will be withdrawn
	Staff turnover may result in loss of knowledge, information and capacities related to VFM planning processes (including spatial planning and participatory land use planning)	<ul style="list-style-type: none"> Clear guidelines and protocols, documentation of trainings and strengthening knowledge management systems Ongoing trainings, engaging diverse staff from national, provincial and district levels (building capacities at all levels)
	Equipment or infrastructure breaks or requires ongoing maintenance	<ul style="list-style-type: none"> Maintenance plans to be developed with water user associations, and Action 2.2.2 will include an additional task on sustainable financing and capacity building

3.3.3 Output 3: Implementation of Sustainable Forest Landscape Management and Forest and Landscape Restoration (FLR)

3.3.3.1 Activity 3.1 Implementation of village forest management

Activity 3.1 Implementation of village forest management	
Contribution to GCF outcome(s)	<p>M9.0 Improved management of land or forest areas contributing to emissions reductions</p> <p>M5.0 Strengthened institutional and regulatory systems</p>
Contribution to programme output	Sustainable forest landscape management and landscape restoration is implemented
Description of / actions	<p>Village forest management will be implemented in all three forest categories (production forest without any commercial harvesting potential in the short-term, protection and conservation forest and unclassified forest categories) following a landscape approach (See Section 1.3 for background). In total, there is high-carbon-stock forest area of 3.5 million ha (82% of total high-carbon forest area) in the six programme area provinces where village forest management can be implemented. In the selected 28 districts, a total of 2.29 million ha of high-carbon forest area village forest management can be implemented (75% of total</p>

	<p>high-carbon forest area). (Total land areas for village forest management potential: 3.9 million ha).</p> <p>3.1.1. Development of village forest management plans (VFMPs)</p> <p>Based on the LUPs, VFMPs are designed using a combination of spatial planning and participatory land use planning with villagers as a precondition to enable the sustainable management of village forests. The proposed projects will follow the MAF/DOF regulation on Village-Driven Forest Management Planning (drafted and scheduled to be endorsed in 2019), which is largely based on the steps outlined in the VFM Guidelines²⁶⁴, developed by CliPAD in cooperation with the Government of Lao PDR and approved by PAFO and PONRE Houaphan. Planning will be undertaken using a landscape approach, taking into account multiple land uses and benefits across the programme area. Among others, tools developed by FAO for planning Forest and Landscape Restoration (FLR) will be used in this respect.²⁶⁵ These guidelines include the following key stages:</p> <ul style="list-style-type: none"> ▪ Stage 1: Demarcation of forest areas and preparation of detailed village forest map <ul style="list-style-type: none"> ○ 1.1 Preparation of field work ○ 1.2 Implementation of village forest boundary delineation and demarcation ○ 1.3 Identification and demarcation of forest areas in need of preservation within the agricultural/ livestock zone (if applicable) ○ 1.4 Preparation of the detailed village forest map at 1:5,000 or 1:10,000 scale ▪ Stage 2: Participatory Forest Resources Assessment (PFRA) and basic forest inventory <ul style="list-style-type: none"> ○ 2.1 Selection of PFRA observation points (hotspots) based on interpretation of satellite images ○ 2.2 Conduct PFRA and transect walks in village conservation and protection forests ○ 2.3 Conduct basic forest inventory in village use forest if forest products are NOT planned for commercial purposes. If forest products ARE planned for commercial purposes, then a detailed forest inventory is necessary ○ 2.4 Review and complete all PFRA and forest inventory documents for the village ○ 2.5 Update the village forest map ○ 2.6 Preparation of copies of PFRA data and village forest map, and hand-over documents to the village ▪ Stage 3: Preparation of five-year village forest management plan (VFMP)²⁶⁶ <ul style="list-style-type: none"> ○ 3.1 Organize a meeting of the village land use and forest management committee (VLUFMC) and district staff to jointly prepare a first draft of the VFMP based on the standard format outlined within the guidelines
--	--

²⁶⁴ <https://www.giz.de/en/downloads/Village-Forest-Management-Planning-Guideline.pdf>

²⁶⁵ <http://www.fao.org/sustainable-forest-management/toolbox/en/>

²⁶⁶ Supported activities currently include forest protection and regeneration activities. This includes (CliPAD/GIZ 2016, p. 16): “fire prevention activities, patrolling, promotion of natural regeneration, enrichment plantings, direct seeding, identification and marking of trees to be protected as mother trees for seed production, partial or temporary protection of selected parts of the village use forest, selective cutting, marking of trees to be cut per year, NTFP management and development activities, building of small dams and water reservoirs, planting on national tree planting day and replacement of demarcation pegs along the forest boundaries after 2-3 years.” For more information on currently permitted activities, refer to the above-mentioned VFMP guidelines from 2016. It should be further noted that Activity 1.2 aims to revise these guidelines and include commercial harvesting based on sustainable management plans and sustainable forest management principles to strengthen additional income streams for villagers and provide incentives for the sustainable management of forest resources.

	<ul style="list-style-type: none"> ○ 3.2 Conduct village meeting to discuss and approve the VFMP, including signing the minutes of the meeting using a standard template ○ 3.3 Signing and official approval of the VFMP by village authorities and DAFO ▪ Stage 4: Preparation of annual forestry operation plan <ul style="list-style-type: none"> ○ 4.1 Organize meeting of VLUFMC and district staff to prepare first draft of the annual forestry operation plan based on the standard template in the guide book ○ 4.2 Conduct village meeting to discuss and approve the annual forestry operation plan, including signing the meeting minutes ○ 4.3 Signing and official approval of the annual forestry operation plan document by village authorities and DAFO ▪ Stage 5: Village forest management agreement <ul style="list-style-type: none"> ○ 5.1 Prepare village forest management agreement in the village based on the standard template ○ 5.2 Present, discuss and agree on the village forest management agreement in a village meeting ○ 5.3 Sign the village forest management agreement by village authorities, DAFO and District Governor <p>3.1.2. Implementation and monitoring of VFM plans</p> <p>As with the development of VFM plans and agreements, the implementation of the plans will follow the best-practice guidelines and procedures outlined in the Village Forest Management Guidelines, including the following stages:</p> <ul style="list-style-type: none"> ▪ Stage 6: Implementation of the village forest management activities by village groups that signed the village forest management agreement, following annual plan of operation and which will be financed by annually approved grants. <ul style="list-style-type: none"> ○ 6.1 Visible and clear forest boundary demarcation (2x/year) ○ 6.2 Regular boundary monitoring/patrolling (2x/month respectively 24x/year) ○ 6.3 Forest fire monitoring and control (if necessary, establish forest fire lines and maintain/patrol along during hot season) ○ 6.4 Silviculture related activities (planting, assisting natural regeneration, stand improvement etc.) ▪ Stage 7: Monitoring and evaluation <ul style="list-style-type: none"> ○ 7.1 Quarterly monitoring of progress made in implementation, distributing GCF grants (based on annually approved village forest plans) through the REDD+ Funding Window to villages' development funds for the implementation of village forest management activities, reporting illegal activity and reporting conflicts ○ 7.2 Annual monitoring of the overall achievement in implementing the annual plan of operation, and preparation of new annual plan of operation ○ 7.3 Every 2 years, conduct monitoring of forest condition and forest cover by using PFRA techniques and transect walks ○ 7.3 After 5 years, conduct monitoring of the overall achievement of the VFMP, and prepare a new VFMP and new VFM agreement <p>Resources will be transferred to village development funds using mechanisms similar to those used in the ICBF project. In short, the EPF and NPMU will receive</p>
--	--

	<p>budget requests from village development funds and check them against set criteria. Approved requests will be administered by the FFRDF.²⁶⁷ More detail on transfer modalities is available in the Project Implementation Manual. Additional details will be developed under a Project Operational Manual during the first months of the programme.</p>
Result indicators	<p>Action 3.1.1 <u>Baseline:</u> 70 VFMPs in target villages (Province Houaphan: 30 villages in district Xam Neua & 40 villages in Houameuang) <u>Target:</u> 650 VFMPs approved in target villages (25 villages in 26 districts, excluding 2 districts to be supported by KfW; with KfW districts, 700 VFMPs; target includes a revision of the VMFPs of the 70 villages mentioned in the baseline) <u>Means of Verification:</u> Approved management plans and signed village-level management agreements</p> <p>Action 3.1.2 <u>Baseline:</u> <ul style="list-style-type: none"> • 70 VFMPs are under implementation in target villages • 67,000 ha managed and following VFMPs <u>Target:</u> 531,505 ha managed following VFMPs (adoption 85%, and excluding KfW-financed villages; with CliPAD and KfW villages in 4 district = 640,000 ha)</p> <p><u>Means of Verification:</u> Remote sensing/GIS, field visits/spot-checks, household interviews, monitoring reports by district authorities</p>
Inputs and investment items	<p>Action 3.1.1</p> <ul style="list-style-type: none"> • Equipment for VFM planning (3-4 GPS receivers and 2-3 cameras needed per PFRA, relascope, materials (printed forms, notebooks, printed updated village maps) • Transportation for district, provincial and national staff to visit villages, districts and provinces (transportation costs, cars, motorbikes) • GIS specialist to support with mapping (village forest maps, current and planned/future) • Field staff to support with implementation of VFM planning, trainings, etc. • Training on VFM based on DOF & GIZ/CliPAD guidelines for PAFO, PONRE, and DOF (3-day training – workshop venue, training materials, costs, per diems, etc.) • Training for DAFO and DONRE staff on equipment (GPS, camera and relascope) • Training of PAFO and/or PONRE staff on the preparation of simple maps (e.g. downloading GPS data, updating PLUP maps and preparing detailed village forest maps), requires intermediate knowledge of data management and GIS applications (specialized training course for suitable candidates) • On-the-job training and technical assistance to village land use and forest management committee and DAFO staff. • Translators for consultations, translation of materials to local languages (as necessary) <p>Action 3.1.2</p>

²⁶⁷ KfW 2017.

	<ul style="list-style-type: none"> • Transportation for district, provincial and national staff to visit villages (transportation costs) • Equipment (described above – for monitoring of forest condition and cover; tractors, (chainsaws, safety gear, hand tools, maintenance tools; small tractors, logging winches, log trailers, skidders, cable system) • Trainings for villagers on sustainable forest management (transportation of district staff to villages, equipment, training materials, etc.) • Translators for consultations, translation of materials to local languages (as necessary) • Provision of village-based implementation grant by EPF into VDF', based on annual village forest work plans • After 5 years, repetition of Action 3.1.1 for the preparation of new VFMPs (after 5 years), and annual village forest work plans (every year)
Technical evaluation / justification / barriers addressed	<p>From the CliPAD Village Forest Management Guidelines (CliPAD/GIZ, 2016): "Village Forest Management is the management, preservation, development and use in a sustainable manner of the forest areas inside the village jurisdictional area which the Government has allocated to the village and which has been classified into village conservation forest, village protection forest, village use forest and other forests. The management of the forest areas has to follow a management plan (Forestry Law 2007). Forest and forestland owners are the organizations, households and individuals to whom the State has allocated forest and forestland areas to manage, preserve, develop and use in accordance with laws and regulations" (Forestry Law 2007).</p> <p>Forestry Law, 2007: "Forest and forestland owners are the organizations, households and individuals to whom the State has allocated forest and forestland areas to manage, preserve, develop and use in accordance with laws and regulations".</p> <p>Draft Forestry law, 2015: "The State encourages individuals, households, legal entities and organizations to carry out 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 thorough and fair manner."</p> <p>"Village use forests are production forests (including NTFPs) located within the village area, which the government has allocated to the village according to land use planning to manage, preserve and use in a sustainable manner in accordance with the law and the regulations. 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 done according to a village forest management plan (see Action 3.1.1.) for the entire village, for household and individual uses; the plan has to be endorsed by the District Governor based on the proposal submitted by DONRE and DAFO."²⁶⁸</p>

²⁶⁸ 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:²⁶⁸ 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.

	<p>Building on Past Experience and Lessons Learned</p> <p>Since the early 1990s, a wealth of experience in the promotion of village forest management responsibilities and joint forest management in the context of larger production forest areas has been acquired, particularly in the Central and Southern part of the country. Programs such as the Lao-Swedish Forestry Programme (LSFP), the Forest Management and Conservation Project (FOMACOP), the Sustainable Forestry and Rural Development Project (SUFORD) and, lately, the Scaling-up Participatory Sustainable Forest Management (SUPSFM) Program have all gained substantial experiences in involving villagers in the management of larger production forest areas (mainly national production forests) for commercial use. Their experiences and work results have been well documented, particularly in numerous publications by LSFP and SUFORD, and the Village Forest Management Handbook by FOMACOP (2001).</p> <p>In terms of support to village forest management in upland areas of Lao PDR, there is far less experience available at present. Past project activities have focused mainly on the upland areas of Northern Lao PDR, e.g. in Xiengkhouang, Luang Prabang and recently within the Climate Protection through Avoided Deforestation (CliPAD) Project in Houaphan Province. The situation in the large production forest areas in Central and Southern Lao PDR, namely Khammouane, Savannakhet and Salavane with their dry <i>Dipterocarp</i> forests, provide only limited similarities with the village forests in the upland areas of Lao PDR. Upland areas are characterized by the presence of shifting cultivation practices in varying intensities, a higher fragmentation of the forest zones, the prevalence of steep slopes and consequently an orientation more towards preservation of forest zones (e.g. for biodiversity conservation and watershed protection). The commercial use of forests for timber production plays a lesser role and village use forests are mainly designated for fulfilling the subsistence needs of wood products and NTFPs of the local population.</p> <p>Village forestry guidelines have been developed by DOF (Division for Village Forest and NTFP Management) as well as by provincial and district forest authorities from Houaphan and GIZ's Climate Protection through Avoided Deforestation project (CliPAD 2016),²⁶⁹ providing guidance on the realization of Village Forest Management Agreements through a planning process. The guidelines are implementation-oriented, including approved templates and numerous examples to facilitate the effective and efficient implementation of village forest management planning. They build on the experience of the Lao Government and other donor organizations, while integrating key lessons learned and addressing diverse contexts (including Northern Lao PDR). GIZ's CliPAD program has implemented these guidelines since 2016 in 70 villages in the province of Houaphan and they form the basis for a new MAF/DOF regulation on Village-Driven Forest Management Planning (regulation is drafted and will be endorsed in 2019).</p>
--	--

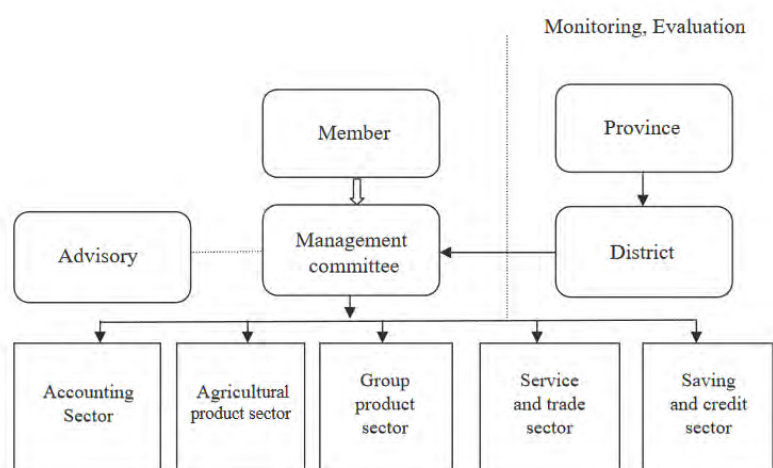
²⁶⁹ Available online: <https://www.giz.de/en/downloads/Village-Forest-Management-Planning-Guideline.pdf>

The guideline builds on the lessons learned and is closely aligned with the following documents: i) Guidelines and procedures in forming a village forestry committee (VFC), SUFORD 04, 2004; ii) Guidelines and Procedures for Tree Marking and vine cutting, No. /3802 LA.04, 2004; iii) Decree on the Forest and Forest Resource Development Fund, No. 38/PM, 2005; iv) Regulation of the Ministry of Agriculture and Forestry on Forest Inventory, No. 0108/MAF, 2005; v) Guidelines on Participatory Forest Inventory, No. 2155/DoF, 2006; vi) Guidelines of the Department of Forestry on Sustainable Production Forest Management Planning, No. 2156/DoF, 2006; vii) Forest Law, No. 6/NA, 2007; viii) Village Forest Management Regulation, No. 0535/MAF. 2001, Dec. 2007; ix) MAF Minister's Order regarding the Enhancement of Forest Regeneration in the Country Wide, No. 0111/MAF, 2008; x) Order of the Prime Minister on Strengthening the Forest Management, Protection and the Coordination of Management Forest and Forestry Business, No. 17/PM, 2008; xi) Decree on the Protection Forest, No. 333/PM, 2010.

Village Development Fund (VDF)²⁷⁰

Access to finance has been a consistent issue within Lao PDR. VDFs were launched by the Government of Lao PDR in the early 1990s in order to enable rural people to have more options for receiving loans or other financing. VDFs operate independently and are self-governed by the villagers that participate in the VDF. Local government authorities can provide guidance and training to the VDFs, but decisions are ultimately up to the members. VDFs are set up as revolving funds, to which VDF members can both deposit savings and receive credit; resources are also available to villagers in the case of emergency, as a kind of social insurance. In some cases, VDF members also receive dividends from the fund.

Precise structures vary from province to province and even between VDFs, but an organizational structure from a VDF in Champasak can be viewed as illustrative of VDF management.²⁷¹



As explained under specific Activity descriptions, VDFs are important partner institutions for the programme as they will receive grants in order to implement programme activities. The Project Implementation Manual explains processes for funds to be disbursed to VDFs.

Barriers addressed

Activity 3.1 addresses the main barriers to scaling-up high-carbon-stock forest in the proximity of villages that are at risk of conversion to agricultural land – the lack of budget, staff and limited capacities which will be addressed by the village-based grants from the GCF programme. It further promotes an inclusive and participatory²⁷² approach based on the principle of Free, Prior and Informed Consent (FPIC). It is closely linked with Activity 1.3, where one of the Actions (Action 1.3.1) focuses on revising regulations for VFM to include SFM for commercial purposes.

²⁷⁰ VDFs for all activities will comply with the Decree on the Forest and Forest Resource Development Fund, No. 38/PM, 2005

²⁷¹ Sisoumang, Bounthom; Wangwacharakul, Vute; and Limsombunchai, Visit; 2013.

²⁷² The PLUP approach for Lao PDR has been widely implemented over the past years. The methodology applied and all the relevant working steps are described in detail in two key documents: a) the “PLUP Manual of 2009 (Green Book)” and b) the “NAFRI Handbook PLUP and Toolbox” of 2012. Within the framework of Village Forest Management Guidelines developed by GIZ, it is not envisaged to describe the PLUP approach in great detail. For more detailed information on PLUP, the 2 mentioned publications should be consulted.

	<p>The proposed approach balances top-down and bottom-up planning, where present land use maps and satellite images inform the process, and bottom-up participatory land use planning is further implemented to develop the plans and management priorities.</p>
Implementation mechanisms	<p>Action 3.1.1</p> <ul style="list-style-type: none"> At the national level, the Action will be supervised by the Village Forestry and NTFP Division of DOF. At the province level (in each province), PAFO will be responsible for implementation. PAFO as well as the DAFO will provide their staff inputs to VFMP development. Villagers will provide their time inputs to participate and develop the VFMP Village Forest Management Agreements must be endorsed by the District Governor based on the proposal supported by DAFO.²⁷³ The NPMU and PPMUs will be responsible for leading the Action implementation. PPMUs will also be responsible for budget provision to develop the management plans and expert input and training services to the Government entities. <p>Action 3.1.2</p> <ul style="list-style-type: none"> Participating village households, in close collaboration with DAFO, will implement the activities as outlined in the management plans. POFI and DOFI will be responsible for the monitoring and evaluation of the activities and ensure compliance with management plans. Finance for the activities will be channeled through the EPF REDD+ Window (as described in Project Implementation Manual) and FFRDF to the village-level accounts (VDFs) and to the DAFOs (see fund flow arrangements below for Actions 3.1.1 and 3.1.2). Linked to Action 1.1.2, on a pilot basis the FFRDF will be tested and trained to provide and manage financing to the village level. The implementation of this Action will be closely supported by the NPMU at the national level with support from the PPMUs. PPMUs will also provide technical inputs, budgeting and planning support and continuous capacity building support during the implementation of the activities.
Fund flow arrangement	<p>Action 3.1.1</p> <ul style="list-style-type: none"> The financing of this Action will be under the responsibility of the NPMU and PPMUs. PPMUs will provide and administer the required budgets for the implementation of the activities. <p>Action 3.1.2</p> <ul style="list-style-type: none"> The DAFO in each province will prepare annual work plans and budgets in close collaboration with the villagers. This will be submitted to the PPMUs

²⁷³ A list of permitted activities for village forestry is provided in Annex 9 of the VFMP guidelines. 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 fire-fighting 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).

	<p>for approval. Once approval is given, the PPMUs will request the EPF to disburse funds to the district level, following the operational manual and procedures of the EPF REDD+ Window.</p> <ul style="list-style-type: none"> At the village level, fund transfer will be based on annual operational plan preparation and budget requests that will be transferred to the PPMUs for approval. Once approved, the PPMUs will make a disbursement request to EPF that will disburse the funding to village development funds. (FFRDF will also provide financial management and disbursement services and build its capacity on the job, closely supervised by the NPMU). Monitoring and evaluation will be conducted quarterly, carried out by EPF staff who will report to PPMUs/NPMU on measures related to payments for village groups. Monitoring of progress made in implementation will be conducted by DAFOs and District Forest Inspection Units (DFIUs) in close cooperation with PPMUs.
Co-finance / leverage	<p>Total activity cost: 32.94 million Euro</p> <ul style="list-style-type: none"> Total GCF finance: 16,391,540 Euro Co-finance from Government of Lao PDR: 5,357,880 Euro Co-finance from private sector (village household in-kind): 939,284 Euro Co-finance from BMZ through GIZ: 3,498,439 Euro Co-finance from BMZ (through KfW Village forestry Management Project): 6,595,749 Euro Co-finance from JICA: 152,895 Euro <p>Note on co-finance: Government entities will provide staff inputs to implement the activities. Villagers will provide an in-kind labor contribution to implement village forest management plans.</p>
Exit strategy / long-term sustainability	<ul style="list-style-type: none"> VFM planning support will help to increase the effectiveness of forest management and encourage sustainable management – reducing unsustainable harvesting and forest clearing. In the long-run, villages will be enabled to finance the implementation of the management plans out of village forest revenues. Capacity development for provincial and district authorities (PAFO and DAFO staff), VFC members and villagers will result in skill development to manage village forest sustainably. At the end of the initial 5-year management cycles, the programme will support the preparation of the second 5-year management plan cycle to be conducted by the DAFOs and DONREs. The implementation of these is expected not to rely on external funding. Income from timber and NTFP revenues (assuming regulatory changes are successfully approved in Activity 1.3) will help incentivize villagers to sustainably manage forest resources, along with other environmental and social benefits. The financing of the purchase equipment operations and maintenance beyond the programme lifetime will be covered by increased revenues streams from the production of village forest. For the harvested timber (assuming regulatory revisions in Activity 1.3 related to village forest management are successfully made), the villages will need to pay a fee which will be used to by the Government to finance the operations and maintenance of purchased equipment (see Annex 2 for an overview of regulations for village forests, including registration, management and harvesting; Note: Additional regulations overseeing village forest management will be developed in Activity 1.3, since currently village forestry regulations do not permit commercial harvesting activities).

Beneficiaries	Village forest management plans developed for 600 villages (13,000 household, 78,000 people; 39,000 men; 39,000 women) without ClipAD and KfW support and 720 villages with ClipAD and KfW support (14,000 household, 84,000 people; 42,000 men; 42,000 women)									
Impacts and co-benefits	<p><u>GHG mitigation</u>: For the GHG mitigation assessment, the total intervention area of 531,505 ha was taken into account. Detailed description of the GHG mitigation is described in Chapter 9.</p> <p><u>Socio-economic</u>: Improved governance of village forests and improved livelihoods from sustainable use of village forests and increased crop production through watershed forest management (ADB “Sustainable Rural Infrastructure Watershed Management Sector Project”). Increased household income from forest harvesting and NTFP collection, as well as from an enhanced crop productivity due to an improved hydrologic balance. If the commercial timber trade is permitted, village forests would be an important timber source for the wood processing industry in Lao PDR (including additional job opportunities, tax for the Government etc.).</p> <p><u>Environmental</u>: Improved forest quality and cover, reduced soil erosion and land degradation due to improved management, enhanced biodiversity and habitat, improved provision of ecological services like water balance.</p> <p>Gender: Empowerment of women to become members of Village Forest Management, and to participate in committees and other forestry decision-making bodies on the local level. The programme will further support the capacity development of female staff for all implementing Government agencies on all levels to improve the gender balance within the forest sector.</p>									
Risks	<table><tr><th>Risk(s)</th><th>Mitigation/ Avoidance Measures</th></tr><tr><td>Villages not interested in participating in VFM</td><td><ul style="list-style-type: none">• Participation is voluntary, and based on the principles of FPIC• Incentives will be provided through the provision of equipment, training and grants</td></tr><tr><td>Villages do not implement VFM according to plan</td><td><ul style="list-style-type: none">• Agreements with villages stipulate “The Village Administrative Committee assisted by the Village Land Use and Forest Management Committee will control the enforcement of these regulations and can charge fines and impose sanctions in line with the set rules in this document.”• VFMPs will be formulated utilizing a participatory approach, based on the principles of FPIC, and will thus be developed based on the priorities and interests of villages.• A grievance mechanism will be available and accessible to anyone who wishes to file a grievance.</td></tr><tr><td>Delays in provision of financing and management plan implementation</td><td><ul style="list-style-type: none">• Strong support by the PPMUs to prepare annual work plans and budget requests• Close collaboration of NPMU/PPMUs with EPF and Government authorities</td></tr></table>		Risk(s)	Mitigation/ Avoidance Measures	Villages not interested in participating in VFM	<ul style="list-style-type: none">• Participation is voluntary, and based on the principles of FPIC• Incentives will be provided through the provision of equipment, training and grants	Villages do not implement VFM according to plan	<ul style="list-style-type: none">• Agreements with villages stipulate “The Village Administrative Committee assisted by the Village Land Use and Forest Management Committee will control the enforcement of these regulations and can charge fines and impose sanctions in line with the set rules in this document.”• VFMPs will be formulated utilizing a participatory approach, based on the principles of FPIC, and will thus be developed based on the priorities and interests of villages.• A grievance mechanism will be available and accessible to anyone who wishes to file a grievance.	Delays in provision of financing and management plan implementation	<ul style="list-style-type: none">• Strong support by the PPMUs to prepare annual work plans and budget requests• Close collaboration of NPMU/PPMUs with EPF and Government authorities
Risk(s)	Mitigation/ Avoidance Measures									
Villages not interested in participating in VFM	<ul style="list-style-type: none">• Participation is voluntary, and based on the principles of FPIC• Incentives will be provided through the provision of equipment, training and grants									
Villages do not implement VFM according to plan	<ul style="list-style-type: none">• Agreements with villages stipulate “The Village Administrative Committee assisted by the Village Land Use and Forest Management Committee will control the enforcement of these regulations and can charge fines and impose sanctions in line with the set rules in this document.”• VFMPs will be formulated utilizing a participatory approach, based on the principles of FPIC, and will thus be developed based on the priorities and interests of villages.• A grievance mechanism will be available and accessible to anyone who wishes to file a grievance.									
Delays in provision of financing and management plan implementation	<ul style="list-style-type: none">• Strong support by the PPMUs to prepare annual work plans and budget requests• Close collaboration of NPMU/PPMUs with EPF and Government authorities									

	Staff turnover may result in loss of knowledge, information and capacities related to VFM planning processes (including spatial planning and participatory land use planning)	<ul style="list-style-type: none"> • Clear guidelines and protocols, documentation of trainings and strengthening knowledge management systems • Ongoing trainings, engaging diverse staff from national, provincial and district levels (building capacities at all levels)
	Commercial harvesting activities in village forests (natural forest) may not be legal	<ul style="list-style-type: none"> • Activity 1.3. will address this risk and closely engage with the Government of Lao PDR

3.3.3.2 Activity 3.2. Implementation of SFM in production forests

Activity 3.2 Implementation of SFM in production forests	
Contribution to GCF outcome(s)	M5.0 Strengthened institutional and regulatory systems M9.0 Improved management of land or forest areas contributing to emissions reductions
Contribution to programme output	Sustainable forest landscape management and landscape restoration is implemented
Description of activities / actions	<p>There are 51 production forest areas (PFAs) in Lao PDR. The scale of degradation in PFAs is immense: “Only 15 percent of the total area in production forest (465,000 hectares) is of good quality – that is, contains at least 60 m³ per hectare of commercial standing stock.”²⁷⁴</p> <p>In the six target provinces, the forest category covers a total area of 1.05 million ha, of which 0.66 million ha is natural high-carbon-stock forest. Regenerative vegetation accounts for 0.33 million ha and agricultural land for 0.05 million ha, which could be used for restoration and reforestation.</p> <p>Based on forest assessment data from SUFORD, only 5 districts currently have the potential for commercial natural forest harvesting; thus, the Activity will only be implemented in these 5 districts (Oudomxay: Xai and Namo district; Sayabouri: Phiang, Sayabouri and Hongsa district). This Activity will build upon the SUFORD experiences and implementation of participatory production forest management and forest landscape restoration activities. The Activity is focused primarily on working with villages in production forests. The rationale from this relates to the overall theory of change of the project: in order to reduce deforestation related to agriculture, villagers need to have access to commercially-sustainable, alternative income streams.</p> <p>3.2.1 Forest inventory and forest management planning in production forests</p> <ul style="list-style-type: none"> ▪ Designation of villages, and mobilization and organization of villagers: MAF will present the programme concept to existing village land use and forest management committees (VLUFMCs) or Village Development Funds (VDFs) led by a district villages forest committee (DVFC).²⁷⁵ ▪ Preparation of forest management plans: participatory land use zoning, marking boundaries, and taking an inventory of trees and NTFPs. The focus of the management planning will be to identify potential zones for restoration and reforestation in the production forests. The identified areas will be linked to Activity 2.2, the establishment of a public-private dialogue to promote private sector partnerships and sustainable investments. ▪ Definition of forest access rules (rules governing forest access and benefit sharing are clearly defined together with villagers), and ensure villagers understand and uphold these rules. ▪ Assessment and identification of eligible and promising village-level development investments based on SUFORD’s positive experiences with village development funds. ▪ Capacity building for VLUFMCs / VDFs and managing inclusive DVFCs, and training for villagers on SFM, forest management plans and monitoring.

²⁷⁴ Grace, Prixar, and Phengsopha 2012 in World Bank 2018: https://ieg.worldbankgroup.org/sites/default/files/Data/reports/ppar_laosustainableforestry.pdf

²⁷⁵ Note: SUFORD worked with villages within 5 km of production forest areas.

	<ul style="list-style-type: none"> Capacity building for provincial and district officials to support with forest management planning and eventual implementation (especially focused on provision of support to villagers). <p>3.2.2 Implementation of management plans and monitoring</p> <ul style="list-style-type: none"> Support VLUFMCs / VDFs and DAFOs in the development of annual work and budget plans to implement forest restoration activities, including village-based plantation/agroforestry development and assisted natural restoration in degraded forests. Implementation of assisted natural regeneration and plantation development or logging activities (if it is allowed by the Government: see Activity 1.3.) in identified degraded areas by village forest organizations. Enforcement of forest access rules (sanctions applied for those who break the rules, and redress available for those whose rights are infringed). Capacity building for provincial and district authorities, as well as villagers (especially VFCs), on monitoring (e.g. forest inventory revision, remote-sensing and ground truthing) and enforcement (patrolling techniques). If necessary, establishment of a village development fund (VDF) in the target villages to finance forest management, small-scale infrastructure and income-generating activities. On-the-job capacity development and training of village organizations in implementation of assisted natural regeneration and plantation development. Ongoing monitoring: remote sensing, ground-truthing, systemic re-surveying of sample plots (preparation of quarterly monitoring of progress made in implementation, making payments to villagers, reporting illegal activity and reporting conflicts). Annual monitoring of overall achievement in implementing the annual plan of operation, and preparation of new annual plan of operation. After 5 years, conduct monitoring and evaluation of the overall achievement of the management plan.
Result indicators	<p>Action 3.2.1 <u>Baseline:</u> 0 forest management plans and forest inventories conducted in target areas <u>Target:</u> 5 forest management plans prepared and approved by village forest committees (each district one) <u>Means of Verification:</u> 5 approved management plans (approved by PAFO and VFC) (each district one)</p> <p>Action 3.2.2 <u>Baseline:</u> 0 forest management plans implemented in production forests, and SFM is implemented on 0 ha in target villages and is not monitored <u>Target:</u></p> <ul style="list-style-type: none"> 25,331 (ha) of production forest category area under participatory forest management (harvesting area, naturally assisted forest area, plantation areas) Provincial and district authorities conduct frequent monitoring and reporting without external support 50 village development grants disbursed (10 per district and per management plan) <p><u>Means of Verification:</u> Annual monitoring reports to be prepared by PPMUs; reports on village grant disbursements</p>

<p>Inputs and investment items</p>	<p>Action 3.2.1</p> <ul style="list-style-type: none"> ▪ Equipment for management planning (3-4 GPS receivers and 2-3 cameras needed per PFRA, relascope, materials (printed forms, notebooks, printed updated village maps) ▪ Transportation for district, provincial, national staff and PPMUs to visit villages (transportation costs, cars, motorbikes) ▪ GIS specialist to support with mapping (village forest maps, current and planned/future) ▪ PPMU staff to support with implementation of management planning, trainings, to support participatory forest zoning, inventory and demarcation and implementation of assisted natural regeneration and plantation management ▪ Workshops for consultations with villagers based on FPIC principles and access rules for participating villages ▪ Informative materials (brochures, posters, informative materials – including picture books, translation of materials into local languages), translation of rules and management plans for ethnic minorities [where necessary] ▪ Training of PAFO staff on the preparation of simple maps (e.g. downloading GPS data and monitoring) ▪ On-the-job training and technical assistance to village land use and forest management committee and DAFO (production forest section) staff. ▪ Translators for consultations, translation of materials to local languages (as necessary) <p>Action 3.2.2</p> <ul style="list-style-type: none"> ▪ Expert PPMU staff to support implementation of forestry activities and address social, gender and ethnic minorities inclusion, and financial staff to support annual work planning and budgeting ▪ Transportation for district staff to visit villages (transportation costs) ▪ Trainings for villagers on sustainable forest management (transportation of district staff to villages, equipment, training materials, etc.) ▪ Translators for consultations, translation of materials to local languages (as necessary) ▪ Provision of grants to villages for assisted natural regeneration and plantation establishment (for plantation, the same mode will apply as for action 2.1.2 (50% matching grant if private sector agreement is in place) ▪ Provision of village development grants for livelihood activities (average USD 7,500 per village)
<p>Technical evaluation / justification / barriers addressed</p>	<p>This Activity builds on years of donor experience piloting participatory sustainable forest management (SFM) in production forest areas, especially the World Bank's SUFORD Program²⁷⁶ and the Forest Investment Program (FIP) in Lao PDR,²⁷⁷ among others. It builds on the protocols and guidance used, while addressing barriers and integrating lessons learned. This experience shows that appropriate management of production forests is greatly affected by the institutional capacity of the forestry institution, particularly in terms of developing and implementing SFMs. The general approach for implementing SFM as described above is based on the SUFORD approach, whereby grants are provided to VLUMFCs to improve planning. Since there is a logging ban on natural forests</p>

²⁷⁶ World Bank Sustainable Forestry for Rural Development Project (SUFORD):

<http://projects.worldbank.org/P064886/sustainable-forestry-rural-development-project?lang=en>

²⁷⁷ Lao PDR FIP Approved Investment Plan: https://www.climateinvestmentfunds.org/sites/cif_enc/files/fip_4_lao_pdr_ip.pdf

	<p>and the allowable sustainable cut volumes are very limited in PFAs, the focus of the Activity will be on forest restoration and plantation development (the latter in highly degraded areas) in production forests, in close collaboration with the private sector (Activity 2.2). Additional measures have been integrated to address shortcomings:²⁷⁸</p> <ul style="list-style-type: none"> • Additional training for provincial and district authorities on participatory SFM • Training for VFC members on participatory SFM • Providing targeted measures to strengthen the engagement of poor and marginalized households, women and ethnic minorities • Improved monitoring, including strengthened emphasis on ground-truthing and taking stock of inventories <p>Prime Minister Order 31 (2013) currently prohibits timber harvesting within production forest areas in response to rampant unsustainable harvesting (legal and illegal). In the programme area, commercial logging in these areas is not considered a major driver of deforestation due to the absence of marketable tree species with minimum harvestable diameters – largely due to over-harvesting in the past.^{279,280} Many production forests are highly degraded, and in need of natural regeneration and sustainable management. While PMO 13 has had positive impacts, including reduced deforestation, it has caused also limited income from production forests.</p> <p>However, in about 5 districts there is a commercial potential for sustainable harvesting and the programme will work with the government on new regulation that allows harvesting if the forest management entity can demonstrate long-term sustainability. Provincial and district authorities have noted that budgets for government authorities, including those responsible for managing these forests, have been negatively affected due to reduced revenue from commercial forestry. Activity 1.3 includes measures to limit the ban on harvesting in sustainable forests on the basis of promoting participatory SFM, with improved monitoring and enforcement (linked with Activities 1.3 and 1.5). Activity 1.1 addresses long-term government forest sector financing.</p>
Implementation mechanisms	<p>Action 3.2.1</p> <ul style="list-style-type: none"> ▪ Management planning will be led by the PPMUs. PPMUs will also provide the needed equipment and logistics, as well as expert staff. ▪ Government responsibility will be at the level of DOF, PAFOs and DAFOs (Production Forest Management Unit) to develop the management plans with support of the PPMUs and NPMU. ▪ Village forest committee members will provide their time and support and participate in trainings. <p>Action 3.2.2</p>

²⁷⁸ SUFORD Project Performance Assessment Report (2018):

<http://documents.worldbank.org/curated/en/239161528225963013/pdf/125929-PPAR-P163409-P064886-PUBLIC.pdf>

²⁷⁹ PM Order No.15: “Strengthening strictness on governance and inspection of timber harvesting, timber transportation and timber business”, 13 May 2016.

Suspend strictly the export of logs, sawn timber, semi-finished products harvested from natural production forest and conversion areas.

Prohibit importing of illegal timber for the purpose of exporting those products to third countries.

All timber has to be auctioned at log landing 2 and only national wood processing companies can buy those logs for further processing in the country.

Border checkpoints should strictly control that only finished products of legal source are exported.

²⁸⁰ Lestrelin et al. 2013; Koch 2016

	<ul style="list-style-type: none"> ▪ Similar to Action 3.2.1, PAFOs and DAFOs and the villages will be responsible for the implementation of the action. ▪ PPMUs will provide the expert staff and will finance trainings and capacity development support to villages and PAFOs and DAFOs. ▪ Financing for implementation will be provided by EPF for village development grants, grants for forest establishment and restoration activities, and annual budget to finance the related activities of PAFO and DAFO in each province and target districts.
Fund flow arrangement	<p>Action 3.2.1</p> <ul style="list-style-type: none"> ▪ PPMUs will be responsible for the budgeting of the activities subject to approval by the NPMU and disbursement of funds. PPMUs will be responsible for the financial management, administration and reporting of the activities. <p>Action 3.2.2</p> <ul style="list-style-type: none"> ▪ PPMU-related support will be financed from GCF budget provided by NPMU. ▪ Financing for the village development grants, forest restoration and establishment activities, and PAFO and DAFO annual operational plans, will be provided by the EPF. EPF will follow the regulations of the REDD+ Funding Window outlined in its operations manual. ▪ NPMU will be responsible for approving the annual operational plans of PAFOs / DAFOs that are eligible for EPF financing.
Co-finance / leverage	<p>Total activity cost: 5.49 million Euro</p> <ul style="list-style-type: none"> ▪ Total GCF finance: 4,868,232 Euro ▪ Co-finance from Government of Lao PDR: 443,520 Euro ▪ Co-finance from private sector (village in-kind): 173,684 Euro <p>Note on co-finance:</p> <ul style="list-style-type: none"> • In-kind Government staff from PAFO, DAFO, POFI and DOFI to support management planning, implementation, monitoring and enforcement • Village-level in-kind labor contribution in management planning and implementation of programme activities
Exit strategy / long-term sustainability	<ul style="list-style-type: none"> ▪ Capacity development for national, provincial and district forest authorities (DOF, PAFO and DAFO staff), VFC members and villagers will support the adoption of sustainable practices and improved land use practices. ▪ Organization of VFCs and institutional strengthening will help improve management and strengthen village ownership of forest resources and increase their household income through the provision of village development grant and village-level plantation and forest asset creation. ▪ Income from timber revenues (assuming the PMO 31 logging ban will be lifted or an exception for the 5 pilot districts would be enacted) will help incentivize villagers to manage forest resources, along with other environmental and social benefits. ▪ The Actions will be implemented in combination with Output 2 providing additional support to villagers to improve production systems²⁸¹ and limit

²⁸¹ For example, including measures to improve production, providing numerous benefits for producers (e.g. increased yields, reduced loss, and income diversification).

	the need for unsustainable harvesting in forests (alternative income streams). This is of particular relevance in areas where there is a need for substantial regeneration before timber and non-timber forest products can be sustainably harvested.								
Beneficiaries (group and number)	Participatory forest management plans developed for 50 villages (1,000 village households, 6,000 people; 3,000 women; 3,000 men) in 5 districts.								
Impacts and co-benefits	<p><u>GHG mitigation</u>: See Chapter 9</p> <p><u>Socio-economic</u>: Improved governance of production forests and improved livelihoods from sustainable use of production forests. Increased income for participating households.</p> <p><u>Environmental</u>: Improved management of production forests, improving forest regeneration, enhancement of habitat, conservation of biological diversity, improved provision of ecosystem services (e.g. reduced soil erosion, landslides, flooding risk, sedimentation, etc.).</p> <p>Gender: The Activity will support the capacity development of female staff for all implementing Government agencies on all levels to improve the gender balance within the forest sector.</p>								
Risks	<table border="1"> <thead> <tr> <th>Risk</th><th>Mitigation/ Avoidance Measures</th></tr> </thead> <tbody> <tr> <td>Prime Minister Order 15 of 2016 banned timber harvesting from national production forest areas and is still in place. As a consequence, it is not currently allowed to legally harvest in natural production forests.</td><td> <ul style="list-style-type: none"> Activity 1.3 includes the initiative to allow sustainable harvesting in national production forests (based on the principles of sustainable forest management). </td></tr> <tr> <td>Village Forest Committees (VFCs) may have limited representation and participation of women and ethnic minorities.</td><td> <ul style="list-style-type: none"> Pro-active gender and ethnic minorities inclusion in the programme activities and VFCs. </td></tr> <tr> <td>Allocation of VDF resources benefits better-off households, whereas women and ethnic minorities often have less access to resources.</td><td> <ul style="list-style-type: none"> Programme guidelines will be translated into common languages within the programme area, and trainers will be trained on gender and social inclusion. Extension and training materials will also include visuals such as videos, pictures and other tools to communicate content. </td></tr> </tbody> </table>	Risk	Mitigation/ Avoidance Measures	Prime Minister Order 15 of 2016 banned timber harvesting from national production forest areas and is still in place. As a consequence, it is not currently allowed to legally harvest in natural production forests.	<ul style="list-style-type: none"> Activity 1.3 includes the initiative to allow sustainable harvesting in national production forests (based on the principles of sustainable forest management). 	Village Forest Committees (VFCs) may have limited representation and participation of women and ethnic minorities.	<ul style="list-style-type: none"> Pro-active gender and ethnic minorities inclusion in the programme activities and VFCs. 	Allocation of VDF resources benefits better-off households, whereas women and ethnic minorities often have less access to resources.	<ul style="list-style-type: none"> Programme guidelines will be translated into common languages within the programme area, and trainers will be trained on gender and social inclusion. Extension and training materials will also include visuals such as videos, pictures and other tools to communicate content.
Risk	Mitigation/ Avoidance Measures								
Prime Minister Order 15 of 2016 banned timber harvesting from national production forest areas and is still in place. As a consequence, it is not currently allowed to legally harvest in natural production forests.	<ul style="list-style-type: none"> Activity 1.3 includes the initiative to allow sustainable harvesting in national production forests (based on the principles of sustainable forest management). 								
Village Forest Committees (VFCs) may have limited representation and participation of women and ethnic minorities.	<ul style="list-style-type: none"> Pro-active gender and ethnic minorities inclusion in the programme activities and VFCs. 								
Allocation of VDF resources benefits better-off households, whereas women and ethnic minorities often have less access to resources.	<ul style="list-style-type: none"> Programme guidelines will be translated into common languages within the programme area, and trainers will be trained on gender and social inclusion. Extension and training materials will also include visuals such as videos, pictures and other tools to communicate content. 								

3.3.3.3 Activity 3.3. National Protected Area (NPA) Management

Activity 3.3 National Protected Area (NPA) management	
Contribution to GCF outcome(s)	<p>M9.0 Improved management of land or forest areas contributing to emissions reductions</p> <p>M5.0 Strengthened institutional and regulatory systems</p>
Contribution to programme output	Output 3. Sustainable forest landscape management and landscape restoration is implemented
Description of activities / actions	<p>In total, the GCF programme area contains 6 National Protected Areas (see Section 1.2.4). These are located in 17 districts, which have all deliberately been selected for GCF programme implementation. These protected areas contain a total area of 1.02 million ha (19% of the selected 28 districts). About 96% (986,281 ha) of this protected area is classified as forest. About 763,158 of this area is classified as high-carbon-stock forest area, which is equivalent to 18% of the total remaining high-carbon-stock area in the six target provinces of the programme</p> <p>The implementation of Activity 3.3 will be exclusively implemented in the Protected Areas and in their associated buffer zones, and will not geographically overlap with the implementation of Activities 3.1 and 3.2.</p> <p>3.3.1 Development or revision of National Protected Area (NPA) management plans</p> <p>The development of NPA management plans and revision of existing (outdated) plans will help strengthen the management of NPAs and reduce deforestation and forest degradation, while improving livelihoods of villagers living within or adjacent to NPAs. This action will include the following measures:</p> <ul style="list-style-type: none"> ▪ Assessment of previous management plan ▪ Assessment of key forest areas and the quantification of current and potential threats as a key component to develop NAP management plans. ▪ Zonation: Identifying land use categories and Participatory Land Use planning (PLUP) ▪ Assessment and identification of alternative livelihood opportunities for which villages will be eligible to receive village-level livelihood grants through village conservation contracts ▪ Awareness-raising and establishment of co-management agreements with villages inside or adjacent to the NPA in NPAs where this has not already been done. Voluntary co-management agreements (village conservation contracts) will be based on a participatory process applying FPIC principles ▪ Development of Law Enforcement Action Plans (LEAPs) for NPAs <p>3.3.2 Improved law enforcement in NPA conservation landscape</p> <p>Implementation and financing of NPA management plans within the NPAs will address the core barrier that there are insufficient resources (financial, technical and administrative) to support the effective implementation of management plans.²⁸² This is particularly relevant since these forest areas contain the largest remaining high-carbon-stock forests, which are particularly at risk of deforestation and forest degradation (refer to Chapter 1.2 and 1.3 for more background information on Protected Areas in Lao PDR).²⁸³</p>

²⁸² Lao PDR ER-PD; IUCN 2011

²⁸³ DOF/ MAF 2018

	<p>The implementation of these plans will strengthen the management and overall sustainability of NPAs and also ensure that effective law enforcement and monitoring systems are operational and effective (contributing to reduced deforestation and forest degradation).</p> <ul style="list-style-type: none"> ▪ Build/reconstruct law enforcement infrastructure, provide patrolling equipment and ensure operation. ▪ Implementation of Law Enforcement Action Plans (LEAPs) for NPAs, regular monitoring and enforcement of management plans and NPA management, including targeting high-risk areas by PAFO staff ▪ Development and Implementation of a biodiversity monitoring strategy aimed at evaluating the effectiveness of NPA management actions. ▪ Implement SMART law enforcement data management system to standardize the monitoring of enforcement efforts, threats and results over all NPA's. ▪ Capacity development for NPA and DOFI staff, and provision of equipment to support improved monitoring and enforcement ▪ Village engagement by PPMUs and DAFO staff for participating villages within and adjacent to NPAs <p>3.3.3. Implementation of sustainable land and forest management by villages living within and adjacent to NPAs</p> <p>Linked with Activity 1.5 and support provided under Output 2, support will be provided to villages living within and adjacent to NPAs to implement sustainable land use activities that are aligned with co-management agreements and NPA management plans.</p> <ul style="list-style-type: none"> ▪ Technical assistance, awareness-raising and capacity building to villagers to implement sustainable forest management and land use activities based on approved land use plans and co-management agreements (land use planning will be supported within Activity 1.5; Action 3.3.1 includes the establishment of co-management agreements). ▪ Support to livelihood development through the establishment of village development funds (VDFs) and village-level forest co-management agreements. GIZ has developed best practices for incentive mechanisms under a project in Hin Nam No that will be adopted. ▪ Technical assistance for monitoring and evaluation and reporting of implemented activities
Result indicators	<p>Action 3.3.1</p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> • 4 NPAs have no management plans and 2 NPAs have recently revised management plans (Nam Ha and Nam Khan) • 0 co-management agreements signed in target villages <p><u>Target:</u></p> <ul style="list-style-type: none"> • Development of 4 new NPA management plans (in all NPAs except Nam Ha and Nam Khan where the ICBF program currently supports the elaboration of management plans) • 80% villages living within or adjacent (5 km) to the NPAs have signed co-management agreements <p><u>Means of Verification:</u> Approved management plans, signed co-management agreements</p> <p>Action 3.3.2</p> <p><u>Baseline:</u> 10-year historical average annual deforestation rate in target district covered by NPA, disaggregated by district in (%) based on ER-Program Reference Level data</p>

	<p><u>Target:</u> Average annual deforestation and forest degradation rate in 17 NPA target districts reduced by 50%</p> <p><u>Means of Verification:</u> Measurement, Reporting and Verification reports disaggregated by districts (see Activity 1.5 on monitoring)</p> <p>Action 3.3.3</p> <p><u>Baseline:</u> 103 village conservation contracts in target villages under implementation</p> <p><u>Target:</u> 80% of villages living within or adjacent to the NPA have signed a village conservation contract and the contract has been implemented in 65% of villages</p> <p><u>Means of Verification:</u> Monitoring and Evaluation reports by PPMUs and signed village conservation contracts</p>
Inputs and investment items	<p>3.3.1 Development or revision of National Protected Area (NPA) management plans</p> <ul style="list-style-type: none"> ▪ Consulting service by PAFO and DAFO staff to support the management plan development and revision process, where no management plans already exist ▪ Capacity building for villagers and forest officers at sub-national levels on management planning, new plans and revisions (province, district, <i>kumban</i>) ▪ Provision of technical equipment for management plan development (GPS, communication devices, measuring devices, cameras, satellite images, clinometer, relascope) ▪ Awareness-raising campaigns for villages, and consultations applying FPIC principles to accompany the (voluntary) establishment of co-management agreements with villages inside or adjacent to the NPA <p>3.3.2 Improved law enforcement in NPA conservation landscape</p> <ul style="list-style-type: none"> ▪ Expert input from NPMU, PPMU and Government staff time for activity implementation ▪ Equipment for monitoring and enforcement (GIS, GPS, communication devices), vehicles (cars and motorbikes) ▪ Boundary of NPA demarcation and signposting ▪ Implementation of SMART enforcement data management system and capacity around data analysis for improved LEM effectiveness ▪ Capacity building workshops for forest officers at sub-national levels (province, district, <i>kumban</i>) on monitoring and enforcement of NPA management plans ▪ Technical assistance for monitoring and enforcement (on-the job support, ongoing technical assistance) ▪ Travel and patrolling finance <p>3.3.3. Implementation of sustainable land and forest management by villages living within and adjacent to NPAs</p> <ul style="list-style-type: none"> ▪ Provision of village conservation grants to villages living within and adjacent to the NPA through EPF and/or FFRDF combined with technical assistance from PPMUs (extension services and technical advice) on implementation of sustainable land and forest management and village-based livelihood activities ▪ Ongoing awareness-raising of villagers and information-sharing campaigns of existing laws / regulations and livelihood options
Technical evaluation / justification / barriers addressed	<p>Within the programme area, there are 6 national protected areas covering 17 districts of the GCF programme area.</p>

NPA	Province(s)	Area (ha)	Management plan? (y/n)
Nam-Et Phou Loey NPA	Houaphan Luang Prabang Xiengkhouang	422,900	No
Nam Xam NPA	Houaphan	69,028	No
Nam Ha NPA	Luang Namtha	224,000	Yes
Nam Khan NPA	Luang Namtha Bokeo	136,000 (56% BK, 44% LN)	Yes
Nam Pouy NPA		177,660	No
Phou Hi Phi NPA	Oudomxay	87,350	No
Total:		1,116,938	

As is evident in the previous table, for the majority of NPAs the lack of management plans and availability of financing is a major barrier to addressing deforestation and forest degradation within NPAs – key areas with high-carbon forest stock.²⁸⁴ Others within the programme area have been supported by recent projects (e.g. Nam Ha and Nam Khan are supported by KfW's ICBF project;²⁸⁵), and continued support focusing on the implementation of sustainable activities, and monitoring and enforcement of plans, will be coordinated with the exit of donor projects (e.g. ICBF to end in 2022).

Application of best practices:
This Activity aims to build on the extensive experience generated by KfW's Integrated Conservation and Biodiversity (ICBF) project.²⁸⁶ It has a total budget of 17.1 million Euros and is being implemented between 2015-2022. Prior to its implementation, extensive pre-feasibility and feasibility studies were conducted that informed the design of the project. Within the six target NPAs, ICBF is active in the Nam Ha and Nam Khan NPAs and corridors (Bokeo and Luang Namtha); however, the programme includes suitable measures that will be scaled-up by the GCF programme to cover NPAs in the programme area. The programme will continue where ICBF left off in Nam Ha and Nam Khan, and will continue to support the implementation of the management plan and community co-management agreements from 2022 until project-end. In Houaphan, experiences in strengthening NPA management will also build on experiences from Nam Et Phou Louey NPA (WCS²⁸⁷; World Bank²⁸⁸) and Nam Xam NPA (USAID and SNV)²⁸⁹.

Addressing key barriers:
The Activity addresses the principal barriers to ensure the sustainable management of NPAs and prevent the increase of deforestation and forest degradation in NPA – lack of

²⁸⁴ Information provided by MAF and MONRE representatives; PRAP Consultations; MOF/DOF 2018

²⁸⁵ Braeutigam 2015

²⁸⁶ This project supports the “effective management of 2 target landscapes comprising NPAs and corridors contributing to sustaining biodiversity in forest ecosystems, while supporting livelihoods of forest-dependent communities”; Braeutigam 2015

²⁸⁷ More information on WCS activities within this protected area are available online: <https://laos.wcs.org/Saving-Wild-Places/Nam-Et-Phou-Louey-NPA.aspx>

²⁸⁸ Protected Area and Wildlife Project:

<http://documents.worldbank.org/curated/en/862811468266173148/pdf/IPP6840V20REV000Box382157B00PUBLIC0.pdf> and <http://documents.worldbank.org/curated/en/710021468278697087/pdf/PAD2430P128393010Box382156B00OUO090.pdf> ; Developing and Demonstrating Replicable Protected Area Management Models at Nam-et-Phou Louey National Protected Area Project (NEPL Project): <http://pubdocs.worldbank.org/en/296761446543710814/pdf/Lao-NEPL-AM-ISM-May-2015-pdf.pdf>

²⁸⁹ newgenerationplantations.org/multimedia/file/574d9156-8098-11e6-ab1e-005056986313

	<p>funding and weak capacities.²⁹⁰ DoF has also recommended that at least 15 staff are present in each NPA; however, due to limited budgets, this is rarely realized.²⁹¹ Poor management and lack of technical and financial resources and capacities also limits the implementation monitoring of environmental and social impacts. This Activity is closely linked with Activity 1.1 (sustainable financing), which will identify new financing streams for conservation (e.g. payment for conservation schemes associated with infrastructure development, fees from the hydropower sector). This will help promote the long-term sustainability of the measures (see Exit Strategy description below). Trainings in the past have been highly limited and only prevalent in NPAs supported by donor projects, and there is a need to build capacities of both provincial- and district-level officials, as well as villagers living within and adjacent to NPAs.²⁹²</p> <p>Villagers will be able to access village-based grants for a set of eligible agricultural and forestry activities that support villagers' livelihoods and forest protection. Guidelines developed by KfW's ICBF program will be followed (Village fund disbursement/management guideline), which permits activities such as the following:²⁹³</p> <ul style="list-style-type: none"> ▪ Natural and enhanced forest restoration processes to support biodiversity ▪ Improved forest use through bamboo management for income generation ▪ Agroforestry for food security and income generation ▪ Non-timber forest products for income generation and biodiversity benefits ▪ Aquatic conservation zones for biodiversity conservation and livelihoods. <p>These grants will reduce the pressure on deforestation and reliance of unsustainable forest use and will improve people household incomes.</p> <p>Processes for application are similar to those described earlier, and that are described in full in the Project Implementation Manual.</p> <p>It was considered to create additional NPAs or wildlife corridors in the project. However, given the current level of existing NPAs, improving the management of these areas is clearly the priority. If management is successfully improved, creating new NPAs will be considered in subsequent projects.</p>
Implementation mechanisms	<p>Action 3.3.1: Will be under the responsibility of DOF and implementation will be carried out by PAFOs and DAFOs and their specific section for protection and conservation forest management. The NPMU and PPMUs will provide technical and financial support for the preparation of the management plans.</p> <p>Actions 3.3.2 and 3.3.3: Will also be implemented by DAFOs and PAFOs. The financing for the operational costs will be provided by EPF or by FFRDF based on annual operational and budget plans to be approved by NPMU. The NPMU and PPMUs will provide targeted capacity building and trainings, and support to the annual planning and budgeting.</p> <p>KfW: Implements the Integrated Conservation Biodiversity of Forests (ICBF) project covering the National Protected Areas Nam Ha and Nam Kan. Financing secured until 2022.</p>
Fund flow arrangement	<p>Action 3.3.1: This Action will be fully financed and administered by the NPMU and PPMUs.</p> <p>Actions 3.3.2 and 3.3.3: Financing will be provided from the EPF REDD+ Window to Government entities and to villages. Government entities will be supported by PPMUs in their annual work planning</p>

²⁹⁰ Lao PDR ER-PD; IUCN 2011

²⁹¹ IUCN 2011

²⁹² IUCN 2011

²⁹³ KfW 2016

	and budgeting. Plans and budgets will be submitted to the EPF, which will disburse in accordance with the EPF window operational manual. (FFRDF may also be considered to execute part of this task).	
Co-finance / leverage	<p>Total activity cost: 11.77 million Euro</p> <ul style="list-style-type: none"> Total GCF grant finance: 7,885,317 Euro Co-finance from the Government of Lao PDR: 3,888,720 Euro <p>Note on co-financing:²⁹⁴</p> <ul style="list-style-type: none"> In-kind Government staff from PAFOs and DAFOs to support management planning and implementation of Actions 3.2.2 and 3.2.3. (Only operational costs related to transport and per diems and investments will be financed by GCF funds). Grant investment is likely to leverage additional household-level investment and increase household incomes that can be reinvested. 	
Exit strategy / long-term sustainability	<ul style="list-style-type: none"> Upfront costs of developing monitoring systems are high, yet after initial investments are undertaken, the cost of maintaining and utilizing systems will drastically decline (i.e. the programme reduces the costs for beneficiaries to adapt new technologies and sustainable practices). Land use planning support for villagers within or adjacent to NPAs will help to increase the effectiveness of land use and encourage sustainable practices that limit the expansion of agricultural activities. This will include measures to improve production, providing numerous benefits for producers (e.g. increased yields, reduced loss and income diversification). Capacity development for NPA staff, provincial and district authorities and villagers will support the adoption of sustainable practices and improved land use practices. Mainstreaming of NPA management plans into SEDPs (national, provincial and district level) will also create stronger ownership and enforcement of the plans. Government co-financing: Activity 1.1 (sustainable financing) will focus on the identification of sustainable long-term financing for NPA management (helping to overcome budget shortages for NPAs). 	
Beneficiaries	<ul style="list-style-type: none"> 200 beneficiary villages within and adjacent to the 6 NPAs (13,000 households, 78,000 people, 39,000 men and 39,000 women). At least 80 Government staff trained on NPA management 	
Impacts and co-benefits	<p><u>GHG mitigation</u>: See Chapter 9 on GHG mitigation quantification. The Activity will contribute to the reduction of deforestation and forest degradation pressures and conservation of high-biodiversity and high-carbon-stock forests.</p> <p><u>Socio-economic</u>: Increased income for participating households.</p> <p><u>Environmental</u>: Improved management of NPAs, resulting in improved provision of ecosystem services and stabilization of key wildlife populations.</p> <p><u>Gender</u>: The Activity will support the capacity development of female staff for all implementing Government agencies on all levels to improve the gender balance within the forest sector.</p>	
Risks and risk mitigation	Risk	Risk mitigation
	Investments in large infrastructure (e.g. dams, roads, mines) could lead to direct deforestation, or result in the relocation of	<ul style="list-style-type: none"> Pre-screening of areas considering where potential dams, roads and mines will be constructed and avoidance of these areas in the programme selection.

²⁹⁴ Note: Not counted in GCF programme budget finance from BMZ (implemented by KfW) for Integrated Conservation and Biodiversity Project (2015-2022) (Total project cost 17.5 million Euro: 15.5 million Euro from BMZ and 2 million Euro from the Lao government)

	villages to protected areas. Relocations often result in deforestation and forest degradation as villages are often moved to areas with insufficient rice paddy and land allocation for households to ensure food security.	
	Illegal logging and other illegal activities (hunting, wildlife trafficking)	<ul style="list-style-type: none"> • Improved monitoring and enforcement of land use plans • Improved awareness of local villages on regulations and the importance of forests, wildlife and biodiversity • Provision of alternative livelihood options and financing
	Participating households do not comply with co-management agreements that are developed, and conflicts may arise due to enhanced law enforcement based on co-management agreements. Local livelihoods, especially poor households, could be especially affected, as they are the most likely to experience economic displacement due to their reliance on the land for their livelihoods.	<ul style="list-style-type: none"> ▪ Participation in the project's activities are voluntary and based on the principle of FPIC. ▪ Grievance mechanism will be clearly communicated in culturally appropriate ways, and villagers are able to access the mechanism to file any grievance. ▪ Co-management agreements are developed using participatory stakeholder processes and will be developed based on the priorities and interests of each village. Trainers will be trained on social inclusion and how to target the inclusion of marginalized or vulnerable households. Awareness will be raised on current practices and their impacts, as well as sustainable land use management, REDD+ and climate change. ▪ Incentives will be provided to help overcome opportunity costs and support the transition to sustainable land use (e.g. farmer field schools, inputs to support the implementation of land use activities, identification and strengthening of additional financial sources for future investments in sustainable land use). Capacity building activities will target highly vulnerable households. ▪ Capacity building and supported investments in monitoring, knowledge dissemination, training/capacity building and awareness-raising will help improve compliance and adoption. ▪ Additional mitigation measures and key considerations for ESMPs are described in the ESIA and ESMP.

3.3.4 Output 4: Programme management, coordination, monitoring and evaluation

Activity 4.1: Programme management, coordination, monitoring and evaluation	
Contribution to GCF outcome(s)	M5.0 Strengthened institutional and regulatory systems M5.0 Strengthened institutional and regulatory systems M9.0 Improved management of land or forest areas contributing to emissions reductions M9.0 Improved management of land or forest areas contributing to emissions reductions
Contribution to Programme output	Project is managed, coordinated, monitored and reported
Description of actions	<p>4.1.1. GCF programme management and coordination by the NPMU, PPMUs, and DPMUs</p> <p>The programme management team at the NPMU and PPMUs will be responsible for the day-to-day operation of the programme and will provide the needed Technical Assistance to the various programme implementation partners. Activities will include:</p> <ul style="list-style-type: none"> • Constant coordination with donors and partners, and notably with MAF, EPF, FFRDF and the GCF • Conducting financial management and accounting of the implementation activities following GIZ financial management standards • Day-to-day implementation of the programme activities and leadership • Procurement of goods and services and recruiting consultants following GIZ procedures (e.g. M&E evaluation) • Programme planning and supervision of implementing partner • Support to executing partners in financial management, procurement, internal and external audits management • Overseeing and coordinating with the EPF window and provision of targeted training <p>4.1.2. Monitoring, evaluation and reporting to GCF</p> <ul style="list-style-type: none"> • The NPMU will develop a dedicated M&E system for tracking programme inputs, activities, outputs and impacts in line with the programme log-frame and will ensure that data is collected and reported in all programme district and villages. It will include the development of a system, an M&E manual and provision and training to the partners to carry out M&E. • PPMUs will closely coordinate with the implementation entities at the district and village levels who will provide data collection and information aggregation for the M&E system. The PPMUs will report to the NPMU, which will aggregate information and report to the GCF. • The NPMU will provide training and capacity development to EPF, FFRDF and to the implementation entities on strengthening M&E to ensure that their GCF programme financing activities feed into the programme M&E system under the responsibility of the NPMU. • External mid-term monitoring and evaluation will be carried out after 4 years of programme implementation and at the end of the programme timeframe. This will serve as independent assessment of the programme progress that will be fed into the reporting to GCF.
Result indicators	<p>Action 4.1.1.</p> <p><u>Baseline:</u> Programme not implemented and no NPMU in place</p> <p><u>Target:</u></p>

	<ul style="list-style-type: none"> • NPMU and 6 PPMUs set up and operational • Programme implemented and funds disbursed according to plan <p><u>Means of verification:</u> M&E reports to GCF every 6 months</p> <p>Action 4.1.2. <u>Baseline:</u> Programme M&E system not in place <u>Target:</u> M&E system established and operational and performs according to GCF needs <u>Means of verification:</u> Quarterly / biannual and annual M&E reports from PPMUs and NPMU</p>
Inputs and investment items	<p>Action 4.1.1.</p> <ul style="list-style-type: none"> ▪ National and international expert input from NPMU and PPMUs (CTA, M&E part-time, national coordinators, forest and agribusiness experts, national support staff for programme implementation) ▪ Vehicle purchase for programme implementation ▪ Logistics and travel ▪ Office equipment <p>Action 4.1.2.</p> <ul style="list-style-type: none"> ▪ National and international expert input from NPMU and PPMUs ▪ Government staff input for M&E activities and reports to NPMU and PPMUs ▪ External service provider to carry out mid-term and final v monitoring and evaluation ▪ External service provider for the establishment of the M&E system ▪ Training and capacity development on M&E to Government staff ▪ Travel and logistics
Technical evaluation / justification / barriers addressed	See capacity needs assessment and the need for an NPMU to support programme implementation.
Implementation mechanisms	<p>Action 4.1.1.: The NPMU will have full responsibility to coordinate and manage the programme activities (with oversight from the National Steering Committee). PPMUs will provide support in the target provinces and will be guided and supervised by the NPMU (with oversight from Provincial Steering Committees). Both the NPMU and PPMUs will closely coordinate with the respective Government entities responsible for the implementation of activities.</p> <p>Action 4.1.2.: The NPMU will be responsible for the development of the M&E system and ensuring that it is implemented. It will guide the implementation partners in the data collection, aggregation and reporting process to the NPMU and to EPF.</p>
Fund flow arrangement	The NPMU will have the operational responsibility for the GCF funding. One of its core tasks is the management and provision of financing to the implementation partners.
Co-finance / leverage	<p>Total activity cost: 9.49 million Euro</p> <ul style="list-style-type: none"> ▪ Total GCF grant finance: 3,867,820 Euro • Co-finance from Government of Lao PDR for GCF programme and IFAD PICSA project implementation: 799,514 Euro • Co-finance from BMZ: 1,935,552 Euro • Co-finance from JICA: 1,605,000 Euro • Co-finance from IFAD PICSA project loan: 1,280,137 Euro

Exit strategy / long-term sustainability	The Government of Lao PDR will assign Government staff to become members of the NPMU and PPMUs to support day-to-day programme operations. It will ensure that skills/knowledge are maintained after the v ends and that project management know-how remains within DOF and other implementation partners.	
Beneficiaries	Government staff and all direct and indirect beneficiaries	
Impacts and co-benefits	<u>GHG mitigation; Socio-economic; Environmental; Gender:</u> Indirectly, through implementation of all programme Outputs and Activities.	
Risks	Risk	Mitigation Measure
	<ul style="list-style-type: none"> High staff turnover in the NPMU and PPMUs or among Government staff leads to loss of implementation continuity and knowledge gaps 	<ul style="list-style-type: none"> Clear guidelines and protocols, documentation of trainings and strengthening knowledge management systems Ongoing trainings, engaging diverse staff from national, provincial and district levels (building capacities at all levels) Supporting close cooperation between GIZ, NPMU, PPMU and other programme partners to continually exchange information

4 PROGRAMME IMPLEMENTATION

4.1 Organizational structure / Institutional / Implementation arrangements

4.1.1 Existing institutional set-up in Lao PDR for REDD+

The institutional set-up for REDD+ and for the Emission Reduction Program document is described in detail in the ER-PD in greater detail (Section 6.1).

National level

MAF Decree No. 1313 (2008) established the National REDD+ Task Force, a multi-sector body responsible for the development of REDD+ in the country. This includes the implementation of REDD+ in the country, supporting capacity development related to REDD+, ensuring cross-sectoral communication and coordination, and participating in international climate change policy discussions and negotiations. In 2017, the Task Force was reestablished based on the Decision “Concerning the appointment of National REDD+ Taskforce” (23.05.2017, Number: 2750/MAF), which appointed the Vice Minister of MAF as the head of the Task Force and the deputy head as the DG of the Department of Forestry (DOF).

Table 20: Overview of the REDD+ Taskforce as per 2017

	Name	Governmental entity	Role
1	Mr. Thongphat Vongmany	Vice Minister of MAF	To be a head
2	Mr. Sousath Sayakoummane	DG of DOF	To be a deputy head
3	Mr. Somchay Sanontry	DDG of DoF	To be a member
4	Mr. Anolath Chanthavongsa	DDG of Department of Agricultural Land Management and Development	To be a member
5	Mr. Si-amphone Saengchandala	DDG of Department of Natural Disaster Management and Climate Change	To be a member
6	Mr. Anothai Chanthalasy	DDG of Land Department, MoNRE	To be a member
7	Mr. Angkhansada Mouangkham	DDG of Foreign Currency Department, Ministry of Finance	To be a member
8	Ms. Manivanh Keokomin	DDG of Ethnic Group Department, LFND	To be a member
9	Ms. Bangthong Thipsomphone	Director of Europe-America Division, Department of International Cooperation, Ministry of Planning and Cooperation	To be a member

10	Mr. Vonphasao Orlasaeng	Deputy Director of Administration Division, the Department of Environmental Quality Promotion, MoNRE.	To be a member
11	Ms. Vanthala Douangmanivanh	Director of Division of International Administration Law, Ministry of Justice	To be a member
12	Mr. Khamman Sorpasert	Director of Energy Conservation and Saving Division, Ministry of Mineral and Energy	To be a member
13	Ms. Vong-akon Phengdalith	Director of Party and Personnel Division, National Lao Women Union	To be a member
14	Mr. Bounthan Philachanh	Director of Planning and Cooperation Division, DOFI	To be a member
15	Dr. Chittana Phomphila	Deputy Director of Research and Technical Management Division, Faculty of Forestry Science, NUOL	To be a member
16	Ms. Valy Vetsaphong	Deputy Director of Chamber of Industry and Commerce	To be a member

The NRTF is responsible for the development of the National REDD+ Strategy (NRS) for which **six technical working group (TWGs)** were established in 2015 (Legal framework, Land tenure and land use, MRV/REL, social and environmental safeguards, benefit-sharing, law enforcement and implementation of mitigation). Representation in the technical working groups is thematic and cross-cutting, with technical staff assigned from all relevant Government departments to provide technical advice to the NRTF.

GIZ, among other development partners, has an observer role in the REDD+ Task Force and provides technical inputs and strategic advice to the Task Force.

The NRTF is supported by the **REDD+ Division under DOF in MAF** as well as the six Technical Working Groups that provide advice on thematic areas of work under REDD+. Coordination on climate change (including REDD+) is also being strengthened by mainstreaming climate finance-related reporting and monitoring across the forestry sector (DOF) and the climate change focal point (in MONRE). Through the multi-sectoral and multi-ministerial structure of the NRTF and the six Technical Working Groups, discussions and decisions related to REDD+ are consulted upon across different sectors, and coordination is facilitated and continues to improve as a result.

Province level

In the six GCF programme provinces, **Provincial REDD+ Task Forces (PRTFs)** have been established, which are chaired by the provincial Deputy-Governors, and supported by the **Provincial REDD+ Offices (PROs)**. As with the National REDD+ Task Force, each Provincial REDD+ Task Force includes participants from diverse Government sectors at the provincial level (including Deputy

District Governors from each district in the province). The PROs are established under the Provincial Agriculture and Forestry Offices (PAFOs). PAFOs represent both the agriculture and forestry sectors (this is also the case with DAFOs at district level). The PROs act as the Secretariat to the PRTFs and are supported by the REDD+ Division of DOF and the six TWGs.

The Provincial REDD+ Office (PRO) and the Provincial REDD+ Task Force are the main actors responsible for coordinating REDD+ at the provincial level. As with the national Task Force, the Provincial REDD+ Task Force includes participants from diverse Government sectors at the provincial level (including vice district governors from each district in the province), and chaired by the provincial vice governor.

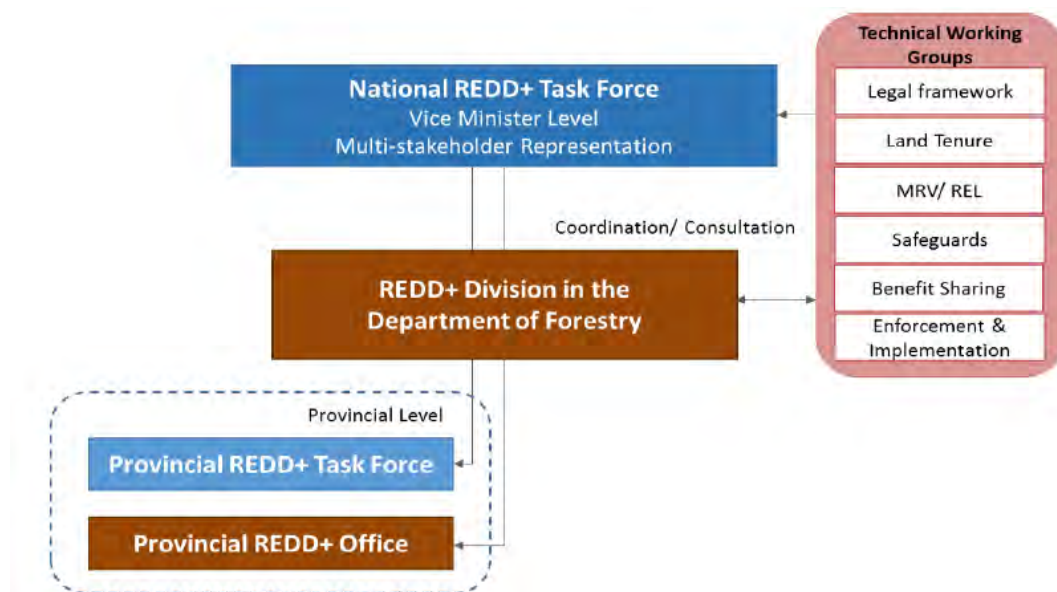


Figure 19. Institutional arrangement for REDD+ at the national and provincial level

4.1.2 Governance structure for the GCF programme implementation

The following Figure illustrates the governance structure of the programme.

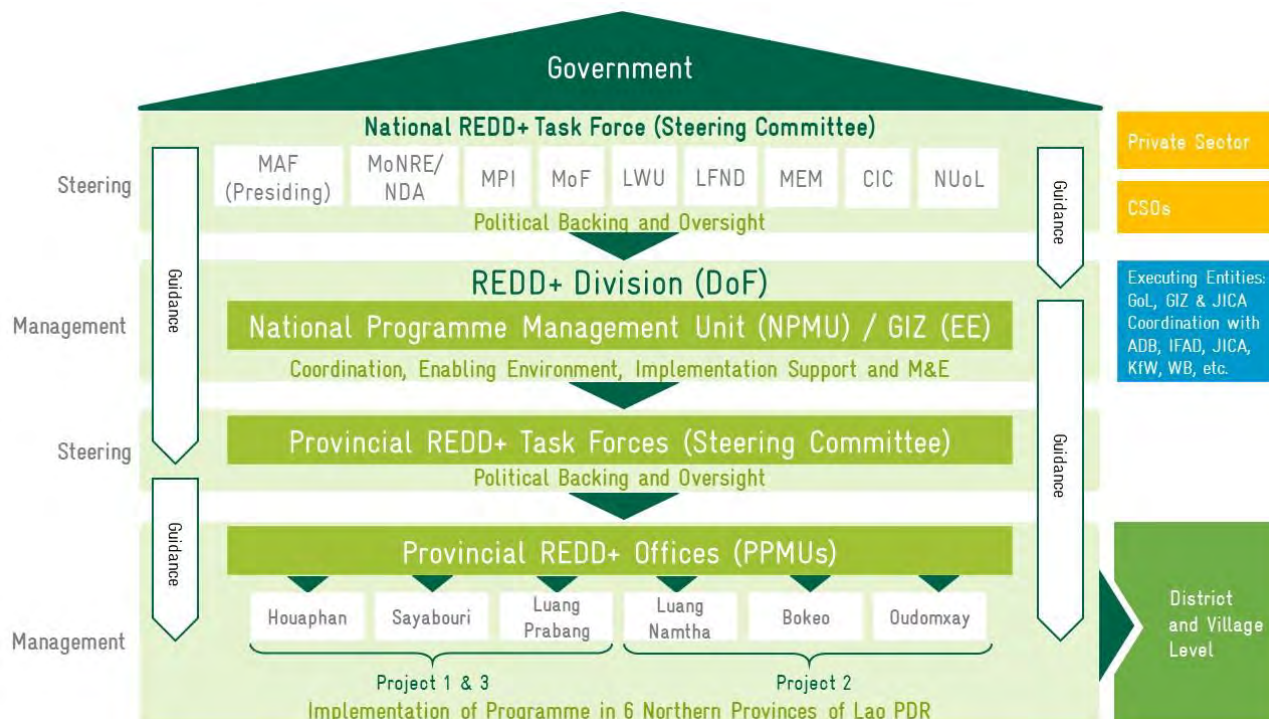


Figure 20. Governance Structure

4.1.2.1 Proposed programme steering structure

The steering structure for the GCF programme builds upon the existing institutional structure for REDD+ in Lao PDR. Thus, the REDD+ Task Force, with its multi-sectoral membership and headed by the Deputy Minister of MAF, will be the national programme project host.

The **National Steering Committee** will provide administrative oversight of the programme, ensuring coordination across the ministries. It will provide strategic project implementation guidance to the National Programme Management Unit (NPMU) and Provincial Steering Committees (the Provincial REDD+ Task Forces), whilst ensuring compliance with the National REDD+ Strategy and national socio-economic development objectives. The National Steering Committee will meet 2 times per year throughout the programme implementation period, as well as on an ad hoc basis as and when required. Its key responsibilities will be:

- Approval of the annual implementation plans and budget of the programme
- Review of programme implementation progress
- Support in resolving potential bottlenecks in programme implementation

GIZ, as the GCF Accredited Entity and an Executing Entity, will maintain observer status in order to provide strategic guidance and ensure GCF-related compliance and guidance is provided to the national actors.

The **provincial steering committees** will be led by the Provincial REDD+ Task Forces in each province. They will approve the provincial implementation plans and budgets and ensure that programme implementation is in line with the provincial socio-economic development plans and

strategies. At the provincial level, the Task Force will review programme implementation progress and provide support to address potential bottlenecks related to implementation.

4.1.2.2 Programme management and implementation structure

Role of GIZ as Accredited and Executing Entity

GIZ headquarters will serve as the Accredited Entity (AE). The GIZ office in Lao PDR will fulfil the role of an Executing Entity (EE), together with the Environmental Protection Fund (EPF). Both structures will be strictly separated and will be accountable to different management structures within GIZ. As such, GIZ will be contracted to the GCF directly for the implementation of the programme.

GIZ Accredited Entity responsibility

As the Accredited Entity (AE), GIZ will take oversight responsibility for the overall programme as defined in the Accredited Master Agreement between GCF and GIZ. As AE, GIZ will administer the funds on behalf of GCF and will provide oversight guidance and quality assurance through its relevant head quarter units for the Executing Entities. A GCF AE unit based at GIZ head-office will be responsible for:

- Overall responsibility and oversight for programme , including programme preparation and implementation,
- Continuous communication with the GCF
- Receiving the GCF proceeds as well as disbursing, administering and processing the funds (financial management)
- Ensuring the proper use of the GCF proceeds
- Supervising each programme activity
- Assessing the integrity and capacity of the EEs
- Setting up a subsidiary agreement with the EEs
- Monitoring the subsidiary agreements and the performance of EEs
- Securing EEs' procurement according to the AE's rules and policies
- Keeping adequate documentation and reporting towards the GCF
- Establishing internal control routines
- Ensuring a continuous programme risk assessment
- Providing financial reports to the GCF
- Evaluating the programme

Oversight and quality assurance are guaranteed in cooperation with the specific departments in GIZ's Head Office:

- Finance department – responsible for strategic and operational financial control of the organisation; maintaining standards of financial management, financial control, accounting, elaboration of annual statements of accounts, etc.
- Procurement department – responsible for procurement, contracting, setting up the financing agreements with the Executing Entities; the execution and monitoring of tender processes through the procurement plan, etc.
- Compliance and Integrity

4.2 Legal agreements

In order to implement the GCF programme, the REDD+ Funding Window and the programme's legal relationship with the EPF will need to be established. The overall GCF programme will be governed by an Implementation Agreement between GIZ and the Government of Lao PDR (GoL), which will include implementation arrangements concerning the EPF and programme beneficiaries, amongst other matters. In addition, GIZ and EPF will sign a Financial Agreement according to GIZ standard operating procedures in order for the EPF, in its capacity as a programme Executing Entity, to receive a grant. All GCF funds disbursed under the REDD+ Funding Window will have the nature of implementation agreements or grant agreements.

In addition to this Implementation Agreement, the EPF will sign grant agreements with a number of sub-grantees, including Government entities (especially those entities listed in Section 2.4 and the FFRDF), VDFs and private sector entities. The EPF will use its own contractual forms developed under the World Bank LENS2 project for these arrangements. As the FFRDF is envisioned to be an intermediary between EPF and some programme beneficiaries, the FFRDF will need to sign similar agreements between itself and those beneficiaries. FFRDF will need to undergo a due diligence by the EPF or GIZ, or a combination of the two, prior to becoming an intermediary.

These agreements will be finalized and signed when the GCF programme is approved.

4.3 Scenarios for responsibility sharing

As an Executing Entity of the programme, the EPF has primary responsibility for management of EUR 40.4 million of the GCF grant. In general terms, there are two scenarios for the sharing of responsibility between the EPF and the other Executing Entity, the NPMU. **Under scenario one**, the EPF would have the following responsibilities in managing the REDD+ Funding Window:

- **Disbursement of funds** directly to the FFRDF, DOF, PAFOs, DAFOs, PONREs and DONREs will be the responsibility of the EPF. The EPF will not, however, have responsibility to approve the technical eligibility of funds to be disbursed. Instead, the NPMU will approve operational plans and budgets from sub-grantees. The EPF may approve or reject disbursement requests based on its fiduciary judgement. In many cases, particularly relating to the FFRDF, the sub-grantee will have additional responsibility in terms of disbursing to small entities (e.g. village groups) due to its presence in the districts.
- **Procurement of goods and services** would be the responsibility of the EPF.
- **Monitoring of financial flows under the GIZ-EPF financial agreement and ensuring regular auditing and reporting of financial accounts to GIZ in its capacity as the AE**, will be the responsibility of the EPF. This is a key function, as the EPF's status as an Executing Entity of the GCF programme will be contingent upon its continued demonstration of responsible fiduciary management practices.

Embedded within MAF/DOF (see Feasibility Study Chapter 4 for a detailed overview of the programme implementation arrangements, roles and responsibilities), the NPMU will play an important strategic, guiding role in ensuring the success of the programme. **Under scenario one**, the NPMU will have the following responsibilities under the programme:

- **Approval of funding proposals** will be the responsibility of the NPMU. The NPMU will evaluate operational plans and budgets against criteria to be developed and will determine the appropriateness of each proposed plan (preliminary, indicative criteria are described in Section 5.2). Approval will also be dependent upon appropriate due diligence of the recipient entity by the EPF supported – if necessary – by the NPMU, PPMUs and DPMUs. Assuming that a plan is approved, the NPMU will request the EPF to disburse funds according to the plan, provided there are no fiduciary concerns.
- **Reporting to GIZ in its capacity as AE against programme milestones and evaluation** will be the responsibility of the NPMU, as well as PPMUs and DPMUs. Results will be collected at the provincial and district levels and fed up to the NPMU. The NPMU will then ensure that reporting is undertaken according to the GCF's requirements and will submit monitoring reports to GIZ as the Accredited Entity.
- **Ensuring compliance against GCF environmental, social and governance safeguards** will be the responsibility of the NPMU.

In order to deliver against these responsibilities, the EPF will need to hire new staff and devote significant resources to managing the programme activities. The fees for the EPF to accomplish these responsibilities will be negotiated upon programme approval; as an indicative figure, a 3% fee is estimated in the programme financing plan.

Under scenario two, the EPF would have significantly more responsibility in programme management. Specifically, the EPF would have the following responsibilities in managing the REDD+ Funding Window:

- **Disbursement of funds** directly to the FFRDF, DOF, PAFOs, DAFOs, PONREs and DONREs will be the responsibility of the EPF. The EPF may approve or reject disbursement requests based on its fiduciary and technical judgement. In many cases, particularly relating to the FFRDF, the sub-grantee will have additional responsibility in terms of disbursing to small entities (e.g. village groups) due to its presence in the districts.
- **Procurement of goods and services** would be the responsibility of the EPF.
- **Monitoring of financial flows under the GIZ-EPF financial agreement and ensuring regular auditing and reporting of financial accounts to GIZ in its capacity as the AE**, will be the responsibility of the EPF.
- **Reporting to GIZ in its capacity as AE against programme milestones and evaluation** will be the responsibility of the EPF. Results will be collected at the provincial and district levels and fed up to the EPF. The EPF will then ensure that reporting is undertaken according to the GCF's requirements and will submit monitoring reports to GIZ as the Accredited Entity.
- **Ensuring compliance against GCF environmental, social and governance safeguards** will be the responsibility of the EPF.

Under scenario two, the NPMU would have lesser responsibilities:

- **Provide sub-beneficiaries with proposal preparation guidance.** The NPMU and associated PPMUs and DPMUs will work with DAFOs, PAFOs, other Government agencies and VDFs to prepare the required materials to submit budget requests to the EPF. The NPMU would also have a role in providing guidance to the EPF on proposal review, but approval would not be the NPMU's responsibility.

- **The NPMU would provide guidance** to the EPF in terms of fiduciary responsibility, monitoring and reporting, and compliance of safeguards. However, the EPF would have the lead responsibility for these matters.

In order to deliver against these responsibilities, the EPF will need to hire new staff and devote significant resources to managing the programme activities. The fees for the EPF to accomplish these responsibilities will be negotiated upon programme approval but are indicatively estimated at 10%.

4.3.1 EPF window project cycle

The programme will deliver benefits by channeling funds under windows for three different beneficiary groups: Government agencies at national, provincial and district levels; village groups and other community groups; and private sector enterprises. The proposed project cycle for the three windows are depicted in Figures below.

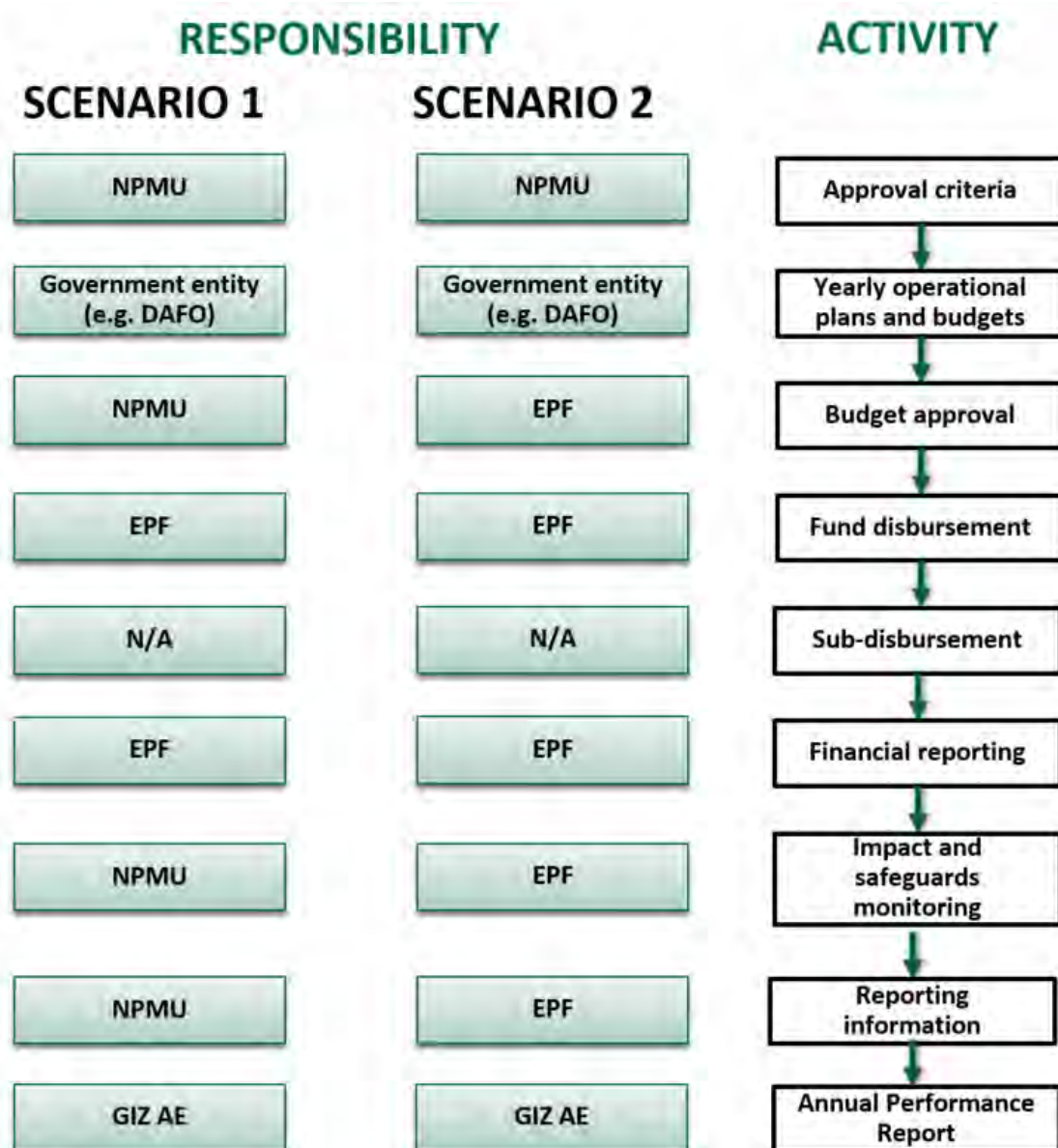


Figure 21. Proposed programme cycle: Government agency window

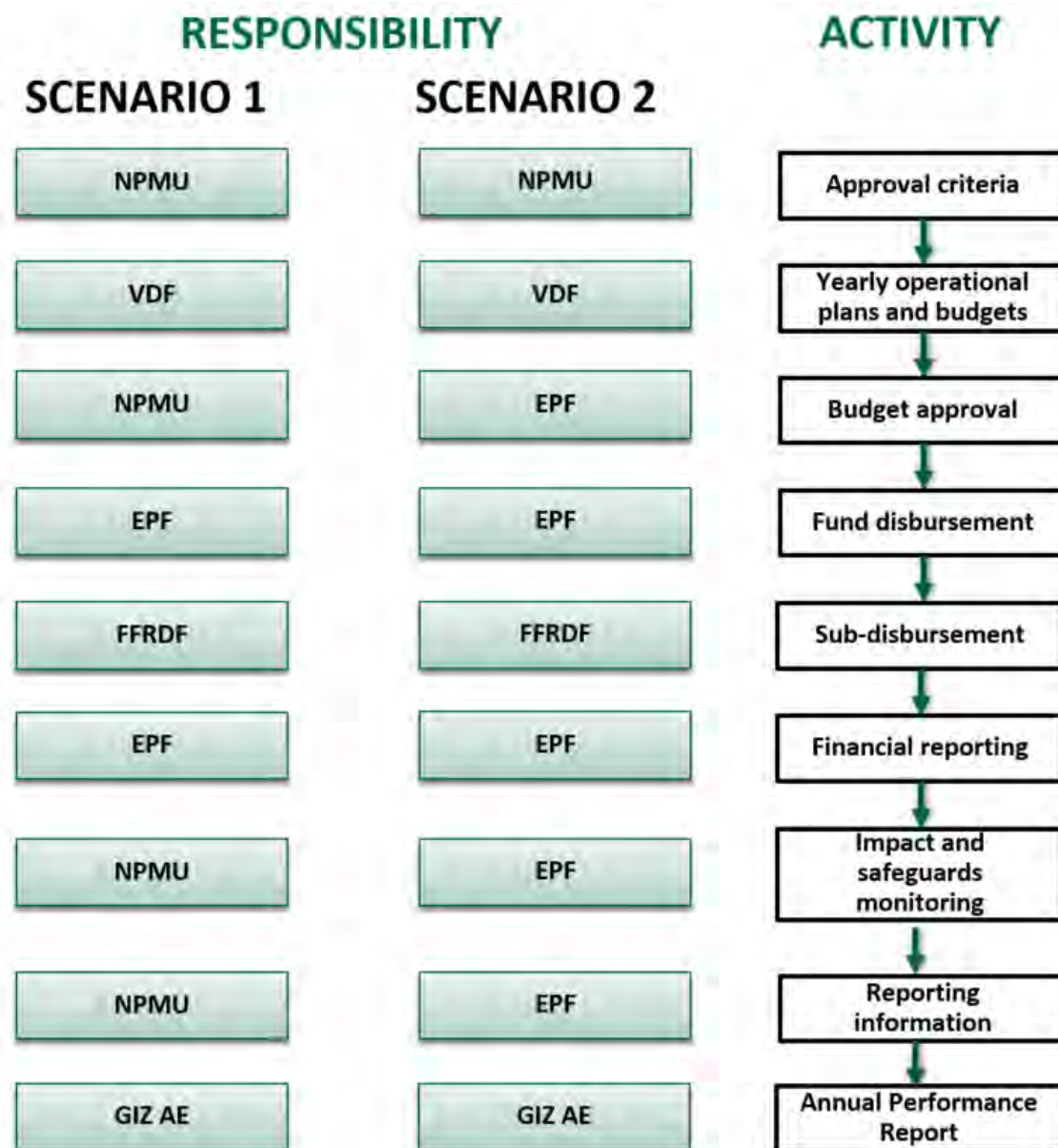


Figure 22. Proposed project cycle: village group window

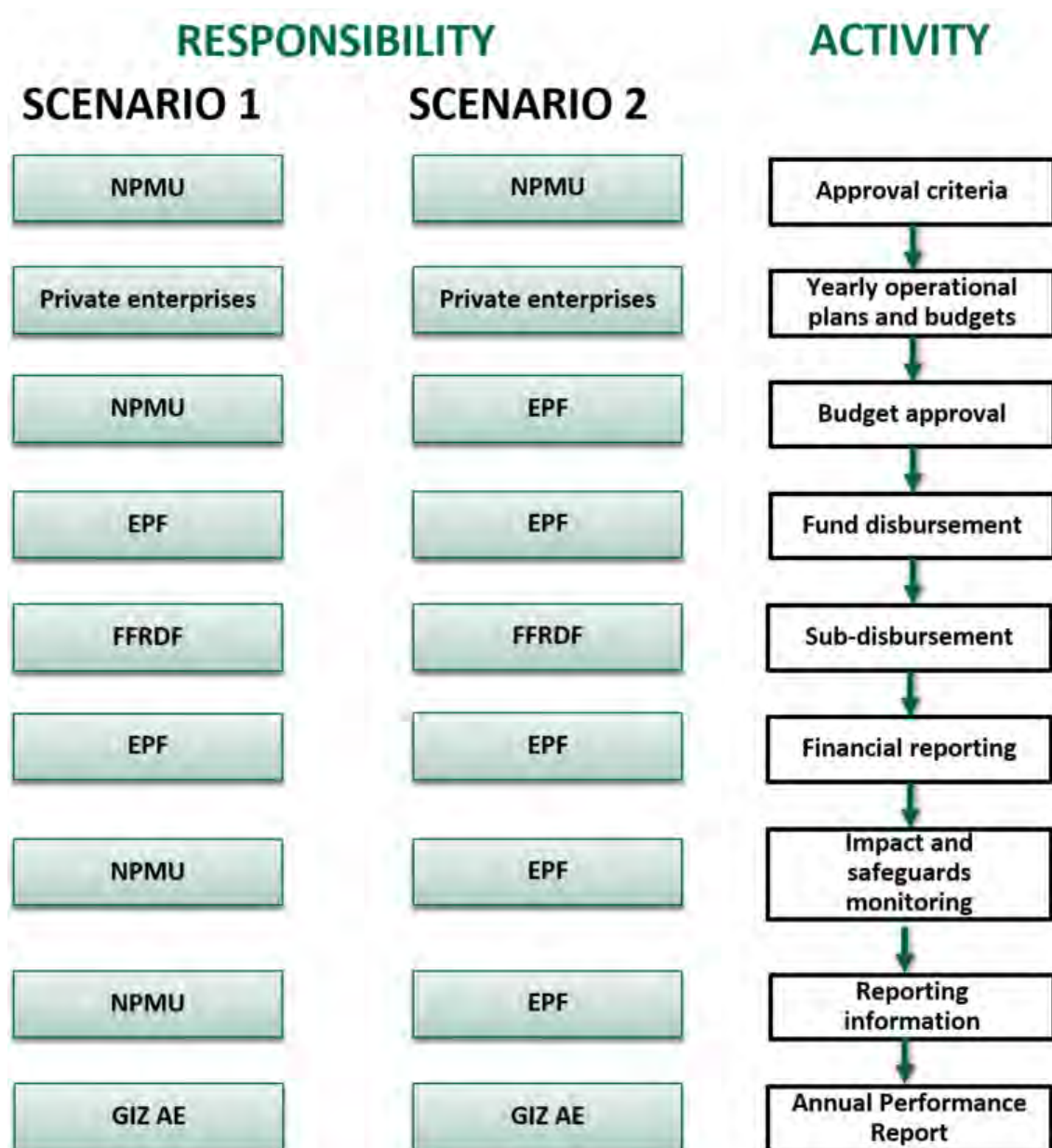


Figure 23. Proposed project cycle: private sector enterprise window

The project approval cycle is broadly similar across the three windows, with some exceptions. Approval criteria and means of submitting the application form are set by the NPMU. Applications for funds will be prepared by the project beneficiary (the Government agency, village group and private enterprise, respectively across the three windows) based on annual operational plans and budgets. Operational plans are intrinsically linked to country-level REDD+ development as they will be informed by PRAPs, the Emissions Reduction Program Document (ER-PD) and the GCF programme design. It should be noted that there is a strong linkage between the ER-PD and REDD+ Funding Window. The NPMU and relevant PPMUs and DPMUs will assist the project beneficiaries in preparing the relevant documentation.

Depending upon the scenario, either the EPF or the NPMU will review the proposal for grant requests and either approve, seek amendments or reject. In the case of scenario one, the NPMU will instruct the EPF to disburse funds to the project beneficiary. In the case of scenario two, the EPF takes its own decision on disbursement. In the case of the sub-window for Government beneficiaries, the EPF disburses funds directly to the beneficiary. In the case of the sub-windows for village groups and private enterprises, the EPF will disburse funds to FFRDF. This intermediary will then disburse funds to the ultimate beneficiary. The role of the FFRDF may evolve – and, ideally, expand – during the life of the programme according to options laid out in Section 2.3. The Activities eligible to receive funding and the Activity-specific mechanisms for disbursing funds are described in Section 2.5.

Regardless of the scenario, the EPF has a key fiduciary responsibility to GIZ's AE unit, and will therefore be responsible for financial monitoring and reporting. Monitoring and reporting of project impacts, as well as compliance with safeguards, however, will depend on the scenario: under scenario one, the NPMU will take responsibility; under scenario two, the EPF will have responsibility. PPMUs and DPMUs will assist either the NPMU or the EPF to collect field data. GIZ EE, the EPF and the NPMU will compile reports in order to prepare information for the evaluation. Finally, GIZ, in its capacity as the AE, will have the responsibility to compile Annual Performance Reports to send to the GCF.

4.4 Financial management and procurement

Procurement and financial management will be implemented as follows (in line with the general arrangements as described in Chapter 4):

- The Executing Entity – the Environment Protection Fund (EPF) – will sign subsidiary agreements with GIZ (as AE), based on GIZ standard operating procedures for contracts for financing.
- Contracts for financing establish the legal basis on which GIZ makes funding available to the Executing Entities for specific purposes to help them carry out certain measures.
- The Executing Entities are responsible for implementing and administering the measures in accordance with GIZ standard operating procedures.

4.4.1 Procurement

In case of procurement by GIZ, GIZ will follow its own procurement guidelines. GIZ is required to comply with the relevant contracting rules as established in the German Act against Restraints of Competition (GWB), the German Regulation on the Award of Public Contracts (VgV) and, if applicable, the Contracting Rules for the Award of Public Service Contracts (VOB and VOL) when procuring services, construction work, and supplies. When awarding contracts for supplies and services (including consultancy services) to be financed in full or in part from the contract for financing, the external Executing Entities will observe the national legal standards for procurement and will in any case comply with the GIZ minimum standards. An overview of these minimum standards is available at https://www.giz.de/de/downloads/giz2017-en-Annex_4a-Award-Procedure.pdf.

GIZ assesses adherence of submitted procurement documents to GIZ procurement regulations at defined stages in the process.

4.4.2 Financial management

The financial management of the programme will follow GIZ's internal rules and regulations. GIZ has bank accounts with Deutsche Bundesbank and Commerzbank. GIZ will not open a specific bank account for GCF proceeds and other GCF funds but will ensure that all funds provided are clearly identifiable from GIZ's other funds by setting up separate cost units exclusively for the funds disbursed by the GCF for each funded activity (ledger accounts). Funds received and expenditures incurred will be booked to the respective cost unit according to generally accepted accounting principles and procedures accepted by the German government. As a general principle, GIZ disburses funds to the recipients in accordance with the progress of the programme. The Executing Entities have to prove the proper use of funds and the defined progress as a prerequisite for any further disbursement.

4.4.3 Independent external

Independent external auditors will perform annual financial audits of the programme in line with International Auditing Standards.

4.5 Programme timeline – Gantt chart

	Timeline																																																																		
	Year 1 (from mid 2020)				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7				Year 8				Year 9				Year 9.5																														
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q17	Q18	Q19	Q20	Q17	Q18	Q19	Q20	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26																													
Output 1: Creation of an enabling environment for REDD+ implementation																																																																			
Activity 1.1. REDD+ Funding Window & Sustainable Finance																																																																			
Activity 1.2: Mainstreaming REDD+ into the NDCs and socio-economic development plans (SEDPs)																																																																			
Activity 1.3. Regulatory framework																																																																			
Activity 1.4. Law enforcement and monitoring																																																																			
Activity 1.5. Land use planning and improved tenure security																																																																			
Activity 1.6. Implementation of the MRV system																																																																			
Activity 1.7 Knowledge management, FPIC, safeguards, and gender																																																																			
Output 2: Market solutions for agricultural drivers of deforestationImplementation of deforestation-free agriculture																																																																			
Activity 2.1. Local incentives for good agricultural practices and agroforestry																																																																			
Activity 2.2. Catalyzing private sector investment in value chains																																																																			
Activity 2.3. ADB Sustainable Rural Infrastructure Watershed Management Project																																																																			
Output 3: Climate change mitigation action through forestryImplementation																																																																			
Activity 3.1. Village Forest Management																																																																			
Activity 3.2. Sustainable management of production forestsimplementation of SFM in production forests																																																																			
Activity 3.3. National Protected Area management																																																																			
Output 4: Sub-project management, coordination, monitoring and reportingProject																																																																			
Project management, coordination, monitoring, evaluation, knowledge management and safeguards management	Recruitment of Project Staff; Project launch workshop	Inception Workshop and Report		Procurement of Office supplies	Annual Performance Report				Annual Performance Report				Annual Performance Report				Annual Performance Report				Mid term Evaluation				Annual Performance Report				Annual Performance Report						Project Completion Report	Project Closure Workshop	Final Evaluation																														

See Annex 8 for a detailed timeline, incl. milestones

5 CAPACITY NEEDS ASSESSMENT

5.1 Scope of capacity needs assessment

As part of the feasibility study for the GCF programme, a capacity needs assessment (CNA) and institutional gap assessment were conducted, in order to identify the capacity needs of Government institutions and partner organizations to implement and manage proposed intervention activities. This assessment provides a comprehensive perspective on the required critical capacities. This assessment also allows the development of a capacity building strategy. This strategy proposes development measures, which seek to address capacities that require strengthening and optimizing those capacities that are already strong and well-founded.

The implementation of the GCF programme requires supporting laws, policies, strategies and procedures, which are delivered through well-functioning organizations comprised of educated and skilled individuals. Multiple departments within the Ministry of Agriculture and Forestry (MAF) and Ministry of Natural Resources and Environment (MoNRE) that have significant mandates for REDD+ implementation will need to have clearly defined roles and responsibilities. REDD+ requires institutional cooperation and collaboration across sectors and between stakeholders. It is recognized that Government ownership and delivery is not sufficient by itself in achieving the goals of REDD+. In order to be sustainable, REDD+ implementation requires Government and wider civil society and private sector to be involved.

The national REDD+ Readiness process conducted a substantive assessment of options and opportunities for setting up a REDD+ Funding Window management framework by looking at existing funds. Through the Benefit-Sharing Technical Working Group, the Forest and Forestry Resource Development Fund (FFRDF) was identified as a potential option for channeling potential funding from the GCF (GoL 2018). Therefore, for the purposes of this assessment, capacity is defined in terms of the institution's ability to effectively allocate and manage REDD+ related financing according to international standards. This focuses specifically on FFRDF's policies, management systems and monitoring practices concerning Social and Environmental Safeguards and fiduciary standards.

The overall objectives of this assessment were to inform the GCF feasibility study preparation, by:

- Undertaking an examination of the required capacity needs for the GCF programme.
- Determining the level of current capacity at a national level.
- Identifying gaps between current capacity levels and required levels.
- Preparing a capacity development strategy, with interventions for addressing capacity gaps.

This assessment specifically involved:

- a) Developing an interview guide and methodology for the capacity needs assessment.
- b) Reviewing key relevant policies, standard operating procedures and guidelines.
- c) Assessing the partner organizations' track records of overseeing or implementing relevant projects or activities.
- d) Assessing the number of staff necessary for performing the proposed role of the partner organization in implementing the GCF programme.
- e) Exploring the availability of relevant skills, competences and experience of the partner organizations, with key staff necessary for performing the proposed role of the partner

organization in implementing the GCF programme. Key organizations include the relevant organizational units in MAF and sub-national agencies responsible for sustainable forest management and law enforcement, and MoNRE.

- f) Conducting a CNA for relevant organizational units in MAF and sub-national agencies responsible for SFM and law enforcement (i.e. DOF; DOFI).
- g) Conducting a CNA for relevant organizational units in MAF and sub-national agencies responsible for promoting forest-friendly agriculture (i.e. DoA, DALaM, DTEAP).
- h) Conducting a CNA for relevant organizational units in MoNRE and sub-national agencies responsible for LUP (DoL).
- i) Conducting a comprehensive Institutional Gap Assessment and Capacity Needs Assessment for the Forest and Forest Resource Development Fund (FFRDF) in order to allocate and manage REDD+ related financing according to international standards (FFRDF's policies, management systems and monitoring practices concerning Environmental and Social Safeguards and fiduciary standards, as well as a comprehensive capacity gap analysis), including:
 - a. A detailed assessment of the FFRDF's policies, management systems and monitoring practices concerning Environmental and Social Safeguards and fiduciary standards, as well as a comprehensive capacity gap analysis.
 - b. A thorough check of the relevant policies against the policy framework and best-practice examples provided by the GCF.
 - c. Clear recommendations and an action plan for next steps to be pursued (capacity building, institutional development, operational procedures).
- j) Drafting a capacity building strategy for the programme, harmonizing the capacity needs assessment and institutional gap assessment for FFRDF, and including a comprehensive Capacity Building Strategy for all relevant organizational units in MAF and MoNRE.

5.1.1 Points of entry

Capacity issues can be addressed across three interdependent levels, including the enabling environment (society), the organizational (organizations) and the individual (people). Any of these levels can serve as the point of entry for a capacity assessment.

Based on the requirements of this particular assessment, the key points of entry are at the enabling environment and organizational levels. This approach allows for a broader understanding of the requirements for REDD+. Although the ERP requires the effective implementation of Provincial REDD+ Action Plans (PRAPs) in the six provinces, a Capacity Needs Assessment at the Provincial/District level has already been undertaken. Consequently, this assessment focuses on the national level, although the coordination between the central and local levels is also examined.

5.1.2 Core issues

There are four capacity issues that are most commonly encountered across sectors and levels, although all do not have to be examined in detail. These interdependent core issues are:

- **Institutional arrangements:** the policies, procedures and processes that are in place to legislate, plan and manage the rule of law, development and other functions of state. This relates to coordination structures, roles and responsibilities, and institutional incentives across public sector agencies.
- **Leadership:** the ability to inspire, influence and motivate individuals, organizations and societies is key in achieving REDD+ objectives. Key determinants include the ability to create a vision, rally people around the goals of REDD+, instill a need for change, and infer a sense of shared ownership.
- **Accountability:** allows organizations to monitor, learn, self-regulate and change behavior. Accountability is essential in the management of REDD+, by providing legitimacy to decision-making, transparency and reducing the influence of vested interests.
- **Knowledge and awareness:** the creation, absorption and diffusion of information and expertise towards effective solutions. At the program level (ERP), knowledge may be influenced by communication frameworks and the ability of stakeholders to adequately participate in REDD+ dialogue.

5.1.3 Functional and technical capacities

Functional capacities are required to create, manage and review policies, legislation, strategies and programs across all levels of capacity (enabling environment, organizational, individual) and core issues (institutional arrangements, leadership, knowledge, accountability). They are key to 'getting things done' and are not associated with any one particular sector or theme. The following five functional capacities are those that are generic to most projects and programmes:

- Capacity to assess a situation and define a vision and mandate.
- Capacity to formulate policies and strategies.
- Capacity to budget, manage and implement.
- Capacity to evaluate.
- Capacity to engage stakeholders.

The technical capacities of relevance to this assessment are explicit to the outputs and activities in the ERP and the associated GCF programme.

5.1.4 Interviews

Primary data was obtained via semi-structured interviews, which provided in-depth information based on participants' experiences and viewpoints. Open-ended, neutral questions were utilized in order to limit influence from the interviewer, and to allow participants to contribute as much detailed information as they desired. A total of 16 different departments, divisions and agencies were interviewed, as outlined in Table 21. Details of the roles of each organization are provided in Chapter 5.

Table 21: Departments, Divisions and Agencies Interviewed

Category	Sub-category (organization name, department/ division/ agency)
Government	<p><u>MAF</u></p> <ul style="list-style-type: none"> ▪ Department of Forestry <ul style="list-style-type: none"> – Protected Areas Management Division – Production Forests Management Division – REDD+ Division – Department of Forestry Inspection – Investment Promotion Department – Forestry Promotion, Plantation and Reforestation Division – Village Forest and NTFP Management Division ▪ Forest and Forest Resources Development Fund ▪ Department of Agricultural Land Management ▪ Department of Technical Extension and Agro-Processing <p><u>MONRE</u></p> <ul style="list-style-type: none"> ▪ Department of Land Management – Division of Land Use Planning <p><u>EPF</u></p> <p><u>FFRDF</u></p>
Donor Cooperation	<ul style="list-style-type: none"> ▪ SUFORD-SU Program ▪ JICA ▪ KfW ICBF Program ▪ GIZ proFLEGT
CSO	<ul style="list-style-type: none"> ▪ The Center for People and Forests

5.1.5 Methodological limitations

This assessment relied on seeking different views across central levels. Consequently, the results are based on perceptions, as opposed to directly observed phenomena. The aim was to interview senior staff members (directors), although in some cases, where directors were not available, deputies were interviewed instead. The majority of the interviews were conducted in the Lao language, so there may have been some information that was lost in translation.

This assessment builds on earlier sub-national Capacity Needs Assessments, to recognizing the importance of the coordination and interplay between central and local (provincial and district) levels that are critical to the ERP and the GCF programme. An earlier assessment was undertaken during October 2018 at provincial and district levels, including PoNRE and DoNRE, PAFO and DAFO, POFI and

DOFI. This assessment looked at capacities at these levels and has helped inform the wider GCF programme proposal. Over recent years a large amount of work has been conducted by international project partners, which has helped improve capacity at these local levels.

This assessment also draws on relevant earlier project level capacity assessments, including the GIZ forestry sector Capacity Needs Assessment (Fischer *et al.* 2013). Therefore, the overall capacity needs assessment considers both national and sub-national levels to inform the proposed capacity development plan.

5.2 Details of organizations

The following sections outline the mandates of the organizations that were interviewed as part of this assessment. Where available, official mandates are provided in bullet points. In other sections, details of the organization have been articulated from details obtained during interviews.

5.2.1 Ministry of Agriculture and Forestry

5.2.1.1 Protected Areas Management Division, Department of Forestry

- To be the core entity for collaborating with the involved parties in creating and diversifying the conservation forest allocation plan for management, conservation, protection, development and utilization of the Protected Areas and the land inside them in sustainable manners.
- To be the core entity for collaborating with the involved parties in identifying and upgrading the potential national protected areas as the national parks.
- To support, monitor and evaluate implementation of management, conservation, protection, development, utilization and creation of eco-tour sites in the protected areas as the regional heritage and world heritage.
- To reconcile, consolidate and give reporting about implementation of protected area management.
- To perform other duties as may be agreed and assigned by the upper-ranking officials.

5.2.1.2 Production Forests Management Division, Department of Forestry

- To support and follow up the localities in order to diversify the allocation and management plan for production forest land into an annual action plan to be implemented each year.
- To consider and consolidate the timber exploitation plan inside the production forest areas, infrastructure construction project areas and mineral exploitation areas in different local areas to submit to high-rank officials for approval.
- To support and follow up the local authorities in terms of logging and logs transportation management.
- To reconcile and report on the outputs from implementation of management works related to production forests, timber exploitation and logs transportation.
- To perform other duties as may be agreed and assigned by the upper-ranking officials.

5.2.1.3 Forestry Promotion, Plantation and Reforestation Division, Department of Forestry

- To collaborate with the concerned divisions to identify the locations, scope and area of degraded forests, barren areas with potentiality for afforestation and forest rehabilitation, including identification of design, promotion of technical matters, planting and rehabilitation methods.
- To support, promote and follow up the entity, individuals and juristic persons in planning and implementing the afforestation and forest rehabilitation activity, including registration of plantations, forest rehabilitation zones, certification of planted timber.
- To provide technical advice about tree plantation and forest rehabilitation.
- To reconcile and report on the outputs of implementation of tree planting and forest rehabilitation promotion activity.
- To perform other duties as may be agreed and assigned by the upper-ranking officials.

5.2.1.4 Village Forest & NTFP Management Division, Department of Forestry

- To be the core entity for collaborating with the local authorities and concerned parties in creation of management plan for the village forests and NTFPs linked with allocation permanent occupations, and termination of swidden cultivation.
- To consider (discuss) and consolidate the NTFPs harvesting plan, firewood (wood for energy) and charcoal from local community and submit to the high-ranking authority for approval.
- To support and follow up local authorities in management of harvesting and transport of NTFPs, firewood and charcoal.
- To reconcile and report on the outputs from implementing the village forest and NTFPs management.
- To perform other duties as may be agreed and assigned by the upper-ranking officials.

5.2.1.5 Forest and Forest Resources Development Fund Office, Department of Forestry

- To mobilize and encourage income collection from different sources to contribute into the fund.
- To manage and allocate the budgets for different projects, then submit to the upper ranking for approval.
- To develop the fund management system to ensure its strength and sustainability.
- To support, monitor, evaluate, reconcile and report about implementation of the projects applying budgets from the fund.
- To perform other duties as may be agreed and assigned by the upper-ranking officials.

5.2.1.6 Department of Technical Extension and Agro-Processing

The Department supports animal husbandry and forestry plantation. Most of the projects focus on extension services to support local people. There are projects on: nutrition; animal husbandry; plantations; promoting agriculture by focusing on farmer groups - LURAS (Lao Upland Rural Advisory Service).

5.2.1.7 REDD+ Division, Department of Forestry

Context: National and provincial arrangements for REDD+ have evolved as part of the Government's efforts to improve and strengthen forestry sector policies and activities. Significant institutional reforms have taken place since 2007, such that roles and responsibilities for responding to climate issues, including REDD+, are now relatively well-established. At the Ministerial level, the Ministry of Natural Resources and Environment (MoNRE) is responsible for monitoring environmental conditions in different areas, including the forest sector, but the primary jurisdictional responsibility for all forests lies with the Ministry of Agriculture and Forestry (MAF). The consolidation of management of the forest sector under MAF has improved coordination and collaboration, as well as capacity to adequately engage with key stakeholders.

The REDD+ Division was set up in 2012 to support the REDD+ Task Force and to establish a number of technical working groups for REDD+, including those related to the development of reference levels and the MRV system, stakeholder participation and consultation, land-use and benefit-sharing. At the national level, there exists the REDD+ Task Force (NRTF). The National REDD Task Force comprises 16 people. It is chaired by a Deputy Minister of MAF and is formed of 15 Director-Generals from across Government. The structure of the NRTF, supported by the DOF REDD+ Division, is replicated at the provincial level, where Provincial REDD+ Task Forces (PRTFs) supported by Provincial REDD+ Offices (PROs) have been established in 7 provinces. The REDD+ Division, while remaining understaffed, has perhaps had the longest and most sustained engagement with various sectors and, hence, has some capacity to understand the intersectoral issues. Working groups include the Natural Resource and Environment Sector Working Group (NRESWG), the Agriculture and Rural Development Sector Working Group (ARD-SWG), the Forestry Sub-Sector Working Group (FSSWG), the Land Sub-Sector Working Group (LSSWG), etc., which all are important discussion fora for Government and its development partners, including civil society.

There have been a number of REDD+ projects and programs supported by development partners at both national and sub-national levels; these have been coordinated by the REDD+ Division and some are still on-going. These include CliPAD, F-REDD, SUFORD-SU, ICBF, and the Lowering Emissions from Asia's Forests (LEAF) Program. On the basis of these projects, it can be asserted that the REDD+ Division has significant experience in working with large programs and development partners, but its functional and technical capacity remains constrained by low staffing levels.

5.2.2 Department of Agriculture (DoA)

The Department has a general mandate of management, inspection, support and development of clean agriculture, crop protection and quarantine, and the management of production and investment factors concerning effective cultivation in the agriculture and forestry sectors. Specific mandates include:

- Development of legislation related to crop sector management (law, decree, regulations).
- Development and management of plant protection (pest surveillance and treatment).
- Development and management of plant quarantine (border checks, crop exports, database).
- Clean agriculture development; standard development and certification systems.

5.2.3 Department of Forestry Inspection (DoFI)

The Department of Forestry Inspection was created in 2007 to enforce the provisions contained within the Forestry Law (passed in 2007). It was established to address illegal logging, the smuggling of timber

and wildlife, forestry-related corruption, and illegal land encroachment. The Department's mandate is to prevent, detect and suppress forest and wildlife crime over all forest landscapes, resources and supply chains. It is made up of five divisions: Administrative, Legislation and Forestry Inspection, Investigation and Prosecution, Wildlife Inspection as well as Planning and Cooperation. It also has forestry inspection offices at the provincial level (Provincial Offices of Forest Inspection, POFIs).

5.2.4 Department of Agricultural Land Management (DaLaM)

The Department was established in 2012 and is mandated to undertake agricultural land surveys and management, land classification and land use planning, conservation, improvement, demonstration and dissemination of technology for land improvement and development with the aim of effective and sustainable agricultural land management and development. DaLaM focuses on four key programs:

- Agricultural Land Survey and Planning Program.
- Agricultural Land Conservation and Development Program.
- Agricultural Land Management Program.
- Capacity Building Program.

5.2.5 Ministry of Natural Resources and Environment (MoNRE)

5.2.5.1 Division of Land Use Planning, Department of Land (DoL)

This is one of eight divisions under the Department of Land. The Division is responsible for land use planning, in both urban and rural areas. In addition to the national level (referred to as the Land Master Plan), there are three levels of planning: provincial, district and village. The Division contains four Task Groups, which include:

- Planning and Administration.
- Development and management of the master plan (national land management). Development and improvement of the manual on land use planning.
- Management of the land use plan across sectors in eight land categories. This Task Group is also responsible for study and research as well as issuance of land certificates.
- Responsible for the training and organizing of workshops. Also, monitoring the land use planning implementation at national and local levels.

5.2.6 Ministry of Planning and Investment (MPI)

5.2.6.1 Investment Promotion Department (IPD)

The Investment Promotion Department (IPD) is the first stop for providing information on the investment process in Laos. The IPD's primary functions include: promoting Laos as an investment destination, offering investment incentives, screening investment proposals, correcting investment data and monitoring investment practices.

5.3 Previous capacity assessments

Studies have been previously undertaken on capacity within the forestry sector in Lao PDR. These provide a valuable initial insight into capacity, as well as an understanding of the timeframes and persistence of some capacity gaps.

In 2013, a Capacity Development Strategy for the public forest sector was conducted at central, provincial and district levels (Fischer *et al.* 2013). The key findings at the national level included:

- Lower levels of actual staff than required or planned across all government departments and divisions.
- Lack of job descriptions and limited salaries, resulting in negative impacts on staff motivation.
- Insufficient budgets were a major concern for all departments, with a reliance on projects funding from international donors.
- The Forest and Forest Resource Development Fund is another source of funding, although there were significant concerns about the future availability of the fund due to declining revenues from the official timber trade.
- Lack of equipment in some departments for undertaking activities such as forest inventories.
- There were a large number of training needs across many departments, including GIS, satellite interpretation, computer software and data management, financial management, monitoring and evaluation, and English language tuition.

In 2018, the SUFORD project undertook an assessment of the effectiveness of capacity building, targeting DoF and DoFI which are the two organizations supported by the project (World Bank, 2018). This assessment looked at the organizations themselves, as well as the individuals working within them, and examined central, provincial and district levels. Some reoccurring themes of relevance to this assessment include:

- The capacity is relatively good for carrying out routine tasks and implementing work plans.
- Undertaking new activities and developing new approaches requires external technical assistance.
- Lack of funding to continue activities will hamper the implementation of activities, retaining skills and transferring skills to new staff.
- Capacity retention is an ongoing problem, due to movement of staff.
- Staff attitude may be a major issue. Despite staff having relatively good knowledge and skills, activities are often not implemented properly.
- English skills hinder the possibilities of cooperation with international stakeholders.

5.4 Analysis of existing capacity

5.4.1 Generic Institutional REDD+ Functional & Technical Capacity

REDD+ institutional capacity at both national and sub-national levels is variable and has predominantly been influenced by development partner funding flows. The main priority has focused on supporting central-level institutional capacity development within MAF and MoNRE. At the provincial level, REDD+ work has largely been on readiness and demonstration work, with limited operationalization, which is in line with the REDD+ phased approach.

In relation to the proposed interventions under the GCF programme relating to MAF and MoNRE, there are several observations. There have been significant institutional changes, redefining jurisdictional roles and responsibilities, which have been intended to strengthen the effectiveness and implementation of policies and measures to address natural resources management and climate change (encompassing REDD+). This illustrates that the capacity of the Government to set the vision has increased over the last decade, since the inception of REDD+ in the country. Government officials acknowledge that there are aspects of capacity that are stronger than others at the national level and there is continuous evolution of regulatory measures to reduce sectoral conflicts. However, most stakeholders feel strongly that the capacity to establish and manage information systems for REDD+ remains limited, because of the absence of a systems approach with no national and sectoral integration.

This analysis takes note of the ongoing development of a National REDD+ Strategy (NRS) to be accompanied by action plans (noting that the ERP will use PRAPs). However, there are apparent gaps in the current framework as to what national-level monitoring systems would look like, and there is acknowledgement that both technical and operational skills to conceptualize such a framework are currently absent. This is relevant for the GCF programme, as adequate capacity is essential for transparent and verifiable monitoring and reporting. For instance, it will be necessary for central-level institutions to have the capacity to coordinate and develop mechanisms to access relevant and accurate data from different sectors. However, there is a general view that this is a major limitation, since there are no regulatory measures or direct policies that either enforce or reduce the burdensome bureaucratic, manual processes.

There has been a large number of projects and programs implemented at provincial level working on REDD+ issues, with support from different development partners working with the Government (MAF). These projects include CliPAD, F-REDD, SUFORD-SU, ICBF and Lowering Emissions from Asia's Forests Program (LEAF). These projects have been implemented in a selection of provinces. For instance, Houaphan has been receiving support from several REDD+ related projects, including CliPAD and LEAF. Luang Prabang has been supported by several JICA projects, and now by the new JICA-assisted Forestry and REDD+ (F-REDD) Program.

While CliPAD and F-REDD have been supporting REDD+ provincial actions, SUFORD-SU and ICBF are collaborating on forest landscape approaches. SUFORD-SU is supporting management of production forests, village forestry and village development. ICBF is supporting the management of conservation and protection forests in two provinces. The anecdotal feedback from these projects shows that it is necessary to continue supporting capacity development (both functional and technical). Table 22 below summarizes key recurring themes from the interviews with staff in the target organizations. The following sections discuss these themes in more detail.

Table 22 Recurring themes in interviews

<p><i>Vision and Mandate</i></p> <ul style="list-style-type: none"> • Unclear roles and responsibilities • REDD+ understanding limited • Multiple agendas across central and local levels 	<p><i>Policies and Strategies</i></p> <ul style="list-style-type: none"> • Inadequate implementation guidelines for operationalizing policies and regulations • PMO 15 successful but has resulted in limited revenue streams from forest logging • 5-Year Planning cycle is critical • Government Order to reduce staff, resulting in heavy workloads • Processes are protracted, manual and paper-based • Good central coordination at the technical level • Central-level to local-level coordination is challenging • Policies on gender equality are in place but implementation remains limited
<p><i>Budget, Manage and Implement</i></p> <ul style="list-style-type: none"> • Unpredictable annual budgets • Reliance on project funding for implementation • Reliance on per diems to incentivize staff • Staff numbers lower than required • Dependency on staff volunteers • Generally, skills and knowledge levels are adequate but could be improved • High staff turnover and role changes • Low staff motivation • Limited delegation • Low knowledge transfer from consultants to staff • Lack of required equipment and infrastructure 	<p><i>Evaluate</i></p> <ul style="list-style-type: none"> • Ineffective monitoring and evaluation • Targets are output- rather than outcome-based • National-level data and information systems are lacking • Centralized information systems and data sharing are limited • Skills in GIS and remote sensing and data interpretation available but limited • Outdated software and no licensing in some cases • Legal enforcement lacks random checks • Land use plans are not monitored and enforced • Audits undertaken by State Auditing Authority
<p><i>Engage Stakeholders</i></p> <ul style="list-style-type: none"> • Structures for stakeholder engagement in place but could be more effective • REDD+ Division has engaged in a number of awareness-raising activities • Good examples of cooperation across public and private sectors • English language proficiency highlighted as a challenge in engaging development partners 	

Roles & Responsibilities & Government Coordination: The level of coordination at technical levels across central Government departments is generally considered to be good, noting the importance of informal relationships in the Lao PDR. However, at the institutional level there appears to be a lack of clarity in some areas over roles and responsibilities. This may be the result of the restructuring that has occurred across government in the past five years. However, based on the emerging National REDD+ Strategy (NRS), it is possible to say that the capacity exists to identify clear roles and responsibilities, considering what has been established to date through the approved PRAPs. This means that,

with adequate support, the departments within MAF are able to determine mechanisms for mutual accountability, but this will require additional technical and financial support to improve existing policies and regulations. This may require temporary technical assistance within a long-term plan to increase staff to allow for sustained project outputs.

Understanding of REDD+: While central Government staff are generally aware of REDD+ as a concept, the level of technical- and policy-level understanding is still limited. Some departments have been attending awareness and training workshops on REDD+, but it appears that developing a deeper understanding will require learning-by-doing when projects are actually being implemented.

Five-Year Planning Cycle: The Government of Lao PDR (GoL) operates through five-year planning cycle and is currently in its 8th Five-Year Development Plan (2016-2020). The FFRDF Office stated that, as a general rule, Government-funded projects must have budgets allocated before the start of each new five-year plan. Additional projects may not be accepted once the plan has been finalized. Even departmental funding can miss out, as outlined by the fact that when DoFI was established outside the planning cycle it was initially limited in terms of funding and capacity. The 9th Five-Year Development plan has a deadline for work allocation and budget submissions of October 2019 from line ministries.

Annual Budgets: The annual budget process for individual departments is unpredictable. Annual fiscal allocation typically comes through either the Ministry of Finance, national funds (e.g. FFRDF) or international development partner funding. Funding from national sources is limited and in some cases budget allocation to departments may not be actually be made available during the course of the financial year. Furthermore, the majority of departments stated that year-on-year national budgets have declined.

Significant implementation budgets are rarely funded from national sources. The high dependency on international donors has created a self-reinforcing cycle, whereby these budgets are the primary source of funding for implementation. The salaries of permanent staff are all still funded from the Ministry of Finance, but it is generally understood that salaries are low.

Staff Numbers: Nearly every central Government department stated that it had fewer staff than required. However, there appeared to be a general lack of clarity over what a suitable number of staff would be. Figure 24 illustrates the current numbers of permanent staff and the required number, as stated during the interviews.

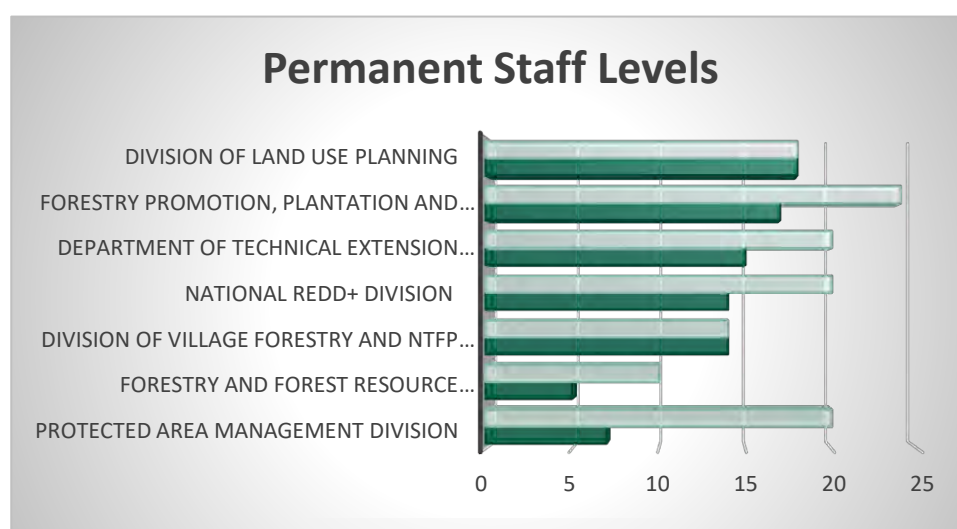


Figure 24. Staff levels

There has been a high-level Government order to reduce numbers of staff across central Government and to achieve more with less. This is clearly detrimentally impacting individual workloads. Many departments rely on volunteers in addition to permanent staff. In the case of the Protected Area Management Division, it has more volunteers than permanent staff at the central level (7 permanent staff to 10 volunteers). Volunteers in Government departments must wait for permanent positions to arise, which may take years and can impact individuals' motivation levels. Most departments have policies in place in relation to gender equality, and there are large numbers of women working in forestry, particularly at local levels.

Skills, Knowledge and Training: In general, staff at central level have adequate levels of education and training. This assessment did not record specific details, but the majority of staff possess a Bachelor's degree or associated degree, with some staff having a Master's Degree or a PhD. It is noted that a limited number of staff have attained qualifications from international universities.

During the assessment, the main training requests that came from Government departments included (in order of mentions):

- Training in relation to developing staff understanding of REDD+.
- Training in the English language to help improve communications with international donors.
- Training in monitoring and evaluation, including data collection.
- Training in relation to GIS applications and mapping.
- Financial training to help with work planning and project implementation.
- Achieving accreditation to administer certification (e.g. the DoA stated that there is only one person in the Lao PDR who has the ability to give International Federation of Organic Agriculture Movements (IFOAM) certification).

Staff Turnover, Incentives, Motivation and Delegation: Staff turnover is high in a few departments. This is sometimes the result of staff being trained and subsequently moved onto higher positions within the organization. However, there are no formally-agreed career development structures and pathways. Staff turnover at both national and local level is highlighted as a significant concern, with new staff constantly requiring upskilling to fill vacant positions. In some departments, the issue of delegation was raised, with senior staff appearing to be hesitant about passing certain tasks to junior members. Many projects understandably require the use of external international consultants, but there is limited transfer of knowledge to Laos staff. Travel and daily subsistence allowances (DSAs) are the key method in the country to incentivize staff members with an absence of core performance-related pay structures.

Central to Provincial/District Coordination: There are a number of challenges with central-level to local-level coordination. Many departments require on-the-ground implementation from local staff. However, coordination between central and local is not always effective due to what appears as unclear roles and responsibilities, specifically with regard to REDD+. It is typical to designate a number of staff to projects, with individuals rotated on a regular basis. As a result, it is difficult for central Government staff to form enduring relationships with individuals. This also may mean that unskilled

staff are assigned onto a project. The regular changes put pressure on the central level to undertake regular training of local staff.

Equipment and Infrastructure: The GoL has an ambition to increase market access for locally-produced commodities, but this will require significant and long-term investment in infrastructure and systems to meet international standards. The persistence of national budget deficits has limited institutional investment in systems and capacity for product certification. For example, the Department of Agriculture (DoA) stated that Lao PDR has limitations with laboratories for agricultural improvement, product enhancement and certification. Where laboratories are present, they usually have antiquated equipment. DaLaM outlined how better laboratories for soil analysis would help with determining land productivity. Equipment and infrastructure are often provided via projects. However, the challenge is in finding the resources for their ongoing upkeep and maintenance.

English Language: A number of departments cited the need to improve English language as a key training requirement. The current limitations in English make engaging with international project donors and networking with development agencies a challenge.

Enforcement: Prime Minister Order Number 15 of 2016 (PMO15) on “Enhancing Strictness on the Management and Inspection of Timber Exploitation, Timber Movement, and Timber Businesses” has had a high success rate with reducing illegal logging and trading. However, the success of PMO15 appears to be largely attributable to significant pressure from the highest levels of the Government, as opposed to merely improved enforcement from Government agencies. DoFI is a relatively new department and has the ability to undertake legal enforcement at all levels of the supply chain (from forest logging through to the factory floor). However, the Department principally relies on informants and does not have the resources to undertake widespread random inspections.

Land Use Planning: A system is in place with regard to land use categorization and planning. However, the monitoring and evaluation aspects of this system have issues with regard to data credibility (as highlighted below) and with regard to implementation and enforcement. Both DaLaM and the Land Use Planning Division stated that they find it extremely difficult to know if land use plans are being implemented on the ground.

Monitoring and Evaluation: There is a critical lack of effective on-the-ground monitoring and evaluation across a range of areas. Where monitoring does take place, the focus is on the number of outputs (e.g. number of training workshops) as opposed to actual outcomes (e.g. impact on household incomes, food security, improving knowledge etc.).

Geographic Information Systems (GIS): Although most departments believed that they have the necessary in-house skills for GIS and analyzing spatial data, there is a critical need for up-to-date software, preferably open source systems. The high cost of proprietary software such as ArcGIS and ongoing licensing costs can be prohibitive based on departments’ current budgets. Effective land use change monitoring will require constant access to current satellite imagery, in order to detect temporal changes through comparisons with historical imagery. However, there is no budget currently set for future satellite imagery acquisition to support land use planning and land use change monitoring.

Data Collection and Management Systems: Some departments, including DoFI, outlined challenges with data collection and integration between national and local levels. Current data collection and management is based on discrete approaches, with some critical datasets stored on personal computers or individual laptops. There is acknowledgement of the risk associated with such approaches, but

institutions have not been able to invest in server-based databases due to budgetary limitations. This means that data is regularly lost when laptops are damaged or lost, or when staff members move on to new roles. There is limited use of shared information systems across different departments, although a framework for forestry has previously been established.

5.5 Functional and technical capacity in relation to the ER-Program and associated GCF programme

In order to determine the capacity strengths and gaps in relation to the GCF programme, a capacity assessment matrix was utilized to determine the current capacity against the desired capacity over the next five years. The scores have been calculated by combining all the individual scores for all of the indicators under each activity, to give an overall percentage of progress, with 100% deemed to be at the total required capacity. The findings of this assessment are outlined below. It should be noted that the capacity needs and gaps are cross-cutting; hence, the presentation of the analysis here in some cases combines sub-outputs (i.e. activities). The overall capacity is considered weak (**approximately 56% of the required capacity**).

5.5.1 Capacity status: Output 1 - Strengthening the enabling conditions for REDD+

The current level of capacity to implement REDD+ and successfully participate in results-based payments is acknowledged as still evolving, with a continuous need for international support. The importance of forest resources and its sustainable management are enshrined in the country's highest-level policies, including the 8th National Socio-Economic Development Plan (8th NSEDP 2016-2020), the Green Growth Strategy (under development), the Central Party's Resolution on Land (2017), the Forestry Strategy 2020, as well as in Lao PDR's Nationally Determined Contribution (NDC).

REDD+ is yet to be fully mainstreamed into national planning process and awareness remains limited in key institutions such as DoA, MPI and DTEAP. Noting the institutional reforms implemented in the last five years, the capacity for policy and regulatory reform processes at national level exists, but the process is slow and likely to be protracted due to the lack of adequate data and information to support the development of evidence-based policy. At the provincial level, the opportunity for mainstreaming REDD+ exists as the country transitions into the 9th NSEDP, but this will require a high level of prioritization. In the 8th NSEDP, Outcome 3, Output 1 (Environmental protection and sustainable natural resources management) outlines an indicator to measure the total number of hectares of production forest area that is certified by the Forest Stewardship Council (FSC) or with a Forest Law Enforcement, Governance and Trade (FLEGT) license. The two overlapping processes are expected to continue in the 9th NSEDP.

Institutional coordination at central level has increased over the past five years but remains challenging at sub-national level. At the provincial level, the preparation of PRAPs illustrates the capacity for preparation strategies and action plans, but this does not necessarily translate into operational capacity, which is the essence of the GCF programme interventions.

The creation of DOFI in 2007 as an independent unit with the mandate to enforce the Forest Law and the Wildlife and Aquatic Law created the necessary platform for law enforcement and monitoring. However, operational capacity for effective enforcement and monitoring remains limited due to continued financing gaps, leading to inadequate staffing and necessary information systems. Although Prime Minister's Order Number 15 of 2016 on "Enhancing Strictness on the Management and Inspection of Timber Exploitation, Timber Movement, and Timber Businesses" (PMO15) is being considered

as having a significant impact, financing gaps in institutions such as DOFI are likely to reduce future gains. Effective forest law enforcement and monitoring is hampered by deficiencies in analysis capacity due to the lack of integrated data collection from the sub-national to national level, due in part to the lack of centralized information systems within institutions. This affects the ability to share data to improve the effectiveness and coherence of law enforcement and monitoring.

Inadequate and functional IT infrastructure systems to provide real-time and accurate data collection and analysis is a critical gap that will need to be addressed under REDD+. The agriculture sector in Lao PDR is going through unprecedented changes due to commercialization, decentralization and internationalization. As part of this change process, MAF is moving to a more programmatic and outcome-based approach. These changes mean that the Ministry has an ever-growing need for accurate and timely data and information that can guide decision-making, update extension workers and farmers on new agricultural technologies and practices, as well as monitor the status and progress of the sector. There is also a need for linkages between different agencies and geographic levels, in the context of sharing public information more effectively across government.

The lack of connected information systems (and associated procedures and guidelines) at both national and sub-national levels means that even developing effective data-sharing frameworks is challenging. This assessment is consistent with a 2017 United Nations Report, “Tracking progress towards National Development Goals and Sustainable Development Goals”, which looked at aspects of data collection, use and sharing. The report highlights that most departments in MAF are considered effective in feeding their data into decision-making processes and that the use of data has improved at national level. However, there are weaknesses remaining at provincial and district levels, where data use is not so effective in planning, but moderately effective for monitoring purposes. Data is often out of date, due to delayed approval by the Government. The report also highlights the fact that data is largely not computerized, leading to over-reliance on paper-based reports. Non-standardized reporting procedures and formats make administrative reporting prone to bias and errors. There is no regular sharing of data and information between ministries and among practitioners. Practitioners and development partners have limited access to MAF data, since data and reports are held by MAF management.

A preliminary land tenure assessment carried out during the preparation for the ERP indicates that registration of land rights is a high priority for the Government, as mentioned in the 2017 Resolution on Land of the Executive Committee of the Party Central Committee. However, at the institutional level, both national and sub-national, the Department of Agricultural Land Management and the Division of Land Use Planning confirmed the disconnect that exists between land use planning and land allocation. This disconnect is largely because of the lack of integrated information systems that enable institutions to access critical, accurate and up-to-date information. The land registration process is viewed as complex, with the lack of one-stop-shop type guidelines. From this assessment, institutions generally understand the heightened pressure on land from land-based investments that contribute significantly to the country’s economic growth. However, the major gap is the lack of adequate measures to support communities’ attaining land registration, since the only form of registration of land rights is through a Land Use Plan. For the ERP and the GCF programme, there is a need for adequate technical and operational capacity at the community level, which will ensure monitoring of land use and change that occurs or results from land registration, and alignment of land use planning.

Table 23: Output 1 Capacity Rating

Output and Activity	Level of existing capacity against desired capacity	Key Organizations Involved
Output 1: Enabling environment for REDD+ implementation	53%	
Activity 1.1 REDD+ Funding Window and Sustainable Finance	50%	FFRDF; IPD [MPI]
Activity 1.2: Mainstreaming REDD+ into socio-economic development plans	56%	REDD+ Division lead, but requires input from all agencies
Activity 1.3. Strengthening regulatory framework to enable sustainable forest management and private sector investment in community-based agroforestry/plantation development	58%	DOF; MoNRE
Activity 1.4. Improved law enforcement and monitoring	63%	DoFI; All agencies
Activity 1.5. Land use planning and improved tenure security	50%	DOL; DaLaM
Activity 1.6. Implementation of the Measurement, Reporting and Verification system	40%	DOF

Key Capacity Gaps

- Capacity to coordinate and develop mechanisms to access relevant and accurate data from different sectors.
- Low/inadequate staff capacity, limitation in numbers and lowly-remunerated staff, and hence low levels of motivation.
- Prioritizing and streamlining different initiatives into shared vision and goals at the provincial level.
- Capacity to engage in functional partnerships for improved knowledge generation on REDD+ and mainstream into policies and regulatory measures.
- Weak and inadequate monitoring and evaluation systems.

5.5.2 Capacity status: Output 2: Promotion of deforestation-free agriculture

The Government recognizes the importance of improving people's access to diverse and nutritious food at affordable prices. The regulatory and institutional framework for promoting deforestation-free agriculture appears to be in place, and government officials are generally aware that there is need for transformative actions for the agriculture sector. However, there is limited capacity to implement new agricultural practices as farmers need training, access to assistance programs and technology. Current financial capacity and operational capacity of institutions such as DALaM is limited.

Agricultural extension systems have limited outreach programs and little to no collaboration with the private sector. Farmers lack the knowledge, capacity and finance to change agricultural practices, while it is observed that relevant government institutions lack the capacity to develop investment

plans and incentive systems that facilitate investments. Communities also lack the systems and funding to monitor the impact of particular practices. Departments administer a range of extension services, and some good examples of farmer field schools and programs such as FAO's Save & Grow Scheme (<http://www.fao.org/ag/save-and-grow/>) exist that have been implemented in parts of the country. Such programs could provide important lessons for the GCF programme.

With regard to private sector engagement, private companies depend on training and capacity building for farmers to meet sustainability practices, but currently there are limited facilities and a lack of open dialogue between government institutions and the private sector. There is a need to focus efforts on removing investment barriers, but also the private sector should be encouraged to present concrete suggestions to Government on policies and activities that could be prioritized to stimulate investments in sustainable land use practices. A major gap seems to be limited access to finance with low interest rates for agricultural schemes.

Table 24: Output 2 Capacity Rating

Output and Activity	Level of existing capacity against desired capacity	Key Organizations Involved
Output 2: Market solutions for agricultural drivers of deforestation	59%	
Activity 2.1. Local incentives for good agricultural practices and agroforestry	63%	DoA; DTEAP; DaLaM
Activity 2.2 Catalyzing private sector investment in value chains	56%	DoA; DTEAP; DaLaM
Activity 2.3. Modernization of small-scale irrigation infrastructure	N.A. (this Activity was added after the completion of the CNA)	

Key Capacity Gaps

- Lack of capacity means (finances, staff, transport) and up-to-date knowledge (e.g. on good agricultural practices) constrains DAFO staff in providing high-quality extension services to farmers.
- Private sector actors (e.g. farmers, traders, millers) lack financial capacity and literacy for business plan development, financial analysis, planning and accounting. Consequently, farmers and other value chain actors have limited access to affordable credit.

5.5.3 Capacity status: Output 3 - Sustainable Forest Management

The Division of Village Forestry and NTFP Management within the Department of Forestry supports the development of five-year Village Forest Management Plans (VFMP). The most significant gap in the efforts and process of village-level land use planning is the absence of well-structured cascading data collection and information systems, specifically spatial information systems. The numerous projects that have supported various land management efforts generally have discrete or stand-alone data collection systems. Guidelines exist (Village allocation and forest management plan guidelines (2012), Decree 1476 DOF VFMP (2016), and Decree 1477 DOF VFMP Manual (2016)). However, there

is general feedback that, for the purpose of REDD+ and the wide-ranging interventions proposed, there are requirements for some consolidation and simplification of guidelines.

In the ERP, it is noted that roughly 400,000 ha are covered through VFMPs²⁹⁵. Each VFMP is registered with the district-level Agriculture and Forestry Offices and can serve as a registered plan of resource rights for the village. But these are largely paper-based, and therefore it is challenging to develop central level understanding of village forest management.

For effective land use planning, it will be necessary to establish a pool of qualified technical specialists to support sub-national offices in undertaking monitoring land use and land use change through GIS and remote sensing. The current challenge is the lack of adequate IT, GIS equipment and software to support the necessary operational capacity. There are a limited number of staff with skills and understanding of the required land use monitoring, including use of remote sensing and geospatial applications.

The frameworks for implementation of VFMPs, SFM, management of NPAs and community-based agroforestry systems are present and well advanced due to the implementation of various projects such as ICBF, SUFORD, CLIPAD, LEAF, etc. This indicates that there is some technical capacity at central and PAFO levels. However, in the absence of external financial support the government is not in a position to sustain such programs. The principal gap that requires strengthening for effective implementation of the proposed GCF interventions is the absence of adequate statutory guidelines and systems to ensure more effective and transparent data management. It is necessary to implement standardized data collection formats, a web-based management information system, and training for staff. Table 25 outlines the Activities proposed under the GCF programme. Activity 2.1.2 is particularly critical, but there are significant capacity gaps.

Table 25: Output 3 Capacity Rating

Output and Activity	Level of existing capacity against desired capacity	Key Organizations Involved
Output 3: Sustainable Forest Management	57%	
Activity 3.1. Implementation of Village Forest Management	60%	Village Forest & NTFP Management Division
Activity 3.2. Implementation of SFM in production forests	60%	Production Forest Management Unit; Forestry Promotion, Plantation & Reforestation Division
Activity 3.3. National conservation forest management (NPAs)	60%	Protected Areas Management Division

Key Capacity Gaps

²⁹⁵ Provincial survey on land tenure assessment for the ER Program.

- Inadequate staff (levels and skills).
- Inadequate information systems (geospatial systems and IT infrastructure) and statutory guidelines for institutional data sharing, access and custodianship.

5.6 Capacity and gap assessment of the FFRDF

5.6.1 Background

Under the GCF programme, international finance requires various distribution mechanisms across various levels within the Lao PDR, from Government levels through to individual communities. The original concept note for the ERP provisionally identified the FFRDF as the most suitable existing main fund for receiving, administering and distributing REDD+ results-based payments (GoL 2018). The FFRDF was set up in 2005, following the Prime Minister's Decree Number 38/PM, dated 21 February 2005, as a body under MAF. The FFRDF aims "to generate and aggregate financial resources from national and international agencies to be used for implementation of forest development activities, especially management of Protected Forest Areas and National Biodiversity Conservation Forests, plantation establishment, maintenance and regeneration of degraded forests and forest lands, watersheds, environmental protection, wildlife conservation, dissemination of and training in forest development policies, forestry laws, forest management techniques and other policies related to forest and forest resources management" (Article 2 of Decree 38/PM).

During the GCF feasibility study, the Environmental Protection Fund (EPF) has superseded the FFRDF as potentially the main initial national funding mechanism. A separate assessment has been undertaken on the EPF and has identified the EPF as having relatively strong capacity in relation to financial management administrative capacities, project management, procurement and engaging with ethnic minorities, as well as experience of meeting the requirements of multilateral donors. The EPF was created in 2005 and is currently housed under MoNRE. The EPF was established to strengthen environmental protection, sustainable natural resources management, biodiversity conservation and community development in Lao PDR. The EPF provides financial support by means of non-refundable grants, preferential loans, interest rate subsidies or a combination of these.

Under the GCF programme, the EPF shall only be used to finance regular and recurrent expenses of ministries, departments, agencies and any other public or private organizations and entities receiving financial support from the EPF, where these expenses relate directly to the implementation of Eligible Activities. Unlike the EPF, the FFRDF is legally mandated to collect and disburse forest sector revenues. Consequently, the Government of Lao PDR plans to channel the ER-P related REDD+ results-based payment through the FFRDF, acknowledging that capacities are still lacking. In the first instance, the FFRDF will be used to channel funds purely at community levels to small entities (e.g. businesses and village groups). It is intended that the FFRDF will eventually take over from the EPF as the main national funding mechanism for the GCF programme (i.e. will assume control of the REDD+ Funding Window), once capacities and systems are in place. However, if it is not possible to utilize the FFRDF in this manner then the project will continue to channel resources through the EPF REDD+ Window.

5.6.2 Financial sources

The main source of revenue for the FFRDF has been timber revenue. Prime Ministerial Order No. 1 of 2012 established a timber benefit-sharing regulation for production forest areas. Of all the timber revenues, 70 percent was deposited into the national treasury/budget. The remaining funds were channeled through the FFRDF, with 12% allocated to local communities and the remaining 18% used

for forest management by provincial and district offices. In addition to timber revenue, the FFRDF receives funds from:

- Royalty fees charged for the use of forests, forestland and forest resources.
- Fees from timber and non-timber forest products (NTFPs) harvested from forests and plantations.
- Obligatory costs for tree planting and non-timber forest product regeneration.
- Fees charged to meet the costs for forest inventory, forestland and forest resources.
- Contributions from Lao citizens and foreigners who run businesses in forestry, non-timber forest products and wildlife.
- Contributions from the state budget, individuals, jurisdictional entities, collectives, local and international social organizations, and international institutions including financial institutions.
- Other revenues, including interest or dividends from investors or shareholders.
- Revenues from profit dividends from selling wood from production forest, as per Prime Minister's Decree No 59/PO.

5.6.3 Projects funded by the FFRDF

The FFRDF has in the past financed forest management activities such as forest inventories and planning, biodiversity conservation, forest conservation and wildlife protection, forest and forest resources regeneration for economic and environmental purposes, eradicating shifting cultivation and providing livelihoods for people living in the three forest types. Funding has also been provided for projects in agriculture and forestry land use planning at district level, as well as forest and forest resource inspection and protection. Eligible institutions have so far only been state agencies at national and sub-national levels. Costs for administration of the FFRDF are borne by the state budget. Typical project-types that have been funded by the FFRDF include:











- Conservation and protection of watersheds and protected areas.
- Tree planting and forest rehabilitation for protection of watersheds and environment.
- Conservation and protection of wildlife.
- Forest inventory, forestland and forest resources.
- Sustainable conservation and protection forests, forestland and forest resources.
- Forestry research and extension.
- Dissemination of laws, regulations, and technical matters related to forestry activities.
- Management of the fund.
- Providing incentives and awards to the people who perform outstanding work in conservation and protection, management and forest regeneration.








5.6.4 Gap assessment

Table 26 outlines the views of the Assessment Team on the FFRDF, using a traffic light system for determining compatibility between the FFRDF and the capacity requirements for the GCF programme (**GREEN - Satisfactory**; **AMBER – some concerns**; **RED – major lack of capacity**):

Table 26: Gap assessment

Area	Compatibility	Rationale
------	---------------	-----------

Objective of the Fund		GCF programme and FFRDF are compatible with respect to use of the Fund for the management, protection and development of forest resources, and contribute towards national economic and social development
Project Types		FFRDF provides funding to a range of forestry-based projects, including conservation, planting, forestry protection and inspection, research, extension and dissemination of information.
Revenues for the Fund		FFRDF allows for contributions from international institutions, including financial institutions. Current revenues are limited due to PMO15, with royalties from NTFPs currently being the main national source. The FFRDF has limited experience with multilateral funders.
Project Selection and Appraisal		The Fund lacks clear eligibility criteria and the initial process by which projects have been selected for potential funding are unknown, although it appears that other line ministries are involved in recommending projects.
Due Diligence		No due diligence processes on project and applicant background are undertaken prior to the approval process.
Approval Process		There is a long approval process, which must conform with the 5 Year Development Planning cycle. Projects must be submitted prior to the 5 Year Plan and new projects cannot be brought in after the commencement date of the plan [the next plan will run from 2020]. The process involves the FFRDF office submitting projects and budgets to the Department of Finance at MAF, which then consolidates and submits the financial request to MPI. The National Assembly then approves the entire FFRDF budget and how much will be allocated to the Fund (not project-by-project). Agreed projects can cross into subsequent 5-year planning cycles. Once a project is approved, it must submit a workplan and break down the budget.
Management of Multiple Projects		The FFRDF has administered a reasonable number of projects previously. However, the number of projects under the ERP and GCF project will be considerably higher than what has been managed to date: the Fund administered funding to 12 projects under the 2011-15 plan and 13 projects under the current 2016-20 plan.
Management of Large Projects		The amount of funding via the GCF programme could potentially be significantly higher than what the FFRDF has previously administered. The largest individual project that the Fund has previously administered is US\$ 235,000. Projects are typically much smaller than this value.
Monitoring & Evaluation		The FFRDF undertakes very limited on-the-ground monitoring. Projects are typically visited by the FFRDF twice a year, although there appears to be limited use of any formal monitoring and evaluation process (since the Fund has been established, a formal M&E process has only been undertaken once through MAF's Department of Finance and the Ministry of Finance). It is up to the projects themselves to show that they have spent the money and undertaken the required activities, through the payment process.
Payment Processes		Funds are distributed quarterly. The payment process is convoluted, using a paper-based reporting process. The projects must report expenditures and describe how they have successfully delivered the activities in the previous quarter. They must produce four copies of a report to be

		sent to PAFO, DoF and FFRDF; and a copy must be retained for their own records. The process can take three months to complete, which can cause delays to project implementation. In some cases, even though budget has been allocated, actual funds may not be directly available.
Accounting systems		Institutional set-up, technical procedures and systems are non-standardized, while reporting procedures and formats are unclear, paper-based data systems are prone to errors, and there is a lack of mechanisms for data validation. The FFRDF relies on paper-based systems, with some input into Excel spreadsheets. The FFRDF would like to improve the system, but this would require a change by the Ministry of Finance.
Banking		When a project is approved, the applicant must open a new bank account under the PAFO. Once quarterly payments are approved, the applicant can obtain money from the account.
Social & Economic Safeguards		There appears to be a lack of mechanisms for addressing public grievances and redresses, withholding of payments, conflicts of interest, gender issues and general ethics. There is no specific safeguard framework in place.
FFRDF Auditing		The State Auditing Office undertakes an audit of the Fund every two years. This audit checks that funds have been used in accordance with the 5 Year Plan and examines how much money has been spent on each project to date.
Human Resources		The FFRDF Office originally wanted 10 staff. However, the Ministry of Home Affairs would not allow this number. Previously the FFRDF was allowed only 7, but now it has only 5 staff, which consists of 2 forestry and 3 finance staff members. These staff levels are not adequate for the amount of work required under the ERP and GCF programme.
Operating Policies & Guidelines		The FFRDF has a Decree booklet, which provides high-level information on the purpose of the Fund. But there appear to be no clear policies and guidelines on the procedural and operating aspects of the FFRDF.
FFRDF understanding of REDD+		Staff have very basic knowledge of REDD+, having previously attended workshops and presentations from the REDD Division.

5.6.5 Conclusion on FFRDF capacity gaps

While the general purpose of the FFRDF aligns with the requirements of the ERP and the associated GCF project, there are critical gaps in a number of capacity areas.

With regard to project selection, appraisal and approval, the FFRDF project selection model is not well documented and lacks adequate guidelines for project grant proponents. There is an inherent assumption that all project proposals conform to Government protocols (as stipulated by the Ministry of Finance as part of the broader planning for the NSEDP). The adequacy and rigor of proposal evaluation appears weak. As an institution, the FFRDF is a fairly small unit with relatively limited knowledge of REDD+ and limited operational capacity at the local level.

Noting that the FFRDF has funded approximately 25 projects and has still not developed standard project management systems, this raises significant questions about its ability to handle larger projects. There are broader issues that also affect other institutions, such as inadequate information systems and data management (including advanced financial management systems). FFRDF accounting

is undertaken by the same accounting unit responsible for all DOF accounting. Similarly, the financial and operational capacity for substantive monitoring and evaluation is severely limited. Monitoring and evaluation for previously-funded projects is fairly basic, with limited data collection guidelines; this is one of the most significant weaknesses in relation to the required capabilities for the GCF programme.

The FFRDF has not had any experience with implementing REDD+ social and environmental safeguards; hence, there is a lack of both technical and operational capacity to ensure project proponents adequately address environmental impacts with appropriate mitigation measures. There are no standard operating procedures and guidelines.

Noting the current shortcomings of the FFRDF, the GCF project design has identified the EPF as the main initial funding mechanism. In the first instance, the FFRDF will be used to channel funds purely at community level to small entities (e.g. village groups). Capacity building will be applied to FFRDF to help the Fund overcome identified barriers and support its capacity needs. It is intended that the FFRDF will eventually take over from the EPF as the main national funding mechanism for the GCF programme (i.e. that the FFRDF will assume responsibility for the REDD+ Funding Window), once capacities and systems are in place. However, if it is not possible to utilize the FFRDF in this manner then the project will continue to channel resources through the EPF.

5.7 Capacity development plan

5.7.1 Key principles

This capacity development plan is recommended for the ERP and GCF programme to implement in order to develop the required capacity across relevant institutions. A number of strategies and interventions are proposed in this report, which are designed to focus on the critical capacity needs. These proposals seek to improve some existing functional and technical strengths, plus introduce new capacities in order to achieve maximum effectiveness. In developing this Capacity Development Strategy and Plan, the following key principles were taken into account:

- **Acknowledge the distinctiveness of the Lao PDR:** During the assessment, every international stakeholder interviewed stated that the Lao PDR is very different to other less developed countries in reference to the way that people in Laos approach work, with respect to aspects such as incentives, motivations, accountability and relationships.
- **The importance of the international requirements of the GCF:** There are a range of institutional-level procedures that are required by the GCF.
- **Limitations with regard to change within the Lao PDR:** It is important to be aware of the inability to change certain aspects within the Lao PDR, either as a result of political or cultural requirements. For example, the requirements for paper-based reporting and authorization is a non-negotiable aspect for working in government; the Five-Year Development Plan is the Lao PDR's key guiding strategic document and work plans and government budgets must work within its planning cycle.
- **Focus on the practical aspects of what can be achieved:** Noting all of the previous principles, this development plan focuses on practical aspects that have the potential to be successful in respect to achieving enduring capacity improvements. The assessment has also examined earlier actions undertaken to improve capacity and has taken note of the lessons learned from their implementation, noting the importance of not simply "reinventing the wheel". Some of the capacity issues discussed in this report, such as staff motivation and establishment of IT systems

for government agencies, require significant long-term investment. Therefore, achieving enduring capacity development is clearly beyond the ability and remit of the GCF programme. In these capacity areas the focus is on what can be realistic and cost effectively achieved in order to deliver the GCF programme.

5.7.2 Institutional capacity

This assessment has established several conclusions. The first is that there are cases where capacity exists, but institutional incentives and accountability are weak. The second is that it is necessary to mobilize and strengthen existing capacities as well as create new capacity where gaps have been identified. The overall goal of the capacity development plan is to enable the institutions responsible for implementing GCF programme interventions and to do so effectively while creating long-term sustainability.

Communications and Awareness-Raising: Public engagement processes are essential for REDD+. A number of institutions noted the importance of communications and awareness-raising in relation to informing stakeholders of the role of Government agencies, information on projects and programmes, and communities' rights and responsibilities. These are key activities in relation to land use planning and legal enforcement. Some agencies, such as DaLaM, have already produced excellent brochures, which provide information on the work that they undertake. However, many institutions do not have the necessary resources to undertake awareness-raising activities and campaigns. Agencies need to be supported in developing awareness-raising strategies and the associated capacities, including budgets, equipment and skills.

Developing REDD+ knowledge: It is important that REDD+ is not presented in isolation, but is, instead, framed in relation to activities that Government and other agencies are implementing in relation to reducing deforestation and forest degradation, particularly in relation to land use planning, sustainable forest management and improved agricultural productivity. The REDD+ Division has undertaken some good work on building awareness and understanding of REDD+ across central Government levels. However, this needs to be built upon, as many institutions stated they have only basic knowledge of REDD+. Building awareness across Government will help increase individual staff members' confidence in expressing ideas with regards to REDD+ and how it links to other policies and programs across government. Furthermore, it is important for field staff at provincial and district levels to be able to explain to communities the benefits and costs of REDD+, as well as understand their rights and responsibilities in relation to social safeguards. As such, it will be important to build a critical mass of knowledge across Government, with central Government providing the role of training local staff in REDD+.

Monitoring and Evaluation: The ability to assess the effectiveness of projects and programs requires significant improvement across a range of levels, including the development of Information and communications technology skills, improvements to data collection and analysis systems, guidelines and the introduction of additional equipment, including IT software and hardware.

Training: Additional training is necessary to improve the skills across Government in monitoring and evaluation and in information and communications technology. The use of "training of trainers" approaches provides an enduring way to ensure that central Government staff can pass on knowledge and skills to a wide number of staff at local levels.

Information Systems: there is increasing amounts of data that institutions need to analyze for reporting purposes and supporting policy processes. A cohesive system is required to collect, collate and manage data and information from across different sectors, which can be utilized by multiple departments and divisions. This should build on the establishment of the previous information-sharing

framework established for the forestry sector. Guidelines will be required so that everybody understands their roles and responsibilities, with one Division within the Ministry taking the lead role.

IT Infrastructure: All institutions highlighted the lack of IT infrastructure (especially hardware such as servers). The capacity development approach should complement existing government priorities and offer cost-effective and sustainable solutions. The Government sees Information and Communication Technology (ICT) as a critical driving force of socio-economic development, especially regarding regional and international integration.

The choice of approach in IT infrastructure investment should be driven by future trends. More devices are accessing networks, as employees use smart phones, tablets and handhelds in an increasingly mobile working environment. The Government already has a number of initiatives to promote ICT (National ICT Policy 2015-2025 [draft]; National Broadband Plan 2012-2020; E-Government Master Plan 2013-2020, ICT Vision 2030, Strategy 2025 and Development Plan 2020. One of the main immediate targets for the Government is to expand the fiber optic transmission network, both aerial and underground, by 10,000 km to reach Vientiane Capital and municipal districts of each province across the country as part of the infrastructure system to support e-governance. This means that cloud-based information systems will become the most cost-effective investment, as internal hardware-based systems become increasingly expensive to maintain and sustain.

Management of land resource data and information such as VFMPs and other spatial data require long-term well sustained capacity and information systems. In particular, such systems must be future proofed against technology that is likely to become redundant and obsolete. It will be important to ensure that capacity interventions at central and local levels are interlinked and advance simultaneously, otherwise there will be a time lag between central and provincial/district levels' readiness. Improving the data flow from local to central levels is essential.

Training: The following areas of training are required:

- *English Language:* Improvements in the ability to speak and write English is necessary so that staff can communicate and network with international donors and development partners.
- *Financial Management:* The ability to account, budget, administer and report on funds for projects requires improving.
- *Learning from International Staff:* Many prior and existing projects in the Lao PDR utilize international experts, who typically leave when the project is complete. Contracts with international staff should include provisions to spend a proportion of their time upskilling Laos staff.

Table 27 outlines specific capacity interventions within individual departments and divisions:

Table 27: Institutional Capacity Gaps and Capacity Response

Institution	Capacity Gaps	Capacity Response	Priority
Department of Agricultural Land Management	Land use plan implementation and extension services	Activity 1.5. Land use planning and improved tenure security, including 1.5.2 (participatory land use planning and monitoring) and 1.5.3 (enforcement for existing land use plans). This will involve staff training, workshops, equipment, vehicles, and consultants.	Medium
Department of Forestry Inspection	Informing stakeholders of their rights and responsibilities	Activity 1.4. Improved law enforcement and monitoring, including 1.4.1 (strengthening procedures, standards and systems for law enforcement) and 1.4.2 (training for implementation of enhanced law enforcement).	Medium

		This will involve staff training and printing and dissemination of regulations & guidelines.	
	Monitoring and evaluation	Activity 1.4. Improved law enforcement and monitoring, including 1.4.1 (strengthening procedures, standards and systems for law enforcement) and 1.4.2 (training for implementation of enhanced law enforcement). This will involve training, workshops and investment into equipment in information and communication technology (GPS, communication devices, computers for remote sensing).	High
Department of Technical Extension and Agro-Processing	Staff turnover	Output 1 provides a range of training and activities that may incentivize staff and help reduce turnover.	Low
	Inadequate staff capacity to support field programs and extension services	Activity 2.1. Market solutions for agricultural drivers of deforestation. This will involve training and the provision of training materials, and equipment. Consultants (national & international) to provide additional capacity during the delivery of the programme. On-the-job training to be provided by consultants to permanent staff to ensure that capacity levels are increased and endure beyond the life of the programme.	Medium
Division of Land Use Planning	Land use plan implementation	Activity 1.5. Land use planning and improved tenure security, including 1.5.2 (participatory land use planning and monitoring) and 1.5.3 (enforcement for existing land use plans). This will involve staff training, workshops, equipment, vehicles, and consultants.	Medium
	Monitoring and evaluation	Activity 1.5. Land use planning and improved tenure security, including 1.5.2 (participatory land use planning and monitoring) and 1.5.3 (enforcement for existing land use plans). This will involve staff training, workshops, equipment, vehicles, and consultants.	High
Forest & Forest Resource Development Fund Office	Managing workloads	Activity 1.1. REDD+ Funding Window & Sustainable Finance. Consultants (national & international) to provide additional capacity during the delivery of the programme. On-the-job training to be provided by consultants to permanent staff to ensure that capacity levels are increased and endure beyond the life of the programme.	Medium
	Understanding of REDD+	Activity 4.1. Project management, coordination, monitoring and reporting, including 4.1.3 (knowledge management and communication). This will involve awareness raising campaigns on REDD+.	Low
Forestry Promotion, Plantation & Reforestation Division	Operating policies and guidelines	Activity 1.1. REDD+ Funding Window & Sustainable Finance. This will involve expert input for restructuring and building compliance system & procedures and staff training.	High
	Monitoring and evaluation	Activity 1.1. REDD+ Funding Window & Sustainable Finance. This will involve provision of additional operational budget to manage,	High

		monitor and report on fund disbursement, and financing of external audits of FFRDF.	
	Understanding of budgets	Activity 1.1. REDD+ Funding Window & Sustainable Finance. This will involve procurement of IT infrastructure to upgrade financial management systems.	High
	Managing workloads	Activity 3.2. Implementation of SFM in production forests. This will involve training and consultants (national & international), who will provide additional capacity during the delivery of the programme. On-the-job training to be provided by consultants to permanent staff to ensure that capacity levels are increased and endure beyond the life of the programme.	Medium
	Extension services	Activity 2.1. Market solutions for agricultural drivers of deforestation. This will involve training and the provision of training materials, and equipment.	Medium
Production Forests Management Division	Monitoring and evaluation	Activity 3.2. Implementation of SFM in production forests. This will involve 3.2.1 (forest inventory and forest management planning in production forests) and 3.2.2. (implementation of management plans and monitoring). This will involve consultants and experts, training and equipment.	Medium
	Communication with international donors	No specific training response recommended at this stage. Capacity should improve through the project and day-to-day interactions with donors.	Low
Protected Areas Management Division	Managing workloads	Activity 3.3. National conservation forest management (NPAs). This will involve training and consultants (national & international), who will provide additional capacity during the delivery of the programme. On-the-job training to be provided by consultants to permanent staff to ensure that capacity levels are increased and endure beyond the life of the programme.	Medium
	Limited and unpredictable budgets	Activity 3.3. National conservation forest management (NPAs), including 3.3.2 (improved law enforcement in NPA biodiversity conservation landscape), and activity 2.1. promotion of private sector investments in community-based agroforestry. This will involve exchange and learning events /study tours with other NPAs on various NPA topics (eco-tourism, management, financing etc), training and public-private dialogue.	Medium
	Monitoring and evaluation	Activity 3.3. National conservation forest management (NPAs), including 3.3.1 (development or revision of Nature Protected Area (NPA) management plans) and activity 3.3.2. improved law enforcement in NPA biodiversity conservation landscape. This will involve experts and consultants, training, equipment and collaboration with universities.	High
REDD+ Division	Managing workloads	All outputs will provide support in the form of consultants (national & international) to provide additional capacity during the delivery of the programme. On-the-job training to be provided	Medium

		by consultants to permanent staff to ensure that capacity levels are increased and endure beyond the life of the programme.	
	Understanding of REDD+ across government institutions	Activity 4.1. Project management, coordination, monitoring and reporting, including 4.1.3 (knowledge management and communication). This will involve awareness raising campaigns on REDD+.	Low
Village Forests & NTFPs Management Division	Monitoring and evaluation	Activity 3.1. Implementation of Village Forest Management, including 3.1.1 (development of Village Forest Management Plans) and 3.1.2 (implementation and monitoring of VFM plans). This will involve experts and consultants, training and equipment.	High
	Capacity to establish village forest management plans throughout the country	Activity 3.1. Implementation of Village Forest Management, including 3.1.1 (development of Village Forest Management Plans). This will involve international consultants, staff support, training, equipment and vehicles.	High

5.8 FFRDF capacity development strategy

The FFRDF needs to improve its capacity in relation to administration, fund management processes, financial management, project management and implementation of relevant social and environmental safeguard frameworks for projects. To ensure accountability, all processes need to be transparent and easily understood by donors, Government staff and fund recipients.

5.8.1 Project selection, appraisal and approval

While the overall purpose of the Fund is clear, detailed criteria are lacking. Therefore, the development of eligibility and assessment criteria is important. The eligibility criteria will provide clear direction to potential Fund recipients over the types of projects that can be funded, while ensuring that there is no scope creep within the FFRDF. The assessment criteria will help the FFRDF Office in determining the benefits of individual projects in relation to achieving the overall strategic purpose of the Fund and the GCF programme. Criteria should include environmental, social and economic components, as well as the ability of Fund recipients to deliver projects. These criteria will help rank different potential projects, which will be important in situations when the value of project applications is higher than that available from FFRDF funds. This assessment will ensure transparency in decision-making, avoiding the question of bias when certain projects are selected over others. The use of an independent assessment panel should also be considered.

When a project is selected, further due diligence should be undertaken, although it is acknowledged that for small projects this stage does not need to be excessive. However, it will be important to assess the ability of Fund recipients to deliver the project; how the project will achieve its goals; how the effectiveness of the project will be monitored, evaluated and reported; and how the project will continue and become self-sustaining after the funding ends.

Project Management: The FFRDF Office has managed a number of projects to date. However, these have been relatively small in number compared to what may come through the GCF project, and they have been predominantly relatively low value. Further support is required for the Office to oversee a

portfolio of projects. There are currently only five permanent staff, spread across the Office's two sections of planning and finances. Initially, the Office requested ten staff, although the Ministry of Home Affairs only allowed them seven staff.

At this stage, it is difficult to determine exactly how many staff would be required for ERP and GCF project implementation, although clearly additional staff will be required due to the increase in the number and size of projects, as well as for taking on the additional requirements detailed in this Development Strategy. Furthermore, staff would benefit from clear operating guidelines and processes. This would help to manage the processes and support recipients in the delivery of projects. Every project should have a single clear point of contact within the FFRDF Office. A further set of guidelines for Fund recipients would also be desirable, which outline the application process as well as details on how to report on the projects' progress, apply for payments and project closure.

Monitoring and Reporting: Every project should have at least a basic project plan that includes objectives and targets, which can be monitored and reported on. This should also include a section on risk management. The FFRDF Office will play an important role in supporting Fund recipients with developing management plans. This may require additional staff training and operating manuals, as well as templates to help with management planning. The FFRDF should produce an annual report, which outlines progress made across the portfolio of projects and payments made. Currently, projects are visited twice a year by the FFRDF Office, which appears to be adequate, although for larger projects more regular inspections may be required. A formal process should be established for undertaking site visits, which verifies the progress of the projects and ensures that funds have not been misappropriated. A process will be required for addressing at-risk projects.

Payment Processes and Accounting: The current payment process involves a paper-based reporting process. Although it is acknowledged that the government requires this process, there are some areas that require improvement. Accurate and up-to-date financial statements are required so that the payments can be tracked and the entire Fund can be monitored. This will require an accounting framework. The payment process also needs to be improved with respect to the speed at which payments are made. Currently, it may take up to three months to make payments, which results in projects being put on hold and incurring significant delays.

Social and Environmental Safeguards System: Safeguards are a requirement to qualify for REDD+ payments. Protocols and standards must be in place to ensure that projects minimize social conflict and respect the rights of local communities. Social and environmental safeguards are required in order to allow for redress and grievances and so that ethical considerations are undertaken. As such, the FFRDF Office requires an internal code of ethics, a conflicts of interest register, a gender equality policy, and grievance and "whistle blower" processes. Following their development, these policies and standards must be communicated to stakeholders.

GIZ Executing Entity: National Programme Management Unit (NPMU)

At the day-to-day operational level, a **National Programme Management Unit (NPMU)** will be established within the Department of Forestry (DOF) of MAF. GIZ Country Office in Lao PDR is the Executing Entity and will be responsible for the establishment and management of the NPMU as well as the establishment and management of the Provincial Programme Management Units (PPMUs) in each of the six target provinces (see below for a more detailed description of the PPMUs). The same NPMU structure will be used for the implementation of GIZ-managed BMZ co-financing and activity implementation.

The NPMU will closely coordinate with the responsible Government agencies for respective activities and will provide technical and financial management support.

The NPMU will be responsible for:

- Conducting financial management and accounting of the implementation activities following GIZ financial management standards
- Coordination with national, sub-national and co-financing entities
- Leading and supervising programme implementation
- Monitoring, evaluation and reporting towards the Accredited Entity (including coordination with co-financing entities)
- Procuring goods and services and recruiting consultants following GIZ procedures
- Providing technical guidance and leadership related to the programme activities and capacity development services
- Providing technical support and capacity development for national, provincial and district level implementation units
- Supporting studies and data assessment
- Contracting, coordinating and overseeing (international) technical expertise to ensure timely and efficient implementation
- Ensuring communication and awareness raising of programme activities and lessons learned
- Overseeing and coordinating with EPF REDD+ Window and FFRDF capacity development and provide targeted training
- Coordinating with the technical lead agencies and departments /divisions within MAF and MONRE that will be responsible for the implementation of programme activities
- Supporting the provincial programme management units in their operations
- Training of EPF and FFRDF and supervision of their activities
- Safeguards monitoring and implementation of gender action plan
- Stakeholder complaint and grievances management

Key staffing of national programme management unit (including BMZ-financed activities to be implemented by GIZ):

- One Programme Director (Chief Technical Advisors) (international)
- One Forest Sector Specialist (international)
- One Agriculture Sector Specialist (international)

- One Monitoring and evaluation expert (international)
- One National Programme Coordinator (national)
- One Financial Management Advisor (national)
- One Accountant (national)
- One Procurement Advisor (national)
- One Communications Expert (national)
- One Gender and Ethnic minorities and Safeguards Expert (national)
- 2 drivers (national)

Provincial Programme Management Units (PPMUs)

The **provincial programme management units (PPMUs)** will support the provincial- and district-level implementation entities in the day to day implementation and management. PPMUs will be located in the PAFO offices within each of the six target provinces, closely linked to the Provincial REDD+ Office. Their major responsibilities will be:

- Supporting national technical agencies and other target beneficiaries in the planning and budgeting of province level and district level activities and support in investments application processes for GCF financing (to be disbursed by the EPF window)
- Providing technical capacity building and supporting target beneficiaries in the application, implementation and monitoring and reporting process to the EPF and to the NPMU
- Collecting and aggregating monitoring and evaluation data from the province and district level implementation entities, and then submitting monitoring and evaluation data and reports to the NPMU
- Support implementation of the social, environmental management plans and gender action plan

Staffing of the PPMUs in 6 provinces: (including BMZ-financed activities to be implemented by GIZ):

- 2 Forestry / 2 agribusiness advisors for province-level coordination (responsible for 3 provinces) (international)
- 6 Province level coordinators (national)
- 6 Financial management and procurement advisors (national)
- 6 Accountants (national)
- 3 Forestry specialists (national) (each responsible for 2 provinces)
- 3 Agricultural specialists (national) (each responsible for 2 provinces)
- 3 Monitoring and evaluation specialists (national) (each responsible for 2 provinces)

District programme management units (DMPU)

The DPMUs are district-level entities responsible for preparation and execution of the proposed activities. The DPMUs will be located in the DAFO offices and be comprised of 2 staff members.

Staffing of the district management unit in 28 provinces:

- 28 district-level forestry activities implementation coordinators (national)
- 21 district level agricultural activities coordinators (national) (in 7 district IFAD will implement very similar activities as activities under Output 2, thus agricultural activities will not be implemented in these 7 districts)

The Environmental Protection Fund executing agency:

The EPF was established in 2005 as a financially autonomous organization by the Government of Lao PDR to strengthen environmental protection, sustainable natural resources management, biodiversity conservation and community development in the country (under the Environmental Protection Law (EPL) and the EPF Decree 2005²⁹⁶). The EPF provides financial support by means of non-refundable grants, preferential loans, interest rate subsidies or a combination of these.

The EPF will serve as a second Executing Entity. The EPF's potential main tasks as an Executing Entity and grant recipient in the programme will include:

- Receiving, managing and forwarding grant financing from GIZ in compliance with GIZ standard operating procedures (which will be evaluated through separate due diligence audit). This will include:
 - Formally creating the REDD+ Funding Window, including related operational procedures;
 - Using the funding window for transferring grant financing to eligible recipients in Lao PDR (public sector entities at national, provincial and district level, village micro finance institutions, individual village households);
 - Together with the programme management units and GIZ staff in Lao PDR, verify the correct spending of the provided grant financing (including accounting and procurement requirements, as well as eligibility of funded activities);
 - Reporting to the funding window's steering committee: the National REDD+ Task Force.
- The REDD+ Funding Window will include three "sub-windows":
 - One sub-window for providing grant financing to Government agencies at national, provincial and district level;
 - One sub-window for providing grant financing to villages/community level;
 - One sub-window for promoting private sector investments in deforestation-free agriculture and/or sustainable forestry businesses and to local financial institutions.

²⁹⁶ The main objective of the EPF is to implement:

(1) Chapter VII in article 65 of the EPL (amendment 2013);
(2) Article 37 of the Forestry Law (amendment 2008);
(3) Article 15 of the Decree to Implement the Law on Water and Water Resources; and (4) Article 22 of the Regulation on the Management of the National Biodiversity Conservation Area, Aquatic and Wild Animals by establishing a source of financing to support priority projects and activities in the fields of research, preservation, mitigation, and restoration of the environment, including the protection and conservation of natural resources and biodiversity, and the mitigation of adverse social and environmental impacts associated with development projects

- Potentially, receive results-based financing from the World Bank's Carbon Fund (FCPF) after 2022, after the initial verification of the ER-Program.²⁹⁷
- Supported by GIZ and other development partners, raise additional international financing (sinking endowments, permanent endowments generating interest rate income, etc.);
- Supported by GIZ and other development partners, raise additional domestic financing (tax revenues, royalties, fees etc.);
- Seek GCF accreditation (currently underway) in order to propose and implement projects.

There are two primary reasons that the programme would channel funds via the EPF. First, it is desirable that a local, capable entity is involved in programme financing in order to increase country-ownership over the programme. The EPF has proven itself capable of managing similar funds in the past, and its involvement would ensure that the programme project is managed by a Government institution. Second, in general, the programme aims to increase the capacity of Government institutions so that the benefits of the programme outlive its lifespan. By giving the EPF significant responsibility in programme implementation, the programme team anticipates that local capacity will increase.

5.8.1.1 Programme implementation partners

The implementation entities will be the national, provincial, and district technical line agencies of MAF (PAFOs and DAFOs) and MONRE (PONRE, DONRE), village groups and small and medium enterprises. A summary of the responsible and supporting entities according to the programme activities is summarized in Table 28 below.

The Government entities will be responsible for preparing the project plans and report and budgets which will be based on the coordination with the district and commune level target areas and entities. These will be submitted to the PPMUs and the NPMU at the national level. The NPMU will review the proposal and either approve, seek amendments or reject, at this point instructing the EPF to disburse funds to the project beneficiary. In the case of the sub-window for Government beneficiaries, the EPF disburses funds directly. In the case of the sub-windows for village groups and private enterprises, the EPF will disburse funds to FFRDF. This intermediary will then disburse funds to the ultimate beneficiary.

The EPF has a key fiduciary responsibility to the GIZ and GCF, and will therefore be responsible for financial monitoring and reporting. Monitoring and reporting of project impacts, as well as compliance with safeguards, however, will fall under the responsibility of the NPMU and associated PPMUs and DPMUs. Finally, the NPMU will take the lead for project evaluation. GIZ HQ will be responsible for delivering a mid-term review and terminal project evaluation.

²⁹⁷ https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR_ERPD_FinalDraftMay.2018-Clean.pdf

Table 28: Programme implementation partner responsibility and financing

Implementation Output 1: Creation of an enabling environment for REDD+ implementation		
Activity	Implementation lead entity	Support entities and coordination needed
Activity 1.1 REDD+ Funding Window & Sustainable Finance		
Action 1.1.1 Mobilizing sustainable forest sector financing	NPMU	MAF/DOF, MONRE, EPF, FFRDF, MPI (Department for Investment Promotion)
Action 1.1.2: Building the EPF and FFRDF to act as a REDD+ Funding Window and finance forest sector development and 1.1.3 Identification of existing and/or establishment of new VDFs to channel climate finance to target villages	FFRDF and NPMU	MAF/DOF, MOF
Activity 1.2: Mainstreaming REDD+ into the NDC socio-economic development plans		
Action 1.2.1 Provision of technical and logistics support and to the national SEDP planning processes	REDD+ Division and National REDD+ Task Force	NPMU, governor's office and the Ministry of Planning and Investment, MAF, MONRE
Action 1.2.2 and 1.2.3: Provision of technical and logistics support to the integration of Provincial and district REDD+ Action Plans into SEDPs	Provincial REDD+ task force and REDD+ offices	PPMU, NPMU, PPIO, PONRE, PAFO, DAFO
Activity 1.3. Regulatory framework		
Action 1.3.1: Creating an enabling environment for SFM and private sector investment in village-based agroforestry/plantation development	NPMU	MAF / DOF, PAFO, DAFO, POFI, DOFI MONRE, PONRE, DONRE,
Activity 1.3.2: Capacity building and awareness raising on the legal forest sector framework	NPMU and PPMU	MAF / DOF, PAFO, DAFO, POFI, DOFI MONRE, PONRE, DONRE,
Activity 1.4. Improved law enforcement and monitoring		
Activity 1.4.1 Strengthening procedures, standards and systems for law enforcement and 1.4.2 Training for implementation of enhanced law enforcement	NPMU and PPMU	MONRE / PONRE, MAF / DOFI, POFI, PAFO
Activity 1.5. Land use planning and improved tenure security		
Action 1.5.1: Mainstreaming FLR guiding principles into land use planning manuals and guidelines	NPMU	MONRE (Department of Land), MAF/DOF, NPMU
Action 1.5.2: Participatory village land use planning (PLUP) in target programme districts	MONRE (Department of Land), PONRE and DONRE	PAFO, DAFO, NPMU, PPMU, EPF,

		Department of Agriculture Land Management (Da-LAM)
Action 1.5.3: Monitoring and enforcement for existing land use plans	DONRE and PONRE	PPMU, EPF, PONRE, DONRE
Activity 1.6 Measurement, Reporting and Verification		
Action 1.6.2: Execution of the 4th (2020/2021) and 5th (2024/2025) national forest inventory; Action 1.6.2. Assessment and development of the forest type map for 2021/2022 and 2024/2025; Action 1.6.3. Calculation of emission and removal factors; Action 1.6.4.: Assessment of leakage effects from the programme area to reference area (Lao PDR); Action 1.6.5.: Reporting on reduced GHG emissions and enhanced carbon stocks Action 1.6.6. Implementation of the national forest monitoring system	FIPD, JICA	PPMU, NPMU, DOF
Activity 1.7 Knowledge management, FPIC, safeguards and gender		
Action 1.7.1 Knowledge management and communication	NPMU	MAF/DOF
Action 1.7.2: Implementatino of the ESMP and Gender Action Plan	NPMU	MAF/DOF

Implementation Output 2: Market solutions for agricultural drivers of deforestation		
Activity	Implementation lead entity	Support entities and coordination needed
2.1. Local incentives for good agricultural practices and agroforestry		
Action 2.1.1. Capacity building on GAP 2.1.2. Investment in GAP and agroforestry	Provincial Department of Technical Extension and Agricultural Processing and Technical Service Centers (TSC) under PAFOs under DAFOs	NPMU, PPMU, LWU
2.1.3. Knowledge management and sharing of successful experiences for replication	PPMU and NPMU	Provincial Department of Technical Extension and Agricultural Processing and Technical Service Centers (TSC) under PAFOs under DAFOs
Activity 2.2 Catalyzing private sector investment in value chains		
Action 2.2.1. In-depth value chain assessment of the key agricultural commodities, and Activity 2.2.2. design and support of a self-sustaining market information sharing system	NPMU and external service providers	PAFOs, DAFOs and private sector
Action 2.2.3. Public-private dialogue of value chain development	NPMU and external service provider	PAFO, DAFO, PICO, DICO, private sector
Activity 2.3. ADB Sustainable Rural Infrastructure Watershed Management Sector Project		
Action 2.3.1. Market oriented production is increased, Action 2.3.3. Command area irrigation reliability improved, 2.3.4. Improved nutritional status; 2.3.5. Project management	See ADB Sustainable Rural Infrastructure Watershed Management Sector Project appraisal document	

Implementation Output 3: Implementation of Sustainable Forest Landscape Management and Forest and Landscape Restoration (FLR)		
Activity	Implementation lead entity	Support entities and coordination needed
Activity 3.1 Implementation of village forest management		
Action 3.1.1 Development of village forest management plans (VFMP)	PAFO, DAFO supported by NPMU and PPMU	MAF/DOF (Village Forestry and NTFP division), villagers, PONRE, DONRE, district governor, LWU
Action 3.1.2. Implementation and monitoring of VFMPs	Village groups with support from PAFOs, DAFOs, and PPMUs	DONRE, PONRE, NPMU, EPF, LWU
Activity 3.2 Implementation of SFM in production forests		
Action 3.2.1: Forest inventory and forest management planning in production forests	DOF, PAFO, DAFOs (Production Management Units) with support from PPMUs	NPMU, DOF, PAFO, DAFO (production forest management unit), VFC committee members, POFI, DOFI, LWU
Action 3.2.2 Implementation of management plans and monitoring	DOF, PAFO, DAFOs, villagers with support from PPMU	EPF, DOF, POFI, DOFI, LWU
Activity 3.3 National conservation forest management (NPAs)		
Action 3.3.1 Development or revision of Nature Protected Areas (NPAs) management plans	DOF, PAFO, DAFOs (NPA management units) with support from PPMUs	DOF, PONRE, DONREs, NPMU
Action 3.3.2. Improved law enforcement in NPAs biodiversity conservation landscape	DOFI, POFI with support from PPMU	EPF, DOF, NPMU
Action 3.3.3. Implementation of sustainable land and forest management by villages living within and adjacent to NPAs	Villagers with support from DAFOs and PPMUs	EPF, DOF, NPMU, POFI, DOFI, FFRDF

6 REGULATION / TAXATION AND INSURANCE²⁹⁸

6.1 Privileges, immunities and taxation

The Federal Republic of Germany has concluded Framework Agreements on Technical Cooperation under international public law with the Government of Lao PDR, which provide for certain privileges and immunities to be applied in projects of technical cooperation, including exemptions for taxes, customs, duties and fees. GIZ will endeavor to reach arrangements to have these privileges and immunities also applied to this programme including GCF proceeds. However, formal agreements would only be entered into after the programme has been approved.

6.2 Approvals, permits, licenses and land

At the time of submitting the Funding Proposal, GIZ was not aware of the project requiring specific approvals, permits, licenses or land to allow for the implementation of planned activities.

6.3 Currency

The local currency in Laos is Lao KIP (code: LAK). The programme's local transactions will use LAK. The AE will manage GCF proceeds in EUR. GIZ will apply its standard rates for the conversion of currency, which is calculated in the following manner: For the first transfer of funds to the account in the partner country the actual exchange will be used. For each subsequent transfer of funds (always at the actual exchange rate) the average rate for the sub-account is recalculated, using the actual balances in foreign currency.

6.4 Insurance

GIZ as AE will ensure that programme activities are adequately insured as per GIZ standard operating procedures and common practices. GIZ standard operating procedures require contractors to ensure required insurance cover. GIZ company policies provide insurance cover for GIZ staffs. At the time of submitting the Funding Proposal, GIZ did not anticipate additional insurances in order to cover special risks in this programme.

²⁹⁸ Note: GIZ regulations on vehicles are provided in Annex 5.

7 PROGRAMME FINANCING PLAN

7.1 Sources of finance

The sources of finance are presented below and in the Excel file (GCF financing Lao PDR - worksheet "Summary Fin plan").

The **GCF** budget amounts to 61.72 million Euro for the implementation of programme.

The Government of Lao PDR will contribute co-finance of at least 22.6 million Euro towards the implementation of the programme. Key Government inputs will be staff time contributions by national-, provincial- and district-level staff. Financial estimates of staff time value are based on an average government salary of EUR 330 month. Staff will devote time to participation, training and implementation of programme activities.

The beneficiaries of the programme (mainly related to village-level farmer and household time inputs) will devote significant time resources for the implementation of activities and participation in training within Outputs 2 and 3. The time input is valued using a USD 3/day (Euro 2.6/day) rate. This equates to a total staff input of 19.2 million Euro for the implementation of the programme.

BMZ co-financing: The total BMZ co-financing for the programme will amount to 13.6 million Euro.

Of this, 6.6 million Euro will be implemented through GIZ as an Executing Entity in Lao PDR. The GIZ Executing Entity will finance part of the programme management team (Activity 4.1) and the implementation of Activity 1.2, Activity 1.3, part of Activity 1.7, part of Activity 2.1, part of Activity 2.2 and part of Activity 3.1.

The remaining 7 million Euro of BMZ co-financing will be implemented by KfW through its Village Forest Management Programme (VFMP) in two districts of the two target provinces (Sayabouri and Luang Prabang).

JICA will provide Euro 3.6 million co-financing for technical assistance to support land use planning and law enforcement (Activities 1.4 and 1.5), to support the implementation of the MRV system under Activity 1.6, and to support the implementation of Activities 2.1 and 3.1 in the provinces of Oudomxay and Luang Prabang.

ADB and EU will provide co-financing of Euro 24.1 million to implement Activity 2.3 (in conjunction with the Sustainable Rural Infrastructure and Watershed Management Sector project, SRIWSM), which will be implemented in 4 provinces. The co-financing contribution is based on the implementation overlap of the GCF programme and SRIWSM in seven districts in three of the provinces (Houaphan, Sayabouri and Luang Prabang), where the projects will work together.

The **IFAD PICSA** loan project with the Government of Lao PDR will co-finance the GCF programme with 11.4 million Euro to support the implementation of Output 2 activities in 7 target districts (out of a total of 28 districts supported by the GCF programme).

The FCPF Carbon Fund: Based on a negotiated Emission Reduction Purchase Agreement (ERPA), Lao PDR is expected to receive REDD+ results-based payments. Lao PDR is expecting up to Euro 35 million for the period 2020-2024, depending upon the achieved results. For the implementation of the national forest inventory in 2024 (Activity 1.5), it is expected that 450,000 Euro (from the first tranche of results-based payments in 2022/2023) will be invested into the national forest inventory in 2023/2024. This financing will be required to receive the second results-based payment tranche in 2025, at the end of the negotiated ERPA.

Table 29: Source of finance by Output and Activity

	Activity	Total value (€)	National/provincial gov't budget	Beneficiary contribution	GCF	BMZ (GIZ)	BMZ (KfW)	JICA	ADB /EU	FCFP Carbon fund	IFAD
Output 1	Activity 1.1. Sustainable finance for forest sector transformation	2,341,198	106,920	0	923,133	1,311,145	0	0	0	0	0
	Activity 1.2: Mainstreaming REDD+ into socio-economic development plans	568,433	194,040	0	0	374,393	0	0	0	0	0
	Activity 1.3. Regulatory framework	1,186,139	123,420	0	0	660,969	401,750	0	0	0	0
	Activity 1.4. Law enforcement and monitoring	2,732,193	162,360	0	2,380,833	0	0	189,000	0	0	0
	Activity 1.5. Land use planning and improved tenure security	10,350,023	5,337,290	32,421	4,440,312	0	0	540,000	0	0	0
	Activity 1.6. Implementation of MRV system	3,447,333	1,289,640	0	789,293	0	0	918,400	0	450,000	0
	Activity 1.7 Improved knowledge and implementation of ESMP and GAP	2,427,231	0	0	2,427,231	0	0	0	0	0	0
	Total	20,711,352	7,106,750	32,421	10,037,669	1,035,362	401,750	1,647,400	0	450,000	0
Output 2	Activity 2.1. Local incentives for Good Agriculture Practices (GAP)	35,489,526	4,418,241	10,718,596	13,950,097	22,828	0	155,400	0	0	6,224,365
	Activity 2.2 Catalyzing private sector investment in value chains	11,514,528	469,326	4,366,511	3,495,885	123,269	0	0	0	0	3,059,537

Activity		Total value (€)	National/provincial gov't budget	Beneficiary contribution	GCF	BMZ (GIZ)	BMZ (KfW)	JICA	ADB /EU	FCFP Carbon fund	IFAD
	Activity 2.3. ADB Sustainable Rural Infrastructure Watershed Management Sector Project	25,010,519	117,807	0	0	0	0	0	24,102,810	0	789,902
	Total	72,014,573	5,005,374	15,085,107	17,445,981	146,097	0	155,400	24,102,810	0	10,073,804
Output 3	Activity 3.1. Implementation of Village Forest Management	32,938,288	5,357,880	939,284	16,391,540	3,498,439	6,598,250	152,895	0	0	0
	Activity 3.2. Implementation of SFM in production forests	5,485,436	443,520	173,684	4,868,232	0	0	0	0	0	0
	Activity 3.3. National conservation forest management (NPAs)	11,774,037	3,888,720	0	7,885,317	0	0	0	0	0	0
	Total	50,197,761	9,690,120	1,112,968	29,145,089	3,498,439	6,598,250	152,895	0	0	0
Output 4	4.1.1. GCF programme management and coordination	9,488,022	799,514	0	3,867,820	1,935,552	0	1,605,000	0	0	1,280,137
	Total	9,488,022	799,514	0	3,867,820	1,935,552	0	1,605,000	0	0	1,280,137
	Taxes, legal capacity, customs, etc.	1,225,000			1,225,000						
	Total budget	153,636,708	22,601,758	16,230,496	61,721,559	6,615,450	7,000,000	3,560,695	24,102,810	450,000	11,353,940

7.2 Procurement

Procurement and financial management will be implemented as follows:

- The Executing Entity – the Environment Protection Fund (EPF) – will sign subsidiary agreements with GIZ, based on GIZ standard operating procedures for contracts for financing.
- Contracts for financing establish the legal basis on which GIZ makes funding available to the Executing Entities for specific purposes to help them carry out certain measures.
- The Executing Entities are responsible for implementing and administering the measures in accordance with GIZ standard operating procedures.

7.2.1 Procurement

In case of procurement by GIZ, GIZ will follow its own procurement guidelines. GIZ is required to comply with the relevant contracting rules as established in the German Act against Restraints of Competition (GWB), the German Regulation on the Award of Public Contracts (VgV) and, if applicable, the Contracting Rules for the Award of Public Service Contracts (VOB and VOL) when procuring services, construction work, and supplies. When awarding contracts for supplies and services (including consultancy services) to be financed in full or in part from the contract for financing, the external Executing Entities will observe the national legal standards for procurement and will in any case comply with the GIZ minimum standards. An overview of these minimum standards is available at https://www.giz.de/de/downloads/giz2017-en-Annex_4a-Award-Procedure.pdf.

GIZ assesses adherence of submitted procurement documents to GIZ procurement regulations at defined stages in the process.

7.2.2 Financial Management

The financial management of the programme will follow GIZ's internal rules and regulations. GIZ has bank accounts with Deutsche Bundesbank and Commerzbank. GIZ will not open a specific bank account for GCF proceeds and other GCF funds but will ensure that all funds provided are clearly identifiable from GIZ's other funds by setting up separate cost units exclusively for the funds disbursed by the GCF for each funded activity (ledger accounts). Funds received and expenditures incurred will be booked to the respective cost unit according to generally accepted accounting principles and procedures accepted by the German government. As a general principle, GIZ disburses funds to the recipients in accordance with the progress of the programme. The Executing Entities have to prove the proper use of funds and the defined progress as a prerequisite for any further disbursement.

7.2.3 Independent external

Independent external auditors will perform annual financial audits of the programme in line with International Auditing Standards.

8 GHG MITIGATION BENEFITS AND EFFICIENCY

8.1 GHG mitigation and carbon removals summary

For the 9.5-year GCF programme implementation period (2020-2029), the ex-ante estimate of reduced emissions and increased removals is 57.9 million tCO₂e (an average of 7.23 million tCO₂/year). This is comprised of 49.83 million tCO₂e emission reductions (due to reduced deforestation and forest degradation), which is equivalent to a reduction of 59% compared to the Forest Carbon Partnership Facility (FCPF) Reference Level emissions; and an increase in removals equivalent to 8.05 million tCO₂e, which is an increase of 37%²⁹⁹ compared to the removals in the Reference Level (Table 20). Assuming average annual emission reduction rate beyond the programme lifetime (for 20 years), the programme can be expected to generate 144.7 million tCO₂.

For the programme implementation period 2020-2029: This results in an estimated cost per tCO₂e of 0.9 Euro per tCO₂e) and estimated cost GHG mitigation cost to GCF equivalent to (2.8 Euro/tCO₂eq).

For the programme influence period of 20 years (2020 – 2039): Based on the 114.7 million tCO₂ emission reduction the cost per tCO₂e of 1 Euro per tCO₂e) is estimated. The GHG mitigation cost to GCF equals to (1.03 Euro/tCO₂eq).

Table 30: Summary of GCF programme GHG mitigation impact

GHG emission / removal source	Reference Level (tCO ₂ e/year)	GCF programme scenario (tCO ₂ e/year)	Net GCF programme GHG mitigation benefit (tCO ₂ e/year)	Total 2020 – 2029 (tCO ₂ e/year)
Deforestation	-3,785,703	-1,679,022	-2,106,681	-16,853,450
Forest degradation	-6,780,618	-2,658,768	-4,121,850	-32,974,799
Restoration	1,295,140	2,085,124	789,984	6,319,875
Reforestation	1,418,501	1,634,514	216,013	1,728,104
Total	-7,852,681	-618,152	7,234,528	57,876,277

Note: Negative values refer to GHG emissions; positive values refer to carbon removals

Table 31: Summary of GCF project GHG mitigation impact (Project 1 and 3)

GHG emission / removal source	Reference Level (tCO ₂ e/year)	GCF sub-programme scenario (tCO ₂ e/year)	Net GCF programme GHG mitigation benefit (tCO ₂ e/year)	Total 2020 – 2029 (tCO ₂ e/year)
Deforestation	-2,580,181	-1,145,128	-1,435,053	-11,480,427
Forest degradation	-4,380,704	-1,833,017	-2,547,687	-20,381,497
Restoration	1,295,140	1,796,603	212,802	1,702,419
Reforestation	1,418,501	1,634,514	501,463	4,011,704
Total	-9,674,526	-6,406,051	4,697,006	37,576,047

²⁹⁹ This high rate in removal activities is due, in part, to the accounting methodology used in constructing the Reference Level, in which carbon removals are spread over a default period of 20 years. This being the case, removals were generated from activities taken during the reference period (i.e. 2005-2015). The same approach is also used for removals that will be generated in the programme implementation period. Forest restoration and reforestation activities related removals will not be fully accounted for. This is further elaborated in later parts of this section.

Table 32: Key efficiency and effectiveness indicators – Programme

<i>GCF core indicators</i>	Estimated cost per tCO ₂ eq, defined as total investment cost / expected lifetime emission reductions (mitigation only)	
	(a) Total programme financing	€ 162.7 million
	(b) Requested GCF amount	€ 62.7 million
	(c) Expected lifetime emission reductions overtime	144.7 million tCO ₂ eq
	(d) Estimated cost per tCO₂eq (d = a / c)	€ 1.12 / tCO₂eq
	(e) Estimated GCF cost per tCO₂eq removed (e = b / c)	€ 0.69 / tCO₂eq

Table 33: Key efficiency and effectiveness indicators – Project 1

<i>GCF core indicators</i>	Estimated cost per tCO ₂ eq, defined as total investment cost / expected lifetime emission reductions (mitigation only)	
	(a) Total project financing	€ 64.0 million
	(b) Requested GCF amount	€ 15.2 million
	(c) Expected lifetime emission reductions overtime	5.6 million tCO ₂ eq
	(d) Estimated cost per tCO₂eq (d = a / c)	€ 11.4 / tCO₂eq
	(e) Estimated GCF cost per tCO₂eq removed (e = b / c)	€ 2.7 / tCO₂eq

All key assumptions are further described in the subsequent sections. Detailed GHG calculations are provided in an Excel workbook.

8.2 Methodology used for calculating GHG mitigation benefits

The methodological approach is based on the methodology used for the preparation of the Reference Level (RL) of the Lao PDR Emissions Reduction Program (ER-P), which was submitted and approved (in June 2018) by the FCPF Carbon Fund and is compliant with the Carbon Fund Methodological Framework³⁰⁰ and the Lao PDR's Forest Reference Emission Level and Forest Reference Level for the REDD+ Results Payment under the UNFCCC (submitted in January 2018³⁰¹). The approach equals a Tier 3 approach under the IPCC terminology.

The ER-P Reference Level accounting area covers precisely the same 6 provinces (Bokeo, Houaphan, Luang Namtha, Luang Prabang, Oudomxay and Sayabouri) as are covered by the GCF programme: the geographical footprints of the ER-P Reference Level and the GCF programme are identical.

³⁰⁰ FCPF, 2016 available at: <https://www.forestcarbonpartnership.org/sites/fcp/files/2016/July/FCPF%20Carbon%20Fund%20Methodological%20Framework%20revised%202016.pdf>

³⁰¹ https://redd.unfccc.int/files/2018_frel_submission_laopdr.pdf

For a detailed description of the Reference Level (RL) methodology, please refer to the ER-PD (Chapters 8 and 11) and respective Annexes (activity data, emission factors and forest degradation assessment)³⁰². The same methodology will be replicated for the ex-post assessment of the achieved GHG emission reductions and removals within GCF programme Activity 1.6. This will be also use for the determination of results-based payments by the Carbon Fund for the period 2019 – 2024 for which the RL is valid. The validity beyond 2024 is subject to further international guidance by UNFCCC and whether the FCPF Carbon Fund will continue beyond 2025.

8.2.1 Activity data

Projections of a land use change matrix without the implementation of the GCF programme (for 6 provinces)

To ensure full consistency with the RL methodology, first, a ‘business as usual’ land use change matrix for the GCF programme duration (2020-2029) was estimated by projecting the historical RL activity data (2005-2015), assuming no GCF programme interventions (Table 34 below). To make such projections, the average annual land use change for each change event was quantified for the period 2005-2015 and this average was then applied to the period 2020-2029.

Table 344: Projected land use change matrix without the GCF programme for 2020-2029 (ha)

		2029				
2020		EG	MD/CF/MCB	DD	P/B/RV	NF
	EG	485,374	190	3	296	368
	MD/CF/MCB	29	3,839,286	65	92,199	28,506
	DD	0	0	17,352	75	100
	P/B/RV	0	41,263	44	2,650,765	129,265
	NF	0	0	0	130,203	707,766

Note: EG: Evergreen Forest; MD: Mixed Deciduous Forest; CF: Coniferous Forest; MCB; Mixed Coniferous and Broadleaved Forest; DD: Dry Dipterocarp Forest; P: Forest Plantation; B: Bamboo; RV: Regenerating Vegetation; **NF:** Non-Forest Land. (For the land use classifications, see also [Section 1.5. Forest Sector Profile, Table 5 \(Stratification of Land Use in Lao PDR\)](#)).

Color coding: Grey: Land/Forest remains in the same land classification category; Yellow: Forest degradation; Orange: Deforestation areas; Green: Forest restoration; Blue: Reforestation.

The results of this land use change matrix were multiplied by the same emission/removal factors (E/R factors) as used in the RL. Consistent with the RL methodology and IPCC guidance, carbon removals were spread over time (20 years).³⁰³ Thus, if reforestation has taken place in the Reference Level, accounting of removals is spread over a period of 20 years. (This implies that restoration and reforestation are partly accounted for (8/20). This recognizes that in forest ecosystems, forest biomass increase

³⁰² <https://www.forestcarbonpartnership.org/lao-people%E2%80%99s-democratic-republic>

³⁰³ For the expected removals for each five-year period, 25% for that period and for each of the next three five-year periods was accounted for. Note that, by using this methodology, removals from activities during the reference period also generate removals in the accounting period of 2020-2028.

slowly over time to reach their full biomass and removal uptake takes time if there a change from lower carbon stock (non-forest land) to a higher carbon stock land use (e.g. regenerated natural forest) (IPCC 2006)³⁰⁴. The same approach applies to the GCF programme implementation period.

Projection of the GCF programme implementation land use change matrix (for 6 provinces)

Direct emission reductions and removals

The projected business as usual (BAU) land use change matrix (2020-2029) was used as a basis to develop the programme scenario land use change matrix. This land use change matrix links the GCF programme interventions with the respective activity data. Thus, each land-based intervention of the GCF programme (Output 2 and 3 interventions) is attributed to a specific land use class and land use change.

For example, the implementation of village forest management (Activity 3.1), as described in Chapter 3, will help protect forests from deforestation and degradation and will support regeneration of degraded forest. On average, approximately 75% of village forest management will be implemented on Current Forest/high-carbon-stock forest (EG/MD/CF/MCB) and 25% on Potential Forest (low-carbon-stock forest (P/B/RV). In the land use change matrix, this is translated into a reduction of the change from MD/CF/MCB to P/B/RV (i.e. reduced forest degradation in the case of high-carbon-stock forest) and into a reduction of deforestation (P/B/RV to NF) in the case of degraded forest area.

In another example, the planting of new forests would result in a change of non-forest land (NF) to P/B/RV, with the carbon removals spread over 20 years.

Table 35 below summarizes the GCF programme interventions and their impacts on emission reductions and carbon removals in the land use change matrix.

Considering that implementation of the GCF interventions is not likely to be 100% effective, adjustment factors were applied to account for imperfect effectiveness of GCF programme interventions.

For each programme activity (as outlined in Chapter 3) a different adjustment factor is applied. The quantitative values of the adjustment factors are based on consideration of the total implementation area and the observed deforestation/forest degradation and removals area. Further, the estimates are based on expert judgement and consultation with experts who have experience with programme implementation in Lao PDR, similar to the approach in the ER-PD development to estimate the ex-ante GHG emissions reduction potential and approval by the Technical Assessment Panel (TAP).

In total, the land-based activities of Outputs 2 and 3 (forestry and agricultural interventions) are expected to occur on an area of 1.63 million hectares within the selected 28 districts (30% of total district area; 5.41 million ha, or 20%, of the total 6-province area of 8.1 million ha). The interventions will be targeted towards deforestation/forest degradation hotspots ([see Programme Area Selection – Section 2.5](#)).

In addition, the GCF enabling environment support (mainly under Output 1) will exert its impact across the entire area of the 6 provinces, not just the 28 districts.

The following Table should be read as follows:

- The implementation of activity 3.1 (implementation of villager forest management) will be implemented on a total forest area of 572,391 ha. From experience to implement this activity, about 75% (429,293 ha) will be in high carbon stock forest and 25% (143,098 ha) on low carbon

³⁰⁴ IPCC (2006, Volume 4, Chapter 4.3: Land Converted to Forest Land) suggests default period of 20 year time interval for forest ecosystems to be established. See also Lao PDR ER-PD, Section 8.3.5, Step 4, available at https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR_ERPD_FinalDraftMay.2018-Clean.pdf

forest stock areas. The high carbon stock areas will be conserved and contribute to a reduction of forest degradation to shifting cultivation land use. The implementation on low carbon stock forest will contribute to restoration and avoidance of deforestation.

- Based on the projection of the Reference Level activity data, the total projected forest degradation area (2020-2027) is 92,827 ha for the in the land use classes (under impact of GCF interventions) and the projected deforestation area is 41,263 ha.
- With the adjustment factor of 2% a total area of 8,586 ha (out of the projected 92,827 ha) will be avoided from forest degradation in the land use classes (MDF/CF/MCB) and 21,465 (out of the 41,263 ha) will be avoided from deforestation.
- The total avoided deforestation and forest degradation area are the multiplied with the emission factors as presented in [Emission Factor section](#).

Table 35: Key GCF programme interventions, linkage to RL activity data and assumptions on effectiveness of interventions

Emissions / removals impact	Activity	GCF Intervention areas incl. co-financiers (ha) ³⁰⁵	Projected degradation / deforestation in RL (ha)	Impact of GCF interventions (land use change matrix land uses)	Factor that reduces deforestation / degradation / increase removals compared to RL	GCF scenario: Change area due to factor reduction (for new land use change matrix) (ha)	Comment / explanatory note
Reduced forest degradation	Activity 3.1. Implementation of village forest management	429,293	92,827	Reduces degradation from MD/CF/MCB ³⁰⁶ to P/B/RV (conversion to NF conservatively excluded)	2%	8,586	Assumes that 75% of intervention occurs on EF, MD, MCB forest area (high-carbon-stock)
Restoration and avoided deforestation		143,098	41,263	Assumes that RV is converted to MD/MCB (natural forest restored)	15%	21,465	Assumes that intervention areas are implemented on RV forest areas and lead to restoration of natural forests
Reduced forest degradation	Activity 3.3. National conservation forest management (NPAs)	763,158	92,827	Reduces degradation from MD/CF/MCB to P/B/RV	2%	15,263	Total targeted high-carbon-stock area is 763,158 ha EF, MD, MCB forest area; total land area is 1.02 million ha
Restoration and avoided deforestation		223,123	41,263	Assumes that RV is converted to MD/MCB (natural forest restored)	15%	33,468	Assumes that intervention areas are implemented on RV forest areas

³⁰⁵ Quantification of the intervention areas is summarized in the Excel file GCF Financial Plan worksheet: Impact of GCF programme.

³⁰⁶ EG land use (high forest carbon stock) is not impacted because reference level degradation and deforestation was very limited in the RL.

Reforestation	Activity 2.1. Promotion of private sector investments in community-based agroforestry	10,000	130,203	Assumes non-forest land conversion to RV/P/B (Plantation)	80%	8,000	Assume that intervention occurs on non-forest land and survival rate of planted forest is 80%
Reduced forest degradation	Activity 2.1-2.3. Promotion of deforestation-free agricultural practices and technologies	60,900	92,827	Reduces the pressure on high-carbon-stock natural forest; Reduces degradation of MD/CF/MCB to P/B/RV	15%	4,568	Assumes that interventions are on RV land or on non-forest land close to high-carbon-stock forests
Reduced deforestation	Activity 2.1-2.3. Promotion of deforestation-free agricultural practices and technologies		129,265	Reduces deforestation of RV/P/B to NF	15%	4,568	Assumes that reduced deforestation occurs on RV land that would be converted to NF in Reference Scenario
Total		1,629,571					

Indirect emission reduction and removals

Beyond the direct forestry and agriculture interventions, indirect GHG benefits from the GCF programme will also occur due to the enabling environment and policy-related interventions (which occur primarily under Output 1), and also due to the strengthened capacities of government and non-government actors.

Such interventions are likely to generate additional GHG benefits in all six provinces and even nationwide. However, the quantification of each enabling environment intervention is challenging, particularly as such interventions are precisely that – enabling. Actual GHG emissions can only materialize when a land-based intervention is indirectly ‘enabled’ by such an intervention.

Considering future uncertainties and the difficulty in attaching adjustment factors to each enabling environment intervention, a simplified – but conservative – approach has been adopted. Same as in the ER-PD, it is estimated that the GCF-supported enabling environment interventions will result in a 10% reduction in the projected deforestation and forest degradation under the Reference Level. Areas already addressed by GCF land-based interventions are excluded from this quantification to avoid double-counting of results.

For forest restoration and reforestation, the same approach is followed, but applying an additional 5% (instead of 10% and same as in the ER-PD) as the effectiveness factor for the enabling environment interventions.

Result activity data of direct and indirect emission reduction and removals

As a result of the direct programme activities implementation and the indirect programme implementation activities, the following land use change matrix was calculated (Table 36). Compared to the activity data for the reference period, over the 9.5-year implementation period the GCF programme will achieve:

- A reduction of deforestation of 38%, equivalent to 34,858 ha.
- A reduction of forest degradation of 13%, equivalent to 19,935 ha.
- An increase of restoration and reforestation of 123% and 11%, respectively – equivalent to 57,000 ha of forest restoration and 14,510 ha reforestation.

Table 36: Projected land use change matrix with the GCF programme intervention for 2020-2029 (ha) (for 6 GCF programme provinces)

hectares		2029				
2020		EG	MD/CF/MCB	DD	P/B/RV	NF
	EG	484,321	171	2	266	332
	MD/CF/MCB	30	3,830,951	58	57,405	25,656
	DD	0	0	17,314	67	90
	P/B/RV	0	98,259	46	2,645,011	112,228
	NF	0	0	0	144,713	706,230

Note: EG: Evergreen Forest; MD: Mixed Deciduous Forest; CF: Coniferous Forest; MCB: Mixed Coniferous and Broadleaved Forest; DD: Dry Dipterocarp Forest; P: Forest Plantation; B: Bamboo; RV: Regenerating Vegetation;

NF: Non-Forest Land. (For the land use classification, see also [Section 1.5. forest sector profile, Table 5 \(Stratification of land use in Lao PDR\)](#)).

Color coding: Grey: Land/Forest remains in the same land classification category; Yellow: Forest degradation; Orange: Deforestation areas; Green: Forest restoration; Blue: Reforestation.

8.2.2 Emission/Removal factors (E/R factors)

For all calculations, the following emission and removal factors were used, fully consistent with the RL methodology (see ER-PD Chapter 8 and Emission and Removal Factor Report³⁰⁷). The emission factors are Tier 3 factors according to the IPCC definition. The following table summarizes the carbon stock and the carbon stock changes for land use changes.

Table 37: Assumed and quantified carbon stocks for forest and non-forest land cover types

Land cover classification code	Land cover classification	Above-ground and below-ground carbon stock (tCO ₂ e)
EG	Evergreen Forest	733.43
MD/CF/MCB	Mixed Deciduous Forest / Coniferous Forest / Mixed Coniferous and Broadleaved Forest	322.89
DD	Dry Dipterocarp Forest	158.33
P/B/RV	Forest Plantation / Bamboo / Regenerating Vegetation	65.78
NF	Non-Forest	18.02

Table 38: E/R factors for land use changes (tCO₂e) for above-ground and below-ground biomass

	EG	MD/CF/MCB	DD	P/B/RV	NF
EG	-	-410.5	-575.1	-667.6	-715.4
MD/CF/MCB	410.5	-	-164.6	-257.1	-304.9
DD	575.1	164.6	-	-92.6	-140.3
P/B/RV	667.6	257.1	92.6	-	-47.8
NF	715.4	304.9	140.3	47.8	-

Note: Legend and color codes apply from Table 22 above. Negative figures indicate GHG emissions; positive figure indicate carbon removal

³⁰⁷ Lao PDR, Department of forestry, March 2018 available at: https://www.forestcarbonpartnership.org/sites/fcp/files/2018/March/Annex%2011%20-%20LaoPDR_ERPD%20EF%20%20Report_0323.pdf

8.2.3 Results of direct and indirect emission reductions and carbon removals

In total, compared to the RL, the GCF programme will achieve emission reductions of 49.83 million tCO₂e and additional carbon removals of 8.05 million tCO₂e over the 2020-2027 programme implementation period over the implementation period of 2020-2027. In total, removals over the 2020-2027 period due to reforestation will increase by 1.73 million tCO₂e (an average of approximately 0.2 million tCO₂e/year) relative to the Reference Level. Increased removals due to restoration activities will amount to 6.3 million tCO₂e (an average of 0.79 million tCO₂e/year). This equals to 7.23 million tCO₂/year. This results in GHG emission reduction of 55% compared the Reference Level and 36% of removals increase compared to the Reference Level.

The direct emission reduction will contribute by 54.5 million tCO₂ (or 6.8 tCO₂ million).

The indirect emission will have a minor contribution to the total GHG benefit estimated at 3.38 million tCO₂ or 0.4 million tCO₂/year. This needs to be considered conservative and is likely to be higher. The nation-wide impact due to enabling environment is not considered in the analysis and is likely to increase the GHG benefit.

Long-term GHG emission reduction: Assuming that the programme will also generate GHG benefit beyond the programme implementation period, a 20 year period is estimated. Over 20 years and assuming the annual direct and indirect GHG emission reductions and carbon removals of 7.23 million tCO₂, 144.7 million tCO₂ will be generated.

8.2.4 GHG methodology for Project 1

The GHG methodology is largely the same for project 1 as for the programme.

Projections of a land use change matrix without the implementation of the GCF project (for 3 provinces)

To ensure full consistency with the RL methodology, first, a 'business as usual' land use change matrix for the GCF programme duration (2020-2029) was estimated by projecting the historical RL activity data (2005-2015), assuming no GCF interventions (Table 39). To make such projections, the average annual land use change for each change event was quantified for the period 2005-2015 and this average was then applied to the period 2020-2029.

Table 39: Projected land use change matrix without the GCF project for 2020-2029 (ha)

		2029				
2020		EG	MD/CF/MCB	DD	P/B/RV	NF
	EG	213,817	114	4	118	191
	MD/CF/MCB	28	2,569,424	99	69,412	25,147
	DD	0	0	17,146	98	120
	P/B/RV	0	28,959	47	1,759,508	106,366
	NF	0	0	0	163,527	657,507

Just as in the calculation of programme impact, a projected land use matrix was estimated for the project area (Table 40).

Table 40: projected land use change matrix with the GCF project for 2020-2029 (ha)

		2029				
2020		EG	MD/CF/MCB	DD	P/B/RV	NF
	EG	213,817	82	3	85	138
	MD/CF/MCB	23	2,569,424	71	32,312	18,106
	DD	0	0	17,146	71	86
	P/B/RV	0	62,362	39	1,759,508	73,911
	NF	0	0	0	142,563	400,401

The results of this land use change matrix were multiplied by the same emission/removal factors (E/R factors) as used in the programme methodology, with one exception. There is one change to the methodology for Project 1. In order to quantify the avoided greenhouse gas emissions and enhanced carbon removals during Project 1 specifically, an additional effectiveness factor is applied to each year (1-4) of the project. Based on experience in similar projects, it is reasonable to assume that project activities, especially those that relate to reducing deforestation, will grow in effectiveness over time as agricultural and forestry sector transformation take place in the country. Therefore, this effectiveness factor reduces the GHG impact during the Project 1 and increases it during Project 3.

9 GCF ADDED VALUE AND EXIT STRATEGY

9.1 Added Value of GCF

Added value through complementary financing of REDD+ implementation and integration into national REDD+ programs

After decades of losing tropical forest and emitting GHGs around the world, the REDD+ mechanism is now approaching implementation at global scale. Lao PDR has committed substantial domestic resources in order to participate in REDD+ and transform its forest sector from a net GHG emission source into a net carbon sink. The country's UNFCCC Technology Needs Assessment (TNA) identifies the forestry sector as one of two mitigation priority sectors (the other being agriculture). Lao PDR has been engaged in the REDD+ readiness process since 2008, demonstrating genuine commitment from the Government and civil society stakeholders. In 2017, the Government completed its NDC and its Forestry Strategy: both build upon the **National REDD+ Strategy (NRS)** to 2025 and **National REDD+ Vision** to 2030 as the official Government documents for guiding REDD+ implementation. The National REDD+ Strategy and Vision aim to improve the quality and extent of forests nationwide to provide economic, social and environmental benefits.

As part of the national REDD+ process, the Government of Lao PDR has designed an Emission Reduction Program (ER-P, 2015-2018) under the Forest Carbon Partnership Facility (FCPF) Carbon Fund. The ER-P was approved by the FCPF at the 18th Carbon Fund meeting in June 2018. The Government of Lao PDR is currently in negotiations regarding the Emission Reduction Purchase Agreement (ERPA). The Government expects to receive up to USD \$42 million of REDD+ results-based payment by 2025.³⁰⁸

In order to receive this results-based financing, early investment in the enabling environment, deforestation-free agriculture and sustainable forest landscape management are required. Already in the design of the financing plan of the ER-P, GCF finance was considered as one of six international financing sources to support the country in the transformation of the land use sector towards low-emission development. GCF finance is critical to complement the financing mix of 6 sources of international, domestic and private sector co-finance sources, critically, to support the needed programme investment to unlock results-based finance from the Carbon Fund (refer to Section 7.2 for a more detailed description of the sources of finance).³⁰⁹

Prompt commencement of the GCF programme in the first half of 2020 onwards is crucial to the success of the programme, as otherwise part of the co-financing could disappear. In addition, delays may jeopardize results-based payments from the World Bank's Forest Carbon Partnership Facility, because the FCPF will only accept emission reductions that were achieved between 2020 and 2024.

The GCF programme is closely aligned with the ER-P and has been designed to deviate from the business-as-usual (BAU) scenario and associated practices identified in the ER-PD. A detailed

³⁰⁸ ER-PD 2018, p. 101

³⁰⁹ ER-PD 2018, p. 24, 83

assessment of the baseline (proximate and underlying drivers of deforestation and forest degradation, [Section 2.1](#)) and past projects ([Section 1.9](#)) was conducted to understand the causes of deforestation and forest degradation and the major challenges and barriers associated with scaling-up policies and measures for REDD+ in Lao PDR. For each of the designed GCF-supported activities, a detailed assessment was undertaken of how the activity addresses key barriers. (Refer to the barrier description tables in Chapter 2 and the activity description tables in Chapter 3 for more information).

Lao PDR is still in the early stage of REDD+ Phase 2³¹⁰ and will need substantial domestic and international public and private investment, including GCF support. No developing country anywhere in the world has ever managed to achieve sustainable management of its forests and landscapes alone. The degree and complexity of the necessary change is high. The need for financial and technical assistance is high. In the NDC, Lao PDR apportioned USD \$12.5 million of domestic resources for the implementation of mitigation and adaptation actions (0.14 % of GDP in 2012). For forestry sector mitigation and adaptation action implementation, the Government is seeking international financing of USD \$220 million.

Lao PDR needs GCF support in the form of a patient long-term commitment, which goes beyond the potential of Lao PDR's existing development partners:

More public financing: The Government of Lao PDR has already committed to contributing a substantial share to close the funding gap for the implementation of the GCF programme. The government is committed to providing EUR 22.7 million to co-finance the implementation.

The GCF activities, specifically Activity 1.1, will devote resources to mobilizing additional public and private domestic finance.

More grants from other development partners: All of Lao PDR's current development partners in the forest sector already support the GCF programme to the fullest extent possible. Germany and Japan have both committed grant financing, and ADB and IFAD have committed a loan package for the implementation of improved agricultural practices and to reduce the pressure on expansion into forested landscapes. The FCPF Carbon Fund is offering Lao PDR results-based payments. Additionally, the FCPF has worked closely with GIZ and the Government of Lao PDR to support the development of the GCF programme by scheduling the ESMF and gender work streams to match the GCF programme's need. FCPF has also provided key data for the development of the GCF programme.

Additional loans for the Government of Lao PDR: Lao PDR is a landlocked least developed country (LLDC). Lao PDR is ranked 138th on the Human Development Index. According to the IMF's recent Debt Sustainability Analysis, *"Lao PDR's risk of external debt distress remains high, suggesting the urgent need to tighten fiscal policy, strengthen public financial management, and*

³¹⁰ REDD+ is commonly divided into three core phases: Phase 1 is known as the 'readiness phase' and focuses on the development of national strategies, action plans, policies and/or measures, as well as capacity building. Phase II is the 'demonstration phase' that focuses on demonstrating and testing policies, measures, strategies and/or action plans that were developed in phase I. Phase III is the 'implementation phase', where countries that have completed the first phases of REDD+ are eligible for results-based finance, based on the measurement, reporting and verification of emission reductions (following the procedures highlighted under the UN-FCCC Warsaw Framework for REDD+). For further information refer to: https://www.greencclimate.fund/documents/20182/194568/GCF_in_Brief_REDD_.pdf/16e4f020-da42-42a2-ad52-d18314822710, https://unredd.net/index.php?view=download&alias=15279-fact-sheet-about-redd&category_slug=fact-sheets&option=com_docman&Itemid=134 and <https://unfccc.int/topics/land-use/resources/warsaw-framework-for-redd-plus>

develop a comprehensive medium-term debt management strategy.” Despite these constraints, the Government is willing to borrow USD 30 million from ADB and USD 20 million from IFAD to complement the GCF programme. The fiscal space for additional borrowing for the GCF programme is exhausted and additional borrowing would be at the expense of future generations and lead to the indebtedness of Lao PDR.

Loans for households: The beneficiary groups - village foresters and subsistence farmers - are among the poorest population groups in Lao PDR, with a high dependence on natural resources and poor access to markets and financial services, and they have insufficient securities for the repayment of loans. Approximately 28% of inhabitants in the programme area live below the poverty line,³¹¹ higher than the national average of 23% (for more information, refer to Chapter 1.1.1 and the ESIA).³¹² Grant financing combined with technical assistance has been determined to be the only appropriate financing instrument for these beneficiary groups. The GCF’s added value will be to support the poorest population groups of the country in the transformation towards more sustainable land use practices.

Co-financing and appropriateness of level of concessionality for GCF funding

As summarized in Section 1.1, Lao PDR is a landlocked least developed country. The risk of external debt distress is high due to external borrowing, and there is an “urgent need” to reform fiscal policies and public financial management.³¹³ Public debt has risen over the last decade, exacerbating declining fiscal income due to falling commodity prices in key sectors (e.g. rubber). The IMF (2018) notes that while there are large lows of foreign direct investments, the non-FDI related trade deficit is high, at nearly 7.6% of GDP in 2017.³¹⁴ According to the World Bank (2018), **public debt reached 61% of GDP in 2017**.³¹⁵ Much of this debt is denominated in foreign currency (80%), and over 85% of external debt is on concessional terms.

Lao PDR is increasingly vulnerable to the risks of sudden exchange rate volatility and, to a lesser extent, to upward movement in external interest rates. Lower concessionality adds to the pressure on debt service, keeping the risk of debt distress high. For instance, interest payments accounted for almost 10% of domestic tax revenue in 2017, compared with 8% in 2016. To remove the risk of debt distress, debt should be anchored to a ratio of 50% of GDP and gradual fiscal consolidation resumed.

Lao PDR faces a significant climate risk and is one of the most climate change-vulnerable countries in the world.³¹⁶ 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

³¹¹ Lao PDR Poverty Line Definition from the 2017 Lao PDR Human Development Report (MPI and UNDP 2017): “The national poverty line is calculated on a nutritional basis. An adult must be able to consume an equivalent of 2,100 kilocalories a day to be above the poverty line. S/he should also have access to some non-food necessities. First, the monetary equivalent of 2,100 kilocalories of food (from a defined basket) is calculated, and then allowances for non-food items are calculated. The sum of these two is the poverty line. Each time a survey is conducted, the poverty line is adjusted for inflation. No new poverty line has been defined for over two decades. Lao PDR follows the World Bank’s method of measuring poverty.”

³¹² Pimhidzai et al. 2014 and UNDP 2009 in MPI and UNDP 2017

³¹³ IMF 2018

³¹⁴ Ibid.

³¹⁵ [World Bank 2018](#)

³¹⁶ University of Notre Dame 2018

the immediate environment. By 2100, mean annual temperatures are projected to increase by 1.4 to 4.3°C.³¹⁷

For the implementation of REDD+ in the six Northern provinces, the Government of Lao PDR has taken out two loans worth USD \$50 million from ADB and IFAD. These projects focus on the agricultural sector.

In the context of the GCF programme, most support is devoted to non-revenue-generating institutional strengthening and forest sector development, where sustainable revenues occur over much longer time horizons than in agriculture (see the Financial and Economic Analysis). Considering this and the debt situation in Lao PDR, GCF grant finance is considered most appropriate. The GCF grant is also justified by the fact that key beneficiary groups are poor households in rural settings, many of whom belong to non-Tai-Lao ethnic groups (approximately 60% on average, although there is substantial variation in each province; refer to the ESIA for more detailed information).³¹⁸

Added value through broad stakeholder engagement and inclusive design

Effective stakeholder engagement is a key element to ensure social sustainability. **Local empowerment through REDD+** promoted by the GCF programme will serve as the main motivation for active engagement and participation of all key stakeholders. Improved knowledge levels and capacities of villagers on REDD+ and sustainable land management obtained through the programme will ensure that villagers continue the adopted management practices beyond the programme lifetime. Activities have been designed in a way that take into account differentiated contexts, interests and priorities, informed by stakeholder consultations at the national, provincial, district, *kumban* and village levels. The programme design has been informed by a large number, and a broad range, of stakeholder consultations, as summarized in Chapter 13.

The programme applies an innovative approach that aims to empower local villagers, including women and members of different ethnic groups, by strengthening their capacities on REDD+ and sustainable land use management, and supports them not only in planning but also in the implementation, monitoring and enforcement of activities. The programme will undertake proactive measures to ensure inclusion of the priorities of all village members and equitable sharing of ensuing programme benefits.

The sustained engagement of stakeholders throughout implementation will provide ongoing feedback to programme management, ensure activities are targeted to local contexts and diverse perspectives, and support ongoing capacity building – all contributing to the long-term sustainability of the programme.

Added value through social sustainability

Social inclusion is a cross-cutting theme within the programme's Outputs, Activities and Actions. The programme aims to promote an inclusive approach, ensuring beneficiaries from diverse ethnic groups and marginalized villages are included within the programme. Specific measures are included that target their participation and promote their empowerment (refer to the tables within Chapter 3 and the ESMP for more detailed information). By promoting an inclusive approach, the programme will create ownership within villages, encouraging diverse stakeholders

³¹⁷ World Bank 2011

³¹⁸ Lao PDR Population and Housing Census 2015

to continue to support activities after programme-end, and to increase awareness of climate change and climate-resilience. Social inclusion measures, such as including trainers from diverse socio-cultural backgrounds, will improve information dissemination to diverse villages and ethnic groups on climate change and REDD+.

Promoting gender equality within the context of REDD+

The programme recognizes that women are vital stakeholders in managing and using natural resources and they will need to play an active role in implementing v interventions. The programme proactively seeks to ensure meaningful participation of women, taking into account the specific constraints and barriers they face. For instance, training sessions targeted at women will be designed and organized at times and in locations that women can easily access; furthermore, the programme will use tools and methods that are mindful of different literacy levels and language barriers. Furthermore, awareness-raising and gender sensitization activities will be organized at the village level to facilitate enhanced participation of women (for more detailed information on specific measures, refer to the Gender Action Plan).

Environmental sustainability

In addition to supporting REDD+, the programme will generate substantial additional environmental benefits. Examples include, among others:

- Reduced sedimentation and soil erosion
- Enhanced biodiversity
- Improved conservation in protected areas
- Reduced land degradation
- Improved watershed planning and management
- Strengthened ecosystem resilience to climate change through improved land management (e.g. restoring vegetative cover, restoring forest health and forest regeneration/ restoration, improving watershed management, etc.)
- Strengthened community resilience to climate change (forest restoration and re-vegetation can reduce erosion and flooding, landslides; diversification of income generation strategies, improved extension will also provide information on climate change adaptation, etc.)

Such benefits are summarized in the Activity tables in Chapter 3 in greater detail, in the GHG mitigation assessment and in the Economic Analysis.

9.2 Exit strategy

Financial exit strategy

The entire approach is designed around the following exit strategy elements. GCF grant financing will:

- **Enable access to REDD+ results-based payments:** Close the initial structural funding gap for transforming the forest sector through the provision of GCF grant finance and deliver emission reduction results that enable the country to access REDD+ results-based payments.
- **Mobilize national and international sustainable forest sector finance:** With the GCF grant finance, the structural funding gap will be closed by unlocking and increasing additional national and international financing streams for the forest and agricultural sectors. Action 1.6.1

is specifically devoted to the mobilization of an array of forest sector financing options, including existing and new ones to be introduced and tested.

- **Attract private sector investment:** The activities of the programme are designed to facilitate greater private sector investment into the sector. The Activities specifically devoted to private sector development (Activities 2.1 and 2.2) will mobilize new and additional investment. These activities will include actions to attract investment from international commodity buyers that have an interest in securing their supply chain while increasing its environmental sustainability (e.g. similar to Starbucks in Indonesia).
- **Support the strengthening of financial institutions to act as the REDD+ Funding Window:** The Accredited Entity and the Government of Lao PDR do not intend to create a new financial institution but, rather, will leverage the expertise and track record of an existing institution. The programme will support and strengthen the capacities of two **national financial institutions**: the Environmental Protection Fund (EPF) and the Forest and Forest Resource Development Fund (FFRDF). They will be enabled to create an interim **REDD+ Funding Window** and will be able to manage and disburse domestic and international sources of finance (including FCPF results-based finance), both for the GCF programme specifically and for broader sectoral needs. The programme will channel GCF grant finance (in a tranching, performance-based manner) through the EPF and the FFRDF, accompanied by capacity development support, that will disburse funds to participating villages and stakeholders for implementing SFM, FLR and deforestation-free agriculture (Action 1.6.2 is specifically devoted to this, as well as Activities under Outputs 2 and 3). The Government commits to progressively increasing its contributions to the REDD+ Funding Window, thereby replacing the GCF grant financing. The Government's contributions will come from different sources, which can be structured into the following categories:
 - **Public budget:** this includes the provision of financial and in-kind resources from the public budget of Lao PDR to the REDD+ Window, beginning in year 1 of the GCF programme. The GCF programme's interventions are expected to increase tax returns as a co-benefit (agriculture, commercial forestry, mining and hydropower). These revenue sources will be monitored using financial reports of the EPF and FFRDF.
 - **Fees and other revenues:** the FFRDF is already legally enabled to receive payments from different forest sector sources. The GCF programme will expand these revenue streams by increasing the capacity of FFRDF to collect payments and demonstrating the value of payments to the Government of Lao PDR.
 - **Results-based payments:** The GCF programme will help to unlock FCPF Carbon Fund payments of approximately USD 42 million in the first accounting period (anticipated mid-term payment in 2023 and final payment in 2025). The RBPs will be channeled through the REDD+ Funding Window. If successful, the Government commits that approximately 90-93% of the payments to the REDD+ Funding Window will be used as a permanent endowment to the Fund, generating interest returns. This follows similar benefit sharing plans in other countries. The same will apply to other REDD+ compensation payments. Exact amounts and mechanisms for distributing payments will be based on ongoing discussions between the Government of Lao PDR and FCPF. However, it is expected that payments will flow directly to the EPF, who

will then channel it to communities in order to implement similar activities. Allocation of grants is envisioned to mirror processes used by the ICBF project.

By the end of the programme (i.e. by the end of year 8), a progressive injection of newly-catalyzed finance from taxes, timber revenues, fees and results-based payments is expected to replace (and surpass) the GCF funding. A transition to sustainable financing, entirely independent of the GCF, will have been successfully achieved. To support this transformation process, a specific Action (1.6.1) forms an integral part of the programme design.

Exit through complementing the Government's engagement with REDD+ and alignment with national policies and development plans

The GCF programme has been developed through extensive consultations and inputs with relevant representatives from a broad spectrum of ministries and departments (ranging from national to district level) to ensure ownership of the proposed programme (and the associated ER-Program). The programme is closely aligned with, and explicitly supportive of, Government policies and plans ([see Sections 1.7 and 1.8](#)).

By aligning the programme with key national climate policies, priorities and commitments, including Lao PDR's NDC, the 8th National SEDP, Vision 2020 and the ER-PD, the chances of continuity of impacts and activities after the GCF investment ends are very high. Improving natural resource management, adapting to and mitigating climate change, and enhancing livelihoods of local villages are explicit goals of Lao PDR's political leadership. As such, the Government of Lao PDR is a strong proponent of the programme's interventions and continuity. [Activity 1.2 \(Output 1\)](#), specifically, focuses on the integration of REDD+ into the national-, provincial- and district-level development plans and budgeting processes beyond the programme lifetime.

Exit through individual and institutional capacity building

The long-term sustainability of programme interventions is further enhanced by the programme's focus on **individual and institutional capacity building**, both of the implementation entities and the key beneficiaries. Measures focused on **institutional strengthening at the provincial, district and local levels** form an essential element of the individual activities, given local capacities and the general low level of awareness of sustainable practices. Government entities and the rural population (agents of deforestation and forest degradation) will have improved skills and awareness of sustainable land use management and REDD+, and thus it is likely they will continue to support such measures after programme completion. Such interventions will further enhance the sense of ownership of provincial and district governments during the programme life-cycle, as well as the ongoing implementation of such activities after programme closure.

Exit through alternative livelihood opportunities and private sector mobilization

Additional income and livelihood opportunities will create a cascading effect and maintain the low-GHG/REDD+ development trajectory triggered by the programme. The programme's financial and economic analysis demonstrates that the proposed interventions are financially viable in the long-run, with positive net present values as well as many other social, economic and environmental co-benefits. Measures focusing on strengthening REDD+ business models, FLR

and deforestation-free value chains will help leverage private sector resources for REDD+ and, ultimately, low-GHG development. Private sector engagement in sustainable activities prior to the programme has been weak and limited to a few leaders. Programme activities have been discussed extensively with private and public sector actors to strengthen the investment climate and support sustainable investments. The creation of dialogue platforms and incentive mechanisms, and value chain strengthening, will contribute to leveraging new resources, and building the capacities of public and private sector actors, as well as villagers.

9.3 Scaling-up and replication potential

There is substantial potential for scaling-up and replicating the programme and its activities. The programme will be implemented in 6 provinces in Lao PDR (out of 17 provinces and 1 prefecture), covering 28 out of 51 districts. Thus, within the country, the programme could be replicated in other districts and provinces. The integration of REDD+ into national and provincial development planning will contribute to the mainstreaming, and hence intrinsic scaling-up and replication, of the GCF programme interventions.

At the national level, capacities will be built in the main forest funds (the EPF and FFRDF), which will facilitate the replication and scale-up of the programme as well as the broader distribution of REDD+ finance beyond the GCF programme target groups as the funds' capacities are built and they become fully operational and capable of managing funds for REDD+. In addition, new finance streams for forests will be mobilized: this will serve as a model for the rest of the country, providing new financial streams for forests nationally.

Internationally, the programme will provide key lessons learned for supporting private sector development, the adoption of good agricultural practices and sustainable forest management. A similar upland landscape exists in neighboring Myanmar, Thailand and Vietnam, and such lessons-learned and key activities/actions can be transferred to these countries as well as other similar regions within Southeast Asia.

10 PROGRAMME RISK AND MITIGATION APPROACHES

The programme has been categorized as a GCF Category B programmes. Category B programmes are defined as: “activities with potential mild adverse environmental and/or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.” For GIZ, Category B equals a project with “potentially rare or locally limited occurrence, largely reversible consequences, easy to manage.” For both organizations, the emphasis is on risks that are “site specific,” few in number and offer ease of management.

The following tables provide an overview of the main technical/operational, social and environmental, and financial risks associated with the programme. They are also presented at the Activity level within Chapter 3. Avoidance and/or mitigation measures are presented. For more detailed information, refer to the ER-PD (2018) and the programme’s environmental and social impact assessment (ESIA) and environmental and social management plan (ESMP).

Risk Factors and Mitigation Measures			
Selected Risk Factor 1			
Description	Risk category	Level of impact	Probability of risk occurring
High staff turnover and limited numbers of government extension staff impedes retention of skills and knowledge in the relevant sectors/institutions	Technical and operational Technical and operational	Low (<5% of project value) Low (<5% of project value)	Medium Medium
Mitigation Measure(s)			
<ul style="list-style-type: none"> Emphasis on documentation and dissemination (as further described in the Activity Descriptions within Chapter 3 and within the programme’s knowledge management framework), to facilitate knowledge retention, capacity building and knowledge exchange. This includes the development of clear and user-friendly guidelines and protocols, the documentation of trainings/workshops, and strengthening knowledge management systems. Continuous engagement with relevant authorities at the national, province and district level will further help strengthen knowledge exchange and maintain organizational knowledge. National and provincial PMUs will further help to sustain this exchange. Training of several staff members in each department/province/district, etc. (to mitigate the risk of any one of them leaving) and training diverse stakeholders at all levels. 			
Selected Risk Factor 2			
Description	Risk category	Level of impact	Probability of risk occurring
Delay in programme start may not match with socio-economic development planning processes for the 9 th SEDP planning period from 2021-2025.	Technical and operational Technical and operational	Low (<5% of project value) Low (<5% of project value)	High High
Mitigation Measure(s)			

- Well-planned GCF programme timeline will facilitate a quick start on pressing topics (notably, SEDP integration). The respective REDD+ Task Forces, including representatives from MPI and provincial and district agencies, are aware of the proposed activities, and the related timing challenges. PPMUs will prioritize the implementation of Activity 1.1 and key cut-off dates are already noted. The planning for the 9th Socio-Economic Development Plan, at the national, provincial and district level needs to be completed prior to approximately 2020.
- PPMUs will provide budgeting and planning support to ensure timely fund disbursement to the responsible authorities (e.g. MPI and the national REDD+ Task Force and REDD+ Office at the national level, and the provincial REDD+ Office and Task Force at the provincial and district level).

Selected Risk Factor 3

Description	Risk category	Level of impact	Probability of risk occurring
Sub-optimal cross-sectoral coordination and potential conflicting interests may limit the adoption and effectiveness of REDD+ and related measures.	Technical and operational Technical and operational	Medium (5.1-20% of project value) Medium (5.1-20% of project value)	LowLow

Mitigation Measure(s)

- Improved cross-sectoral planning and dialogue between key actors (including MPI, MAF, MONRE, PONRE, PAFO, POFI, etc.; see Chapter 1.7.1 for a list of key institutions), as a cross-cutting measure throughout various programme activities (see below)
- Results-based payments will provide an additional incentive for the Government to maintain strong ownership over the GCF programme and commitments to achieving the programme's results.
- Improved integration of REDD+ in SEDPs at the national, provincial and district level will secure Government budget for REDD+ activities and ensure ownership and commitments to REDD+ across sectors, at all levels (national, provincial, district).
- Improved planning and monitoring of forest areas, including areas with approved timber harvesting permits, will increase accountability and enforcement, ultimately limiting over-harvesting and unsustainable forest use.
- Improved land use planning (including demarcation of land, issuance of GIS maps, participatory land use planning with local villages, among other Actions described in Activity 1.4) will improve monitoring and enforcement of land use based on plans. Investments in data and knowledge management (e.g. servers and information systems), will ensure land use plans are securely stored and available to different agencies and villages to strengthen planning, implementation, monitoring and enforcement (see Chapter 5 for additional information).
- The GCF programme builds on strengthened relationships and cross-sectoral planning established through the REDD+ Task Force and promotes continuous dialogue and ongoing capacity building and coordination. It continues to strengthen multi-stakeholder ownership of REDD+ based on donor projects/programmes, as well as the development of the ER-PD and PRAPs during recent years.
- Continuous engagement with relevant stakeholders within the government contributes to strengthen ownership by relevant departments at all levels.

Selected Risk Factor 4

Description	Risk category	Level of impact	Probability of risk occurring
--------------------	----------------------	------------------------	--------------------------------------

Weak rule of law and corruption ³¹⁹	Technical and operational Technical and operational	Low (<5% of project value) Low (<5% of project value)	LowLow
Mitigation Measure(s)			
<ul style="list-style-type: none"> Law enforcement strengthened through programme activities (e.g. development of standard operating procedures for forest law enforcement, training on best practices for inspection, training on equipment [including GIS and technology to support law enforcement], among others described in Activity 1.4) Activities focusing on strengthening the enabling environment for REDD+ (Output 1) will target activities to improve forest governance across different levels of Government, and to work with non-government actors to open up space for dialogue and participation. Transparent reporting system clarified/established that is effective, accessible and culturally appropriate to permit reporting at village-, <i>kumban</i>-, district-, province- and national-level. Improved awareness of forest regulations and the importance of forests for livelihoods, climate change (mitigation and adaptation) and ecosystem function (Government authorities at all levels, and other non-governmental stakeholders). Improved land use planning, documentation of land use and monitoring of land use will improve the adoption of sustainable agricultural and forestry practices. 			
Selected Risk Factor 5			
Description	Risk category	Level of impact	Probability of risk occurring
Crop and livestock price volatility negatively affect farm profitability and household incomes, causing farmers to change crops/land use practices	Technical and operational Technical and operational	Low (<5% of project value) Low (<5% of project value)	MediumMedium
Mitigation Measure(s)			
<ul style="list-style-type: none"> Capacity building of farmers on market research Training-of-trainers (farmers) on marketing and safeguarding against price volatility (e.g. crop diversification). Strengthening value chain actors on terms and conditions and forward contracting, including enabling farmers to negotiate better terms and conditions for deforestation-free crops/ products with market traders and middle-men. Identification of supported activities (informed by extensive stakeholder consultations) and implementation of the GCF programme will engage villagers in the design of interventions (e.g. in land use plans, flexible menu of options for good agricultural practices [Annex 3],). By exposing farmers to information related to market dynamics/ information, and potential risks and opportunities, the programme will promote longer-term perspectives in farming, and enable villagers to consider different production strategies and promote diverse income streams can be ensured for different time spans (e.g. tree plantations as long-term bank accounts).³²⁰ If interventions are implemented properly, high market demand and prices will present a positive opportunity for sustainable agricultural practices.³²¹ 			

³¹⁹ ER-PD 2018, page 160

³²⁰ ER-PD 2018

³²¹ Ibid.

Selected Risk Factor 6			
Description	Risk category	Level of impact	Probability of risk occurring
Private sector actors do not want to participate in the programme and prefer to continue using BAU practices.	Technical and operational Technical and operational	Medium (5.1-20% of project value) Medium (5.1-20% of project value)	LowLow
Mitigation Measure(s)			
<ul style="list-style-type: none"> Extensive pre-consultations with leading private sector actors during the GCF programme development stage to gauge their interest and specific needs. For instance, leading forestry companies with an interest in sustainability, including Burapha Agroforestry Ltd., expressed their interest in scaling-up sustainable activities with the private sector (e.g. in scaling-up community-agroforestry in degraded production forests – where Burapha is one of the first companies working with the Lao Government to pilot such activities in Sayabouri). Similarly, in the agricultural sector, products such as cardamom and galangal, which are compatible with agroforestry systems and sustainable agriculture, are gaining in market relevance as foreign demand for the products grows. Agriculture value chain actors such as rice millers and traders indicated their interest in training and capacity building on best practices (e.g. good milling practices) and financial literacy (business analysis and planning, accounting and bookkeeping), as well as ‘matchmaking’ with other value chain actors (farmers, local and international buyers etc.). The district level Multi-Stakeholder Platforms should thus be of key interest to private sector stakeholders. Targeting leading companies with reputations for implementing sustainable forestry and agricultural projects in the country to serve as early movers/leaders, while also working with companies interested in adopting sustainable practices (and improved dialogue between both groups through the dialogue platform to be established under Activities 2.2). Enabling environment activities focus on strengthening the investment climate and addressing key barriers for the private sector to invest in REDD+ and sustainable land use activities, including improving access to land and improving investment support to private sector actors and links to district and village groups. Public-private dialogue will improve coordination and communication between government officials and private sector actors, raising awareness of key gaps and barriers and improving actions to address and overcome these challenges. Engagement of private sector via Farmer Field Schools (FFSs) and deployment of GCF-supported agribusiness specialist staff time to engage with private sector to understand needs and added value to participants. 			
Selected Risk Factor 7			
Description	Risk category	Level of impact	Probability of risk occurring
FRDF capacity building progress is too slow, and FRDF is not capable of managing REDD+ results-based finance within the programme timeframe	Technical and operational Technical and operational	Low (<5% of project value) Low (<5% of project value)	MediumMedium
Mitigation Measure(s)			
<ul style="list-style-type: none"> Dedicated support to FFRDF by the programme within Action 1.1.2, including the provision of support for the FFRDF to redesign its governance structure, standard operating procedures, manuals and guidance documents that meet international fiduciary and safeguard standards. FFRDF staff 			

will be provided with ongoing training and capacity development to build needed skills and address capacity gaps, among other activities described in Activity 1.1.

- Utilization of EPF as a back-up strategy. The programme has been designed to initially use the EPF to channel the necessary resources, as its capacities and accountability systems are already in place (see capacity assessment in Chapter 5). It is intended that the FFRDF will eventually take over from the EPF once capacities and systems are in place; however, if this is not possible the programme will continue to channel resources through the EPF.

Selected Risk Factor 8

Description	Risk category	Level of impact	Probability of risk occurring
Plantations with non-native species can lead to biodiversity risks (e.g. via invasion) if not appropriately planned, managed or monitored (related to Activity 2.1)	Social and environmental Social and environmental	Low (<5% of project value) Low (<5% of project value)	LowLow

Mitigation Measure(s)

- Only use of approved species that are non-invasive (locally-adapted species with a history of implementation and demonstrated proof of low-environmental risk).
- Planning conducted based on the principle of site-species matching by forestry experts, wherein forestry plans are developed with technical support to local communities, and revised/approved by forestry experts (including revising plans and conducting field visits).
- Heterogeneous landscape planning will ensure that plantations occur on non-forested land (taking into account site criteria identified in the forestry law and land law are taken into consideration, where tree plantations for timber production may only be established on production forest areas classified as 'degraded' or 'bare' or 'other land types'³²²), ensuring that no primary natural forest or permanent agricultural land is utilized for plantation activities. In addition, the programme will apply international best practices for site selection, and will ensure that selected village-based agroforestry and forest plantation sites are: i) not included in protected areas, iii) areas where at least 80% of the lot area is acceptable for industrial tree plantation establishment (e.g. in areas with slopes less than 35°, in degraded or barren forest, outside of riparian areas, high conservation value forests or sensitive forest areas, as well as Government restricted areas, village protection forests or other conservation areas), iv) where there are no permanent settlements or permanent agricultural plots within the borders, within 50m of sites of cultural or archaeological value, areas planned for tourism.
- On land used for plantations, approx. 70% will be locally adapted industrial trees, 20% will be a buffer zone and at least 10% of planted trees will be native tree species (promoting forest restoration).
- Ongoing monitoring will help ensure that any unforeseen negative impacts are identified and necessary measures are adapted as necessary.

Selected Risk Factor 9

Description	Risk category	Level of impact	Probability of risk occurring
-------------	---------------	-----------------	-------------------------------

³²² "Plantations for timber may also be developed on land from outside of the Forest Land area assigned to MAF; i.e. other Land Types that are allocated in accordance with the legislation for leases and concessions." (Hilary and Alounsavath 2015, p. 141). Plantations must receive approval prior to establishment.

Extreme climatic events, pests and diseases may limit programme effectiveness and damage programme investments in sustainable agriculture and forest management	Social and environmental Social and environmental	Medium (5.1-20% of project value) Medium (5.1-20% of project value)	LowLow
Mitigation Measure(s)			
<ul style="list-style-type: none"> Regular monitoring conducted within the framework of the programme will lead to early detection, follow-up and the identification of suitable management practices/adjustments as necessary. Programme team will include a staff member dedicated to monitoring the impact of the programme and implementation of the ESMP. Inclusion of drought-resilient crops and varieties in Output 2. Capacity building and training on sustainable water harvesting techniques, risk mitigation processes (including good agricultural practices with strong climate change adaptation co-benefits that can reduce risk). For example, reducing shifting cultivation and increasing vegetative cover in upland areas can 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 (Activity 2.1) Land use planning will help improve land use practices, including reducing exposure to risk (e.g. identifying high-risk areas for landslides, flooding, etc.), and will support the planning, adoption and monitoring of sustainable land use processes that can help reduce risk (see above). The timing of programme activities will be conducted considering seasonal conditions, climate, etc. (e.g. tree planting season in dry season). 			
Selected Risk Factor 10			
Description	Risk category	Level of impact	Probability of risk occurring
Programme activities will be implemented within and adjacent to high conservation value areas (e.g. National Protected Areas/Conservation Forests); if sustainable practices are not followed, they could have a negative impact on biodiversity	Social and environmental Social and environmental	Low (<5% of project value) Low (<5% of project value)	LowLow
Mitigation Measure(s)			
<ul style="list-style-type: none"> The programme is expected to have positive impacts on protected areas: e.g. improved livelihoods for villages within or adjacent to NPAs, increased conservation of natural habitat for biodiversity, increased forest restoration/rehabilitation, increased protection of watersheds, streams and water sources, improved participation in forest management, improved capacities for forest management, monitoring and enforcement, and improved transparency in decision-making, among others. Supported activities will be based on approved management plans, revised, validated and approved by diverse stakeholders, and developed based on a participatory process. General land use planning-related mitigation actions are described above in Risk 2. Improved monitoring and law enforcement will help ensure that negative impacts are avoided or detected and addressed quickly. Improved awareness of local villages on regulations and the importance of forests, wildlife and biodiversity. 			
Selected Risk Factor 11			

Description	Risk category	Level of impact	Probability of risk occurring
Participating households do not comply with land use plans that are developed. Ethnic groups and poor households could be especially affected, as they are the most likely to experience economic dislocation due to their reliance on the land	Social and environmental Social and environmental	Medium (5.1-20% of project value) Medium (5.1-20% of project value)	Medium Medium
Mitigation Measure(s)			
<ul style="list-style-type: none"> Participation in the programme's activities are voluntary and based on the principle of FPIC. Grievance mechanism will be clearly communicated in culturally appropriate ways, and villagers are able to access the mechanism to file any grievance. Land use plans are developed using participatory stakeholder processes and will be developed based on the priorities and interests of each village. LUP processes will take into account areas of high cultural value. Trainers will be trained on social inclusion and how to target the inclusion of marginalized or vulnerable households. Awareness will be raised on current practices and their impacts, as well as sustainable land use management, REDD+ and climate change. Incentives will be provided to help overcome opportunity costs and support the transition to sustainable land use (e.g. farmer field schools, inputs to support the implementation of land use activities, identification and strengthening of additional financial sources for future investments in sustainable land use). Capacity building activities will target highly vulnerable households. Capacity building and supported investments in monitoring, knowledge dissemination, and training/capacity building and awareness-raising will help improve compliance and adoption. Extension and training materials will include visuals such as videos, pictures and other tools to communicate content, including translations to key languages (as necessary). Stakeholder consultations on proposed regulatory changes, including consultations targeting vulnerable groups and expert consultations, will help to sustain community interest and commitment to the programme through active participation and compliance, and mitigate the potential risk of economic displacement and non-compliance (e.g. Activity 1.3). Strengthened capacities and technical support for ongoing monitoring will assess potential trade-offs or unforeseen impacts and will identify the need for potential adjustments. 			
Selected Risk Factor 12			
Description	Risk category	Level of impact	Probability of risk occurring
Inadequate inclusion of ethnic groups, particularly marginalized or vulnerable groups	Social and environmental Social and environmental	Medium (5.1-20% of project value) Medium (5.1-20% of project value)	Medium Medium
Mitigation Measure(s)			
<ul style="list-style-type: none"> Proactive inclusion of diverse ethnic groups, including marginalized groups, in the implementation of the programme. Increased participation, particularly of ethnic groups, in sustainable forest management, land use planning and village development activities will be ensured through enhanced support from extension services and ongoing technical support. There are important aspects of 			

the planned activities that lead to enhanced recognition and rights of villages in planning, managing, protecting, using and benefiting from village forest resources (e.g. village forests within national forest land).³²³

- The GCF programme's Stakeholder Engagement Plan and safeguard measures will ensure participation of ethnic groups and other marginalized groups through the inclusion cross-cutting measures that target their engagement, ensure meaningful participation and consultation with communities, ensure responsive monitoring of social inclusion and gender, and ensure that diverse communities and beneficiaries are able to benefit from the programme. They will further provide a framework to avoid, mitigate and/or manage any unintended adverse impacts.
- The programme's grievance mechanism will be clearly communicated in culturally appropriate ways, and villagers will be able to access the mechanism to file any grievance.
- Development of agricultural and forestry value chains will enable villagers to produce and market improved products, addressing common concerns highlighted during programme development related to the lack of alternative livelihoods, especially for marginalized and vulnerable groups.
- Trainers and PMU staff will be trained on social inclusion and culturally appropriate training practices.
- FFSs and trainings will increase knowledge, skills and participation among rural villages, including ethnic groups and marginalized groups.
- Trainings (including FFSs and other workshops), and training/ informational materials will be available in other common languages as necessary (translation support also available). Materials will also be presented in ways to reach diverse audiences (e.g. using photos and diagrams to reach illiterate households, etc.).

Selected Risk Factor 13

Description	Risk category	Level of impact	Probability of risk occurring
Inadequate inclusion of women in the programme	Social and environmental Social and environmental	Low (<5% of project value) Low (<5% of project value)	LowLow

Mitigation Measure(s)

- The programme aims for balanced participation of women, and includes measures targeted to strengthen gender equality across all Outputs and Activities.
- Gender is seen as a cross-cutting theme within the programme, and the Gender Action Plan identifies concrete activities and indicators for the programme across Outputs and Activities, as well as roles and responsibilities and the timeline for the implementation of these measures. The GAP has been fully integrated into the programme log-frame and timeline, and ensures the programme not only promotes gender equality but also gender-responsive monitoring and management. For more information, please refer to the ESMP and the GAP.

Selected Risk Factor 14

Description	Risk category	Level of impact	Probability of risk occurring
Lack of interest from financial institutions due to continued perception that sustainable agribusiness is not a priority investment sector.	Social and environmental	Low (<5% of project value) Low	LowLow

³²³ ER-PD 2018

	mentalSo- cial and en- vironmen- tal	(<5% of pro- ject value)	
Mitigation Measure(s)			
<ul style="list-style-type: none"> EPF matching grant or risk absorption mechanism will greatly reduce financial institutions risk. Several financial institutions will be approached for cooperation on sustainable finance in order to identify the most appropriate partner. Financial institutions in Lao PDR have engaged with development finance institutions to expand lending to a number of segments that were previously perceived as high risk. 			
Selected Risk Factor 15			
Description	Risk category	Level of impact	Probability of risk occurring
Parts of the programme area is contaminated with Unexploded Ordnances (UXO), which is relevant for agriculture and forestry related (Outputs 2 & 3)	Technical and operational Technical and operational	Low (<5% of project value) Low (<5% of project value)	LowLow
Mitigation Measure(s)			
<p>During the Second Indochina war (1964-1975), more than 2 million tons of bombs were dropped on Lao PDR, making it one of the most heavily bombed countries in the world. Hence, large areas of Laos are contaminated with UXO and affect in certain areas the socio-economic development of the country, preventing access to agricultural and forest land and increasing the costs, through land clearance, of all development projects.</p> <p>Also, within the GCF programme Area, sizeable tracts of land are contaminated in Houaphan and Luang Prabang, while the provinces of Sayabouri, Bokeo, Oudomxay and Luang Namtha are just slightly affected.</p> <p>Since certain agriculture and forest related activities (e.g. rice cultivation, ploughing, tree planting, timber harvesting operations) might cause accidents with UXO, the following measures should/can take place at all sides to avoid under any circumstances such incidents:</p> <ul style="list-style-type: none"> Impact assessments based on historical bombing data as well as on the Information Management System for Mine Action (IMSMA324). <p>If needed:</p> <ul style="list-style-type: none"> Clearance can be initiated through the Government's National Unexploded Ordnance Programme (UXO Lao) 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 			
Other Potential Risks on the Horizon			

³²⁴ The Information Management System for Mine Action (IMSMA) was developed to help make mine action safer, faster, more effective and efficient. It is also implemented in Laos and provides computerised decision support tools (maps), which are able to support the coordination and management of operational activities in the landscape (<http://www.nra.gov.la/imsmdatabase.html>).

- Prompt commencement in the first half of 2020 onwards is crucial to the success of the programme, as otherwise part of the co-financing could disappear. In addition, delays may jeopardize results-based payments from the Forest Carbon Partnership Facility, because the FCPF will only accept emission reductions that were achieved between 2020 and 2024.
- Climate change may lead to the increased occurrence and/or severity of extreme climatic events. The programme's investments will as a co-benefit strengthen the resilience of ecosystems by improving forest cover, supporting ecosystem restoration and helping to strengthen the holistic management of watersheds.
- Government expectations for results-based payments may be high and there is the potential risk that their expectations might not be met. However, ongoing REDD+ support has tried to provide realistic information and to keep expectations in check. The proposed GCF programme will help Lao PDR to overcome key barriers for REDD+ and ultimately increase the likelihood of achieving results to unlock payments.
- Lao PDR is currently in the process of negotiating a FLEGT- voluntary partnership agreement (VPA) with the EU. If successful, the VPA will likely increase interest of the private sector and government to support REDD+ and sustainable forest sector activities. If the VPA negotiations were to be unsuccessful it could reduce government and private sector incentives for sustainable forest-sector activities. The GCF programme will support improved transparency, monitoring and planning in the forest sector, and provides numerous synergies with FLEGT and the VPA (e.g. improved forest monitoring, land use planning, improved forest law enforcement, implementation support for sustainable management of forest resources, etc.)
- Apart from programme-induced changes in access to or use of resources; (see ESIA, PS5: Land acquisition and involuntary resettlement) throughout the programme area a certain external risk in terms of concessions and accomplished re-settlement exist.

Forest loss has had much to do with interest in land-based investments, increasing over the years. A survey on national concessions and leases indicated that in 2012, over 2,640 cases of active leases and concessions were issued covering 1.1 million ha of land, or almost 5% of the country's territory³²⁵. As of 2018, an internationally supported initiative of the Government to inventory land-based concessions anecdotally reports that concessions for the mineral sector exceed 10 million hectares³²⁶ across the country³²⁷. According to the 2012 report, of the total area under concessions and leases, over 80 % were under foreign investments, with Vietnam, China, and Thailand as the main investors. Approximately 30 % of the land under concessions or leased are considered to have been previously forest. Land based investments in the Northern region accounted for 38% of the national share, in area terms. Related to such land concessions and leases, social and environmental concerns, including negative impacts on rural community livelihoods by replacing small-holders' agricultural areas and access to forests, have risen. In recent years, the GoL embarked on a number of reforms. For instance, in 2012, in response to the concerns raised across the country,

³²⁵ Schönweger et al. 2012. Excluding cases of mining exploration (over 1 million additional ha) and use agreements for hydropower generation, logging, and contract farming, which were beyond the scope of the inventory.

³²⁶ It is not known whether or not this figure includes underground extraction mining concessions (i.e. as opposed to open-pit) which are not a direct threat or driver of deforestation or forest degradation.

³²⁷ Comprehensive land concession data that has been produced through the Land Concession Inventory (with funding from SDC) since 2014, and is becoming available (as of May 2018). The concession inventory was carried out jointly with the Ministry of Agriculture and Forestry, the Ministry of Planning and Investment, the Ministry of Energy and Mines and the Ministry of Natural Resources and Environment, and covers the whole country for agriculture, forestry, mining and hydropower sectors, including detailed maps of areas granted for concession and actual areas used, and associated data (concession company, individuals responsible, financing, dates of approval, etc.). It was carried out with support of the offices of the Provincial Governors and done at both provincial and district levels. The outcome of the concession inventory has been presented by the MONRE Minister to the Central Committee and the Prime Minister. The data is in a state now where it can be used, pending a formal agreement for dissemination between ministries.

the GoL issued a suspension on granting of new concessions for mining and rubber investments, which remains in effect today.

The allocation and compliance monitoring against concession/lease plans have been subject to major conflicts, nationally. The Central Party's Resolution on Land (2017) speaks specifically about issues arising from the issuance of State concessions and leases and the need for improved land management and administration.

The programme itself has little influence on decisions in terms of granting concessions and leases. However, the programme will support government partner agencies responsible for monitoring and enforcement of concession awards, implementation as well as conflict resolution e.g. through:

- Compliance/non-compliance of concessions to be monitored by overlaying the cleared forest area with the concession boundary, and field check.
- Developing/improving guidelines and build capacity for compliance of deforestation related safeguards for agricultural concessions and leases.
- Improving processes and capacities for assessing, monitoring of deforestation from permanent conversion to agriculture, and enforcing compliance for agricultural concessions and leases.
- Supporting the implementation of PM Decree No. 84 (2016) on Compensation and Resettlement for People Affected by Development Projects allows people affected by projects to receive compensation for the loss of assets and opportunities by development projects.
- Improving monitoring of implementation, linking monitoring with law enforcement, including:
 - Systematic enforcement of contracts and concessions
 - Systematic monitoring of infrastructure, urbanization, resettlement, and mining

11 ARRANGEMENTS FOR MONITORING, REPORTING AND EVALUATION

Monitoring, reporting and evaluation arrangements will comply with the relevant GCF policies, as stipulated in the AMA, FAA and project-related Financing Agreements and Implementation Agreements with Executing Entities and Implementation Partners, which EEs will extend to sub-grantees.

The programme will apply a customized results-based Monitoring and Evaluation (M&E) system.

The system will be based on:

- GIZ Standard Operating Procedures (“GIZ’s evaluation policy - Principles, guidelines and requirements”)
- The programme logical framework
- The programme implementation schedule
- Requirements of the GCF’s Annual Performance Report
- Development partners’ Standard Operating Procedures
- Procedures and requirements of programme partners and stakeholders in Laos

The M&E system will track programme inputs, actions, activities, outputs, and impacts as well as associated financial flows across all components in all programme districts, provinces and at national level in Laos.

The overall responsibility and oversight for M&E and reporting lies with the GCF AE unit of GIZ head office. The national programme management unit (NPMU) in Laos will implement the M&E system and work closely with provincial programme management units (PPMUs), district programme management units (DPMUs), GIZ EE in Vientiane, Government programme partners and development partners. M&E measures are integrated in Output 4, Activity 4.1.2 Monitoring and evaluation and reporting to GCF.

11.1 Recruitment of M&E staff

Immediately when the programme commences, GIZ’s GCF AE unit at head office in Germany will make available one expert to oversee, coordinate and manage the programme M&E and reporting routines. He/she will cooperate closely with NPMU and GIZ EE staff to coordinate the implementation of the programme’s M&E system. Immediately when GCF proceeds become available in Laos, the NPMU and the six PPMUs will recruit one M&E specialist each. The NPMU will hire an international consultant to support the management of the M&E system and provide on-the-job training for PPMU and other stakeholders of the system where requested. Six PPMUs will hire national M&E experts to support the implementation of the M&E system in their respective province and districts.

In the first year of the programme, the NPMU will tender the services of a specialized technical consulting firm, which will support the programme in designing the details of the M&E system and support the early implementation phase. The firm will also provide trainings and capacity building to the programme implementation partners as requested.

11.2 Independent monitoring and evaluation studies

GIZ's AE unit will initiate a mid-term review (MTR) in year four of the programme (or at any time that GIZ, the NDA and/or the Programme Steering Committee consider necessary). GIZ competitively selects and assigns an independent consultant for this task. The MTR will duly involve programme stakeholders including target groups and beneficiaries, programme partners and contributing development partners. The MTR will include:

- A review of the institutional, administrative, organizational, environmental, social, economic, technical and financial aspects of the programme based on the assumptions and risks included in the design (among others as specified in the Funding Proposal and Feasibility Study) and M&E system;
- A review of covenants to assess whether they are still relevant or need to be changed or waived due to altered conditions;
- A review of the viability of remaining planned impacts;
- An assessment of the need to restructure or reformulate the programme and the effects of such restructuring on the programme's objective and long-term goals.

GIZ's AE unit will make available an MTR report to the GCF Secretariat and programme stakeholders. In due time before the completion of the programme, GIZ's AE unit will initiate a programme completion mission, in which the implementation of the programme based on the programme, financing and implementation agreements, the delivery of outputs and the achievement of programme targets are evaluated. The mission will duly involve programme stakeholders including target groups and beneficiaries, programme partners and contributing development partners. At the time of the programme's physical completion and commissioning, and before the expiry of the guarantee period, GIZ's AE unit will make available a final report to the GCF Secretariat and programme stakeholders.

11.3 Data collection and frequency

The NPMU will coordinate data collection for implemented activities through responsible implementing departments / divisions of the district and provincial level. The PPMU will supervise and guide the monitoring and evaluation. Each PPMU will aggregate monitoring reports based on DPMU inputs at least every six months. The NPMU will aggregate all the PPMU reports and make a summary report available to GIZ's AE unit at headquarters again at least every six months.

11.4 Measurement, Reporting and Verification (MRV) of reduced GHG emissions

The MRV of reduced emissions is an essential activity for monitoring the programme's efficiency and effectiveness and for continued learning across the programme. In cooperation with JICA, the programme includes a dedicated technical assistance package (see Activity 1.5, 'Implementation of the Measurement, Reporting and Verification System') that will be specifically devoted to the measurement and reporting of achieved emission reductions. The MRV will be subject to

verification by the FCPF Carbon Fund (as a basis for results-based REDD+ payments). Methodologically, the same approach will be used as for the Reference Level development (see ER-PD and Annexes for methodological approach).³²⁸

³²⁸ <https://www.forestcarbonpartnership.org/lao-people%E2%80%99s-democratic-republic>

12 STAKEHOLDER ENGAGEMENT PLAN

This chapter comprises the programme's stakeholder engagement plan. Stakeholder engagement is considered as a key element of this programme. Extensive consultations have informed programme design, and the programme has been designed to ensure that stakeholder engagement is a central theme in the programme and has been integrated in a cross-cutting manner, throughout the proposed activities and actions.

The plan will constitute the basis for the engagement of stakeholders within the framework of the programme, promote ongoing consultations and communication throughout the programme's lifespan, develop a feedback and grievance redress mechanism, and ensure programme activities are implemented in a culturally-appropriate manner.

12.1 Stakeholder engagement in programme design

Based on Lao PDR's National REDD+ Program, stakeholders are defined as actors within the following five major groups: government, local communities, civil society, private sector and development partners.³²⁹

Stakeholder engagement is seen as a central element to supporting programme design, where stakeholders have played an important role in providing inputs and feedback on programme design, and have validated the proposed programme.

Extensive engagement with stakeholders has been conducted for the elaboration of the ER-PD and National REDD+ Program, and has laid a strong foundation for the elaboration of the proposed GCF programme. Additional stakeholder consultations were conducted within the framework of the proposed GCF programme to ensure that the programme targets high-priority activities and actions, to receive feedback on how to strengthen the programme, and finally validate programme design. The following sub-sections will provide an overview of stakeholder consultations conducted i) during ER-PD preparation and within the framework of the National REDD+ Program and ii) during the GCF programme development phase.

12.1.1 Stakeholder engagement within the framework of ER-PD preparation and the National REDD+ Program³³⁰

For the preparation of the ER Program, stakeholder consultations have been conducted with a wide range of stakeholder representatives ranging from the central to the village cluster level. The objectives of the consultations were not only to identify drivers of deforestation and forest degradation, and possible measures to address the identified drivers and barriers for successful implementation, but also to enhance understanding on the aim of the ER Program and its designed activities, and pros and cons of implementing it under their jurisdiction. Consultations

³²⁹ "For the National REDD+ Program, stakeholders are considered to fall into five major groups – Government, local communities, private sector, civil society, and development partners." – ER-PD 2018, p. 32

³³⁰ Text from ER-PD 2018, p. 84-87

have been conducted based on the principles of Free, Prior and Informed Consent (FPIC), aiming for full and effective consultations with particularly local level stakeholders.

The preparation of the National REDD+ Program, especially its National REDD+ Strategy and SESA, have been taking place concurrently with the preparation of the ER-PD. To ensure synergy and efficiency in the parallel implementation of the two important processes, the two processes were carefully planned to synchronize in their methods, schedule and outputs.

Overall consultation strategy on REDD+

The ER Program adopted the aforementioned stakeholder grouping for its stakeholder consultations, by building on the results of the consultations for the National REDD+ Strategy (NRS). This common approach helped the stakeholders to further their understanding on REDD+ in Lao PDR.

The consultation process for the National REDD+ Program, i.e., on the National REDD+ Strategy (NRS), Strategic Environmental and Social Assessment (SESA), and other supporting elements were conducted primarily (but not exclusively) through the following channels:

- Intensive primarily technical level consultation with the six REDD+ Technical Working Groups (TWG) among Government and quasi-Governmental agencies/organizations (with participation of other non-Government participants as relevant to the thematic area of discussion), approximately one-third of the official TWG membership are women;
- Strategic-level consultations with the National REDD+ Task Force (NRTF);
- Existing sector coordination mechanisms, namely the Forestry-sub-sector Working Group (FSSWG) under the Agriculture and Forestry Sector Working Group, open to, and participated by a wide stakeholder membership of organizations working in the forestry sector;
- Consultations with representatives of provinces, districts, and *kumban* (village cluster); and
- Focused consultation meetings with non-Government stakeholder groups of REDD+ of civil society organizations, private sector, and development partners.

Consultations for the ER Program preparation

It is important to mention that the development of the ER-PD itself been a participatory process, undertaken through a committee known as the ER-PD Team. Under the leadership of the National REDD+ Focal Point and the REDD+ Division, the ER-PD was convened and participated by the partner organizations actively engaged in REDD+; namely, FCPF REDD+ Readiness Project, the Climate Protection through Avoided Deforestation (CliPAD) Project of GIZ funded by BMZ, the Sustainable Forest Management and REDD+ Support Project (F-REDD) of JICA, and the UN-REDD Program support from FAO, along with the World Bank-financed REDD+ Readiness operation. This committee met regularly (weekly meetings by default, and more intensively as required) to discuss and draft sections of the ER-PD. In various instances, this committee was the venue for providing options for the ER Program formulation, which would then be consulted with other Government actors and non-Government actors through TWG meetings, consultation meetings, and through other venues.

For the ER Program formulation, consultations were conducted on a number of occasions for different thematic focal areas as well as for different purposes in the process leading up to decision-making. In July and August 2015, two regional workshops were held to discuss the ER-PIN

development with the proposed six provinces of the ER Program. After acceptance into the Carbon Fund pipeline, further consultations took place with all six provinces in December 2015 to elaborate the next steps in order to develop the ER-PD. At the central level, the ER Program updates were introduced through the aforementioned sector coordination mechanism of the FSSWG in its regular meetings.

From 2016, the six provinces engaged in their respective processes of developing their Provincial REDD+ Action Plans (PRAPs). PRAPs are the provincial-level instrument that identifies the strategic interventions to address drivers and barriers for REDD+. The PRAPs for the six provinces are the central instrument through which the ER Program interventions will be rolled out, and therefore are inherently linked to the ER Program development. For the PRAP preparation in the six provinces, consultation meetings were held in all 50 districts and 50 selected *kumban*¹⁰⁶, engaging with provincial and district staff, and village representatives. In total 339 villages were represented by these consultations. The PRAP consultations intensively discussed and identified main drivers and barriers to REDD+ and priority interventions for the province.

Another regional meeting with these six provinces was organized in September 2016. In October 2017 all Northern provinces gathered together in Oudomxay province to discuss the National REDD+ Strategy, SESA, Safeguard Plans and elements of the ER Program including on institutional arrangement, and benefit sharing.

Apart from the PRAP processes, consultations held with the provinces up to January 2018 discussed the issues and areas including the following, as pertains to the ER Program:

- General introduction and awareness raising related to REDD+ and climate change;
- Land and resources tenure arrangements;
- Institutional arrangement for ER Program implementation;
- Non-carbon benefits;
- Assessment of negative environmental and social impacts from the ER Program interventions; and
- Benefit-sharing structures and principles – provisional ideas.

In January 2018, an ER Program consultation workshop with the six provinces took place in Luang Prabang province, including with high-level provincial officials. Based on the PRAPs developed in each of the six provinces, the draft ER-PD was discussed and consulted. As a result of these consultations, the provinces have confirmed their participation and commitment to the ER Program.

For development of the six PRAPs, sub-provincial level consultations were held in all 50 districts, and in 50 *kumbans* with representatives from 339 villages. The target stakeholders included the Government agencies and representatives from mass organizations at the provincial and district levels (i.e. province, district) and representatives of the villagers of the sampled communities. (In each district, a meeting was held with one selected *kumban* and the leaders of villages in that *kumban* attended the meeting.) *Kumbans* were selected as part of the district level meetings based on a set of given criteria such as deforestation hotspots, ethnicity, proximity to National Protected Areas etc.

Consultations were conducted to ensure the participation of men and women from diverse ethnic groups, given the ethnic diversity present in the programme area.

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

Sources:
✓: Ms. Manivanh Keokominh, Deputy Director, Lao Front for National Construction, unofficial data, 2017.
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 25. Composition of ethnic groups in the ER Program area, and overview of ethnic groups consulted during PRAP kumban consultations

Source: ER-PD 2018, Annex 1 p. 2

12.1.2 During GCF Programme Proposal Development

Engagement with the NDA

The proposed programme has been developed with regular engagement from the NDA in Lao PDR - MoNRE. Structured dialogue with the NDA and other key national partners has been ongoing since April 2017 as part of GIZ's country programming. Since then, regular discussions have been held with the NDA on diverse topics related to the proposal development process, including stakeholder consultations at the national, provincial, district, *kumban* and village level. Representatives from the NDA have further attended cross-sectoral multi-stakeholder workshops to provide feedback on the programme.

A letter of no-objection has been provided by the NDA (dated YEAR.MM.DD), confirming the proposed programme conforms with the country's national priorities, strategies and plans, and that it is in accordance with relevant laws and regulations.

Engagement with Government focal points for REDD+ and UNFCCC

In addition to maintaining ongoing communication with the NDA, the proposed programme has been designed with the continuous engagement with Government focal points from key ministries, where the Government has demonstrated strong ownership of the programme concept. The head of the country's REDD+ Office (the National REDD+ Focal Point) has been a major proponent of the programme and consistently involved in programme design and stakeholder consultations. The UNFCCC focal point within MoNRE has also been kept informed about the programme, and representatives from MoNRE have regularly participated in programme consultation events and workshops (described in greater detail in Chapter 13.2.1 and Annex 6).

Engagement with development partners

A multi-donor working group exists to support the Ministry of Agriculture and Forestry on REDD+ issues. The working group consists of GIZ, the World Bank (including representatives of the SUFORD project and the FCPF Technical Assistance team), JICA and FAO. The working group has assisted MAF with the development of the FCPF ER-PIN, the ER-PD, the PRAPs and the national REDD+ Strategy. GIZ has worked closely with the World Bank – both the Lao Country Office and the FCPF – throughout the REDD+ development process, starting in 2015 and continuing through the GCF programme preparation period. In December 2017, MAF Vice Minister H.E. Thongpath Vongmany wrote a letter to BMZ Minister Dr Gerd Mueller to request GIZ support to design and implement the GCF proposal, identifying other development partners as potential co-financiers. Subsequently, the Government of Germany (through GIZ and KfW) and JICA, as well as ADB and IFAD, have agreed to provide co-finance to the GCF programme (co-finance letters are provided in Annex 5); FAO is involved in the implementation of specific Actions of the GCF programme (see Section C.3).

Other stakeholder consultations

Additional consultations were held to support the development of the GCF funding proposal, in which a total of 1,066 participants attended.³³¹ Consultations were held with the following stakeholders at the national, province, district, and village level:

Stakeholder Category	Stakeholders Consulted
Government	
<i>National</i>	<p>DOF/MAF: Production Forest Division, Forest Protection Division, Planning and Cooperation Division, National Protected Areas Division, REDD+ Division, Aquatic and Wildlife Division, Administration Division, Legal Division, Forest and Forestry Resources Development Fund, Forest Inventory and Planning Division, Deputy Director General of DOF, Village Forests and NTFP Division, Department of Forest Inspection</p> <p>DALAM/MAF: Department of Agriculture and Land Management</p> <p>Funds: EPF and FFRDF</p> <p>MONRE: Planning and Cooperation Division, Department of Climate Change Representatives from National REDD+ Task Force</p> <p>Ministry of Finance</p> <p>NAFRI</p>
<i>Provincial</i>	<p>Provincial REDD+ Offices (PRO), PAFO, PONRE and POFI representatives in each Province</p> <p>Members of Provincial REDD+ Task Force</p>
<i>District</i>	District representatives including from DAFO, DONRE and DOFI
Local Communities	
▪ <i>Bokeo</i>	Ban Samork Neua, 1 additional village in NPA
▪ <i>Houaphan</i>	Huayhu village, Ban Yard village, Hong Oy village, Ban Phonxay
▪ <i>Luang Namtha</i>	Ban Nam Mad Mai, Ban Nam Dee, Ban Don Mai
▪ <i>Luang Prabang</i>	Ban Phanid
▪ <i>Oudomxay</i>	Nangew village, Ban Napa
▪ <i>Sayabouri</i>	Phonekeo village, Ban Phonxay

³³¹ This figure is not indicative of the total number of people who participated, as some participants may have participated in more than one consultation or workshop. A list of participants is provided in Annex 6.

Civil Society	Lao Women's Union (including at national, provincial and district-level); Village Focus International; The Centre for People and Forests (RECOFTC); FLEGT CSO Network – including the Green Community Alliance (GCA), the Rural Research and Development Promoting Knowledge Association (RRDPA), the Association for Community Training and Development (ACTD), Lao Biodiversity Association (LBA), Maeying Houamjai Phathana (MHP), the Wildlife Conservation Association (WCA) and the Social Development Alliance Association (SODA); National University of Laos (NUOL)
Private Sector	Burapha Agro-forestry Co. Ltd. Plus, interviews with 25 producers, 15 traders (paddy, maize, Job's Tears, NTFPs), 12 rice millers and 2 banks in Luang Prabang, Luang Namtha and Oudomxay provinces
Development Partners	KfW (Country Office and ICBF Programme); GIZ (CLIPAD, LMDP, proFEB/proFLEGT); JICA (F-REDD); FAO; UNDP; ADB; Head of German Development Cooperation in Lao PDR/BMZ; World Bank; SUFORD-SU (WB).

Figure 26. Overview of stakeholders consulted during the funding proposal development process (additional to consultations conducted for the ER-PD)

Note: Refer to Annex 6 for a more detailed overview of specific participants and meetings held

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 following figure provides an overview of the main consultation processes held.

Table 41: Overview of stakeholder consultations to support the preparation of the GCF proposal

Description of consultation(s)	Dates	Stakeholders engaged	No. of Participants		
			Total	Male	Female
1. Scoping mission for the development of the programme's concept note	April 3-7, 2018	FAO, GIZ-FLEGT, JICA F-REDD, Head of German Development Cooperation in Laos (BMZ), DOFI Director General (MAF), DOF Deputy Director General (MAF), Department of Climate Change Deputy Director General (MONRE), Planning and Cooperation Division (MONRE), Division of Village Forest and NTFP Management. Head of the REDD+ Division in DOF (MAF), UNDP	11	10	1
2. Second scoping mission for the development of the programme's concept note	April 23-30, 2018	Head of the REDD+ Division within DOF (MAF), Vice Minister of MAF, DOF Deputy Director General (MAF), Division for Planning and Cooperation within DOF (MAF), Division for Village Forest and NTFP Management within DOF (MAF), KfW (representative from the ICBF program)	6	5	1
3. National inception workshop for GCF feasibility study and proposal development	October 5, 2018	From DOF/MAF: Production Forest Division, Forest Protection Division, Planning and Cooperation Division, National Protected Areas Division, REDD+ Division, Aquatic and Wildlife Division, Administration Division, Legal Division, Forest and Forestry Resources Development Fund, Forest Inventory and Planning Division, Deputy Director General of DOF, Village Forests and NTFP Division, REDD+ Division	17	13	4
4. Stakeholder consultations in Vientiane to inform feasibility study and proposal preparation	October 2-5, 2018	Vice Minister of MAF, SUFORD-SU, Head of German Development Cooperation/ BMZ, Forest and Forest Resources Development Fund Division, Buapha Agro-Forestry Co. Ltd., GIZ ProFEB/ ProFLEGT Component, World Bank, JICA, KfW country director, ADB, FAO, Environmental Protection Fund, GIZ Country Director, KfW ICBF program	18	16	2
5. Provincial stakeholder consultations to inform feasibility study and proposal preparation	October 8-16, 2018	In each province meetings with: Provincial REDD+ Task Force Members, Representatives from PRO, POFI, PAFO and PONRE, District representatives, villagers and village authorities.	572	483	89
6. National debriefing workshop	October 18, 2018	JICA, KfW, EPF, Buapha Agro-forestry Co. Ltd., DOF (MAF), Production Forest Division (DOF/MAF), SUFORD-SU, REDD+ Division (DOF/MAF), Planning and cooperation division (DOF/MAF), Village Forests and NTFP Division (DOF/MAF); GIZ Country Office, DDG of DOF (MAF); FFRDF, Department of planning and finance (MAF), DOFI (MAF), Forest Protection Division (DOF/MAF), REDD+ Division (DOF/MAF), Forest Inventory and Planning Division (DOF/MAF)	29	22	7
7. Agribusiness interviews in Luang Prabang, Luang Namtha and Oudomxay Provinces	November 7-11, 2018	25 local producers, 15 traders (paddy, maize, Jobs-tear, NTFPs), 12 rice miller and 2 banks.	N/A	N/A	N/A

8. Workshop with GCF representatives on opportunities for climate finance with a focus on REDD+ and the forestry sector, as well as private sector engagement	November 19, 2018	FAO, Department of Climate Change (MONRE), UNDP, Village Focus International, NAFRI, JICA, Investment and Business Division within the Department of Planning and Finance (MAF), Department of Agriculture, REDD+ Division (DOF/MAF), DOFI (MAF), Division of Planning and Cooperation (MAF), DDG Department of Forestry, EPF, DG Department of Forestry (MAF)	28	24	4
9. Stakeholder consultations in Houaphan Province to identify forest priorities for inclusion in the GCF funding proposal	November 21, 2018	Village authorities, villagers from Huayhu village, PAFO Houaphan (forestry Section, REDD+ section, Inspection), DAFO Houameuang (forestry unit, inspection unit), district governor's office	30	18	12
10. Stakeholder consultations for the elaboration of the programmes's capacity needs assessment and capacity building strategy	November 26-30, 2018	FFRDF, SUFORD-SU, FAO, LMDP-GIZ, RECOFTC, ProFLEGT Component (GIZ), Department of Land (MONRE), Department of Climate Change (MONRE), Department of Agriculture and Land Management (DALAM/ MAF) DDG of DOF (MAF) and others from DOF/MAF: Division for Planning and Cooperation, Production Forest Management Division, Protected Area Management Division, REDD+ Division, Village Forest and NTFP Management Division, DOFI, Plantation Promotion and Forest Restoration Division	19	18	1
11. Stakeholder consultations for the design of the REDD+ Funding Window under the EPF	November 28-29, 2018	EPF (All heads of Divisions, EPF-GF Focal Points, Safeguard Officers, Monitoring and Evaluation Officers)	N/A	N/A	N/A
12. Stakeholder consultations for the development of the programme's gender assessment and gender action plan	January 16-24, 2019	PAFO and Lao Women's Union (Houaphan), DAFO in Xam Neua, District LWU Office in Xam Neua, Villagers (Ban Yard Village; Ban Nam Mad Mai, Ban Nam Dee), PAFO Luang Namtha, Provincial LWU in Luang Namtha, DAFO and LWU in Luang Namtha	148	79	69
13. Stakeholder consultations for development of the ESMPs	January 28-February 4, 2019	Phonekeo village (Sayabouri Province, Sayabouri District); Hong Oy village (Houaphan Province, Houameung District); Nangew village (Oudomxay Province, Xai District); also district-level meetings.	118	59	59
14. Final validation workshop	February 8, 2019	MAF, MoNRE, MPI, REDD+ Task Force, FFRDF, EPF, PAFOs, DAFOs, RECOFTC, GIZ, KfW, World Bank, FAO, JICA, EU, IFAD, ADB, German Embassy, Village Focus International,	70	67	3
Total No. of Participants in Stakeholder Consultations³³²			1,066	814 (76%)	252 (24%)

³³² Note: there is overlap of participants in different meetings.

Preliminary Scoping Missions

Preliminary scoping missions were conducted by GIZ staff and project development experts to assess the possibility for developing a GCF concept note and potential funding proposal from April 3-7 and April 23-30, 2018. Missions focused on fact-finding, meeting with key actors and determining country interest in developing a proposal, whilst ensuring the relevance of the concept selected. A high-level meeting with government representatives was held to ensure commitments to programme development from main programme partners and supporting partners interested in providing co-finance. In total, 17 people (15 men, 2 women) were consulted during these two scoping missions.

Inception Workshop

An Inception Workshop for national government partners was held on October 5, 2018 where the initial programme structure was presented, as well as key considerations for activities and actions, institutional arrangements and potential co-financing sources. A major topic of this workshop was discussing the plan for feasibility study and proposal development, as well as planning for upcoming provincial consultations. In total, 17 people attended the workshop (13 men, 4 women).

Provincial-level consultations on programme design and feasibility and post-mission debriefing meeting

Extensive consultations were conducted at the provincial and local level, where over 572 people (483 men and 89 women) participated in consultations held in the programme area (six Northern provinces) from October 8-19, 2019. Within each province, the following stakeholder consultations were held:

- Provincial workshops with representatives from REDD+ Task Forces to present the programme and receive feedback
- Provincial working sessions to provide information for proposal development with representatives from PRO, PAFO, PONRE and POFI.
- District workshops with all district representatives (including DAFO, DOFI and DONRE, District Lao Women's Representatives, among others) within each province to provide feedback and support programme design
- Village visits (1-2 per province) to verify drivers and barriers, and to receive direct feedback on village needs.

Consultations ensured the participation of diverse stakeholders, including women and diverse ethnic groups. Workshops with CSOs, the private sector and co-finance institutions/donor organizations, among others, have been held since the development of the GCF concept note and proposal.

The programme was well received in the consultations. Provincial and district government authorities emphasized the major challenges they face, including limited capacities and resources, and noted the importance of the programme to support both investments in REDD+ and sustainable land management, as well as capacity development and the procurement of equipment to help them do their jobs (e.g. POFI noted that limited equipment restricts the effectiveness of

monitoring and law enforcement). Villagers validated the driver and underlying causes of deforestation and the importance of proposed activities. A major theme for village consultations was the need for alternative livelihood opportunities and value-adding opportunities (see summary Table below for more details comments and responses).

After the provincial, district and village consultations, a debriefing meeting was held in Vientiane with key stakeholders from government, donor organizations, and private sector to present the stakeholder feedback and new insights into the programme design. The mission validated the baseline information and provided insight into what specific design measures are needed (e.g. including marketing support linked with agricultural extension, need for capacity building and filling regulatory gaps on plantations and commercial forestry activities, among others, the need for investments in equipment for POFI and DOFI due to extremely limited budgets, among others).

Other stakeholder engagement activities

Numerous other stakeholder events were held to support programme development. This included meetings and consultations with agribusiness to inform the design of output 2, consultations with diverse actors to inform and validate the design of the proposed EPF funding window (Activity 1.5), meetings to assess national capacities and develop a capacity building strategy, and further consultations to inform the gender assessment, GAP and environmental and social impact assessment.

The following table provides a summary of the comments received from the above described consultations.

Table 42: Overview of comments received and responses during GCF proposal development

Comment	Response
Inconsistent policies or policies with gaps have led to misunderstandings of laws and regulations, and differing implementation.	Agreed. Activity 1.2 revises the regulatory framework for key policies with identified gaps/inconsistencies. All Outputs contain Activities and Actions dedicated to capacity building, including on key and revised laws and policies.
There is a lack of finance available for the government to implement sustainable land use activities, especially in the forest and agriculture sectors.	Agreed. The programme provides short-term financial support by providing finance for activity implementation, and Activities 1.1, and 2.2 aim to mobilize new finance streams for sustainable land use practices that support REDD+ to improve the long-term sustainability of interventions.
Leading private sector actors need to be incentivized to invest in the programme area. This includes provision of support to access land and other financial incentive mechanisms to promote sustainable investments.	Agreed. Activity 2.2 both focus on ways to mobilize private sector actors to invest in sustainable land use activities (deforestation-free value chains, SFM and FLR – e.g. village-based agroforestry). Various activities in Output 1 strengthen the enabling environment, which also enables private sector investments (strengthened regulatory framework, improved law enforcement, etc.). Thus, a mixture of policy and financial incentives are provided to strengthen private sector investments, based on consultations and feedback from the private sector.
A major challenge for villages is their dependence on agriculture to maintain their livelihoods. Thus, livelihood support should be considered as a core element to support the transition to sustainable practices.	Agreed. The lack of alternative livelihood activities was identified as an underlying cause of deforestation, along with other sectoral challenges (e.g. low productivity, poor extension support). In order to achieve REDD+ objectives, an important component will be to support villages to adopt sustainable practices that are also able to provide income. Outputs 2 and 3 provide both technical and financial support to local villages to adopt and implement

Comment	Response
	practices and to strengthen private sector investments and cooperation with villages. Output 1 aims to strengthen law enforcement, improve regulations to promote sustainable management, and identify new financial sources that can be re-invested in the land (including supporting villages to sustainably manage forest resources).
Weak capacities at the provincial and district levels, and high staff turnover, limit the effectiveness of interventions.	Agreed. Capacity building is a cross-cutting theme within the proposal and builds upon a detailed capacity assessment and capacity building strategy (Chapter 5). Staff turnover is a risk, as well as a reliance on contracted staff; however, the programme's knowledge management strategy aims to ensure that training modules, information and knowledge are transparent, fully-documented and accessible to improve the uptake and continued training of staff on REDD+ and sustainable land use practices.
Land use plans were lost in some districts due to the lack of a data management system (only hard copies). There is a need to avoid this in the future.	Agreed. Within the programme management and monitoring a core element will be how to manage data and knowledge, and ensure that key documents (including land use plans) are stored, transparent and accessible. Activity 1.5 will also improve data and knowledge management for forest and land use resources.
Often projects have focused on planning, with limited resources dedicated to implementation. It is important that this programme supports not only planning, but also implementation and monitoring.	Agreed. Technical and financial support is dedicated not only to land use planning, but also for plan implementation, capacity building and monitoring. The identification of new financial streams (Activity 1.1), will help mobilize additional financial resources to support the long-term financing of forest-sector interventions, including the implementation and monitoring of management plans.
Interventions should focus on all forest categories.	Agreed. Activities 2.2, 3.1, 3.2, and 3.3 provide targeted interventions for village forests, conservation forests, protection forests and production forests.
Provinces and districts may have challenges in writing requests to the EPF or other national funds (insufficient capacities).	Agreed. PPMU staff will provide on-the-job training and support to the relevant sub-national institutions to develop timely, transparent and realistic requests for funds from the EPF or the FFRDF. Such requests will be based on annual plans developed by project management (see Chapter 4).

12.1.3 Environmental and social impact assessment and the incorporation of findings into programme design

An assessment of the environmental and social impacts associated with the programme was conducted during the programme development phase. The programme was classified as a category **B** programme. For the GCF, Category **B** is defined as follows: "activities with potential mild adverse environmental and/or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures." For GIZ, Category **B** equals a programme with "potentially rare or locally limited occurrence, largely reversible consequences, easy to manage." For both organisations, the emphasis is on risks that are "site specific," few in number and offer ease of management.

The programme 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 generalised safeguards approach will be appropriate for such a complex and diverse programme area. The highly complex and interacting dynamics of landscapes, ethnic groups and policy implementation (among others), have created a diverse set of responses at village and household level that comprise people’s livelihoods. At times, local livelihoods are put at higher risk because of external factors such as concessions. At other times, “over-enthusiastic” restrictions on upland cultivation also put livelihoods at risk. The activities proposed for financing from GCF are oriented around FPIC, positively helping small-scale farmers with a focus on ethnic groups in remote places. However, it is possible that the programme itself may lead to land use restrictions, thus negatively impacting on some families’ livelihoods. Therefore, it is of utmost importance for the programme to establish proper safeguard plans, closely monitor programme activities and involve diverse stakeholder groups, including CSOs, in programme implementation and monitoring processes.

The following table provides examples of how the ESIA has informed programme design. For more detailed information refer to the ESIA and ESMPs.

Table 43: Potential risks and mitigation measures identified in the ESIA for the proposed programme activities

Output/ Activity	Risk	Examples of on incorporated findings
Output 1: Creation of an enabling environment for REDD+		
Activity 1.1	Challenges moving from SEDP to implementation	Promotion of multi-sectoral dialogues at different levels within the context of SEDP planning and mainstreaming REDD+, monitoring of SEDP progress
Activity 1.2	Delays could continue to affect finalization and passing of key legislation and ultimately affect the updating of regulations	Government ownership promoted throughout programme design, and should be sustained in implementation (across sectors and levels)
Activity 1.3	Risk of targeting 'little guys' instead of major players	Ensuring that law enforcement measures also target major players, especially those associated with the development of infrastructure and energy projects through a combination of improved MRV, land use planning and law enforcement. NMPU and PPMU should have a detailed list of all concessions in the programme area to ensure clear monitoring.
Activity 1.4	If land use planning is poorly implemented, it could lead to displacement (physical or economic) from resources that they have customarily used. Failure to recognize areas of cultural value	FPIC and community engagement figures for land use planning should include all ethnic groups, women and poor households. Trainers should be trained on social inclusion and gender equality within consultations. Land use planning will be participatory and ensure that land use plans are tailored to the local context. Land use planning activities build on over 15 years of experience in Lao PDR and will utilize detailed guidelines and tools that have been developed and enhanced by donors and government institutions over the years. Such guidelines have been developed through stakeholder consultation, are aligned with the legal framework, and encourage gender equality and social inclusion. The programme's complaint and grievance redress mechanism allows an efficient channel independent of village management units and administrative channels to ensure grievances, especially associated with areas of high conservation value and cultural value, can be efficiently and effectively presented to programme management to prevent any losses.
Activity 1.6		Ensuring ongoing dialogue between MAF, MONRE and MOF on the role of the EPF and FFRDF to ensure that there are no misunderstandings in terms of their role
Output 2: Implementation of deforestation-free agriculture		
Activity 2.1	Risk of loss (including access to) land for alternative uses and livelihood options	FPIC processes with all local communities will ensure they are aware of risks and can ensure that the planned activities are appropriate based on villagers local needs, interests, context and capacities.

Output/ Activity	Risk	Examples of on incorporated findings
	Risk that “deforestation-free” agriculture will be misunderstood as high intensity agriculture, with high pesticide use and various environmental and social impacts Risk of elite capture	Training and capacity building will be participatory and promote mentoring to enable the adoption of good agricultural practices and deforestation-free agriculture A strong and detailed training concept has been elaborated to facilitate learning, build on farmer networks and increase access and effectiveness of extension services and farmer field schools. Measures will be targeted to particularly vulnerable households, ensuring that training is culturally sensitive, and takes into account additional barriers that vulnerable households may face.
Activity 2.2	Small scale irrigation could lead to land access losses for poorer families using land in higher areas of the watershed	Irrigation infrastructure will be accompanied by rigorous inclusive land use planning to promote inclusive development and safeguard vulnerable households Support will be provided in districts with irrigation infrastructure to implement good agricultural practices, as well as village forest management promoting the sustainable use of forest resources, including in upstream areas.
Activity 2.3	Private sector actors may require infrastructure or promote other activities with adverse tradeoffs (e.g. traders may demand feeder roads to fields, which may in turn drive deforestation and forest degradation)	Dialogue with private sector actors to be supported by the programme to understand the need for improved practices away from BAU environmentally damaging practices.
Output 3: Implementation of sustainable forest management and forest landscape restoration		
Activity 3.1	Risk of bush fallow and/or pasture lands of communities being subject to reforestation efforts (thereby losing land)	Detailed forest mapping will be conducted as a part of land use planning and management plan development for village forests to ensure that programme activities are in the villagers’ interests. The programme’s complaint and grievance redress mechanism allows an efficient channel independent of village management units and administrative channels to ensure grievances, especially associated with areas of high conservation value and cultural value, can be efficiently and effectively presented to programme management to prevent any losses.
Activity 3.2	Policies do not support villagers’ selective harvesting for commercial purposes from production areas	Close link with Activity 1.2 to enable policies to support villager’s selective harvesting to sustainably benefit from production forests (need to provide benefits from SFM and FLR to help local peoples maintain and strengthen their livelihoods)

Output/ Activity	Risk	Examples of on incorporated findings
	Elite capture	Outreach and support will target vulnerable households, including ethnic minorities, women-headed households and other vulnerable households.
Activity 3.3	Too strict of NPA management may deny local people customary harvesting of NTFPs, possible risk of denied access to cultural heritage sites	NPA management will recognize that communities within and adjacent to NPAs are dependent on these areas to maintain their livelihoods, thus the activity should ensure that communities are able to benefit from sustainable land use practices, and that management plans respect their rights. This is aligned with the proposed process that will work with local communities to implement sustainable and suitable management practices.
Output 4: Programme management, contingencies, coordination, monitoring and reporting		
Various	Difficulties to find multi-ethnic staff who can assist with the implementation of the programme in provinces and districts Difficulties to find senior staff to take care of environmental and social safeguards	Efforts must be made to ensure ongoing stakeholder engagement with diverse stakeholders, including CSOs, villagers, etc. Emphasis should be placed on supporting with capacity needs and resources (incl. training staff) Programme management units should include staff dedicated to monitoring the ESMP, GAP, and overseeing the programme's grievance redress mechanism Additional support should be targeted for the inclusion and capacity building of ethnic persons, including ethnic persons as trainers

12.1.4 Gender and programme design

A gender assessment was conducted for the GCF programme to inform design, ensuring that key gender considerations are effectively mainstreamed throughout the programme proposal. It looked at the social, economic, environmental and political factors underlying climate change-exacerbated gender inequality and other gender-issues related to the programme. It further looked at the potential contributions of women and men to support the transition to low-greenhouse gas development pathways. Based on the results and recommendations of the gender assessment, a Gender Action Plan (GAP) was developed. The programme's GAP contains specific gender elements that are integrated into the programme design in a cross-cutting manner, and will be implemented along with the programme's activities. Ultimately, the GAP ensures an effective gender mainstreaming and integration of a consistent gender-perspective in the ER program in order to maximize climate and development co-benefits.

The assessment was based on desk reviews of relevant policies, legal and regulatory frameworks, pre-existing assessments in the sector, as well as on stakeholder consultations on the Provincial, District, and village level (detailed overview of consultations included in Annex 6).

In terms of stakeholder consultations, 148 people (79 men [53%], 68 women [47%]) were consulted for the gender assessment and action plan from 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.

While there are several gender-related challenges present the programme region, the programme has strong leverage to promote female leadership and participation in the planned activities and stakeholder processes from the national to the local level. The political commitment to the programme is particularly high and should be capitalized on. The programme will utilize existing gender structures, while at the same time actively involving senior and technical staff to foster a Government culture where gender is increasingly mainstreamed. Capacity development is necessary for all stakeholders to strengthen knowledge on gender and REDD+ at the same time.

The following Table provides an overview of identified gender inequality drivers and examples of measures included within the programme's GAP to address these drivers and promote gender-equality across programme outputs. More detailed information is available in the detailed gender assessment and gender action plan prepared for this programme.

Table 44: Identified gender inequality drivers and risks, and measures applied to address them within programme design

Activity	Identified gender in-equality drivers and risks	Measures applied to address gender inequality-drivers and risks in programme design
1.1 1.2	The current Forestry Law draft and PRAPs do not reflect upon gender aspects of forestry.	<ul style="list-style-type: none"> Future regulations and guidelines based on that Law would have to consider gender as a crucial factor in forest protection, monitoring, equal user rights and benefit-sharing, as well as resource management. Gender experts support the revision of regulations, providing insight on how to strengthen gender considerations.
All	The current capacities of Government staff on all levels to actively integrate gender and ethnic considerations into their management and implementation approaches are very limited, and the majority of staff is male. Ethnic languages are often a barrier of communication which is not actively dealt with. This strongly affects inclusiveness on the ground level, where women are often left out in planning and decision-making activities if not actively encouraged to participate.	<ul style="list-style-type: none"> Training of all concerned Government staff, including Lao Women's Union (LWU) and the REDD+ Window management, on "gender and REDD+". Communication materials on forest protection, REDD+ and other awareness-related activities should be gender-sensitive, user-friendly, and in different ethnic languages whenever possible. Engage LWU staff in village activities as much as possible. Allocate budget to LWU.
1.2 2.1 3.1 3.2 3.3	The consultations showed that women are considered the main users of forest resources and possess vast knowledge of their surrounding natural habitats and their status of degradation, but rarely participate in forest management and monitoring due to lack of education and traditional norms.	<ul style="list-style-type: none"> Guidelines/by-laws on village management committees, and village forest planning need to state that village meetings should separate women and men, and should set a quota for women to be included in each committee (at least 30% women/committee). The by-laws should also provide alternative pathways for people to fulfill the necessary requirements to become committee members (e.g. minimum education standard OR passing of a standard oral test). Allocate budget to the LWU to conduct related skills trainings to village women.
1.3 2.1 3.1 4	The consultations on village level showed that environmental awareness is still very limited. The greatest motivation for villagers to engage in protection measures is found when they see immediate effects on their livelihood through decreasing resources (less income, less food). Exchange with other villages is commonly seen as a very effective tool to initiate change, but women are often prevented from traveling due to traditional norms and lack of transport.	<ul style="list-style-type: none"> Awareness-raising campaigns through interactive tools and gender-/ethnic-sensitive communication materials which consider existing motivation factors. Enable female villagers to participate in exchanges and meetings outside the village through direct campaigning through LWU and Government staff, and provide allowances and means to travel if necessary.

Activity	Identified gender in-equality drivers and risks	Measures applied to address gender inequality-drivers and risks in programme design
All	They are currently no specific women's groups active in forest management. The Lao Women's Union (LWU) is usually the only active organization which can influence decision-making on all levels.	<ul style="list-style-type: none"> The programme needs to utilize the LWU as much as possible to represent and reach women with their activities, and it is strongly recommended to allocate budget directly to the local LWU offices to enable them to responsibly co-facilitate program activities.
1.3	The current Law Enforcement Actions Plans do not consider gender aspects and are therefore not considerate of the potentials of women's role in forest use and protection.	<ul style="list-style-type: none"> Support inclusion of women's roles in law enforcement measures (e.g. patrolling) in the next Actions Plan after 2020. Revise Standard Operating Procedures accordingly.
1.4 3.1	Legally, women and men have the same rights to land. Reality shows, however, that women's land tenure is still less secure than men's. Women are also often not actively included in decision-making steps of land use planning (LUP). The subsequent forest management plan is then seen by local men and women as a specialized step which women are even less part in. Reasons provided are lack of education to take over "technical" tasks, lack of confidence to partake in management decisions, and traditional norms of many ethnic groups.	<ul style="list-style-type: none"> LUP processes supported by the programme need to be vigilant in actively including all women and men in the target villages (separate meetings; women meetings led by female staff). Quotas need to be set to encourage women's inclusion in village management committees. Again, LWU can function as a facilitator and skills developer for village women, if budget is allocated accordingly.
1.5 3.2	There is currently no National Forest Inventory system in place. The development of it, as planned by the program, should utilize women's roles in forest use and access.	<ul style="list-style-type: none"> Gender-proofing National Forest Inventories processes (external consultant, trained LWU staff or NPA such as ADWLE): <ul style="list-style-type: none"> - Small feasibility study on the potential of developing a women-centered approach for community-based monitoring systems - Gender-proofing all related capacity building and trainings efforts, forest-inventory planning, field data collection & data entry/analysis/reporting, quality control, communication/documentation & dissemination activities.
2.1 2.2	Women and men in the villages are willing to make the shift away from shifting cultivation and other land use systems contributing to deforestation, towards deforestation-free agriculture as long as the shift provides more income and considers the high work load of villagers. Women are traditionally working longer hours per day, whereas men's work is physically of higher intensity.	<ul style="list-style-type: none"> The programme needs to conduct studies on potential alternative production practices which are considerate of potential impacts on workload and cultural practices. Community-based learning and consultation activities as proposed by the program need to ensure that women and men can openly express these concerns (separate meetings, grievance mechanisms considerate of gendered barriers).

Activity	Identified gender in-equality drivers and risks	Measures applied to address gender inequality-drivers and risks in programme design
2.2 2.3	Women's and men's access to local markets strongly depends on road access. Women's access is further limited by safety concerns, traditional norms, and higher workload in the families which prevent them from venturing out. Regarding general market access, women feel less confident and knowledgeable to venture beyond women's traditional products (handicraft, weaving, NTFPs).	<ul style="list-style-type: none"> Farmer Field Schools could aim to set up women's collectives who can venture together to minimize safety concerns, adhere to traditions, and maximize learning and financial security. Studies show the success potential of such women collectives. Microfinance support through the programme can be connected to these collectives as well.
2.2	<ul style="list-style-type: none"> Microfinance access has shown to empower communities if the villagers are not amongst the poorest. In that case, microfinance is often seen as too risky. Women are often more hesitant to make debts to protect their families, and use micro credits most often for health emergencies and children's education. Village Development Funds are often managed by women, and many ethnic groups' women are responsible for the families' financial management. 	<ul style="list-style-type: none"> Improving villages' access to microfinance has large potential to empower women to engage in village management, and to empower their families' health and education. It can be assumed that this will have a positive effect on women's general access to village management, including resource management. However, women and men will likely only use microfinance to invest in new agricultural methods/products if the programme supported them with market analysis and access, as well as related skills training and extension services.
2.2	<ul style="list-style-type: none"> Both local Government agencies and local villagers welcome private sector investment as long as it does benefit the communities in terms of higher income and less workload, as well as enhanced skills. All parties expressed the wish to have the Government strongly controlling such potential investments to limit risks for the communities. The interviewed women stated that they don't feel confident to partake in decisions over investments. 	<ul style="list-style-type: none"> Village consultations about potential private sector engagement need to separate villagers from village authorities, and men from women to ensure that all villagers feel safe to express their views and ask questions.

12.2 Stakeholder engagement strategy for Programme implementation

12.2.1 Objectives of the stakeholder engagement strategy

Stakeholder engagement will be continuous throughout the implementation of the GCF programme. This 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 program

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

Info Box 9. Community Engagement Framework for the ER-PD

A Community Engagement Framework (CEF), developed within the context of the ER-PD, provides best-practice guidelines on how to work with rural communities, to ensure that ethnic minorities, women, and other vulnerable groups can meaningfully participate and benefit. It also specifies what actions must be taken in case that mitigation measures must be taken regarding ethnic minorities, resettled communities or households, communities or households losing access to resources, as well as any mitigation measures necessary to account for gender impacts. CEF has been developed based on extensive consultations with stakeholders in the programme area, and the programme will utilize the framework to guide community engagement within the framework of the GCF programme and ensure that best practices are applied.

12.2.2 Stakeholder engagement process for programme implementation

For all activities implemented with villagers at the local level (e.g. land use planning and activities within Outputs 2 and 3), participation is voluntary and based on the principle of Free, Prior and Informed Consent (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.

A communication and information dissemination plan will be elaborated within the programme's inception phase. Annual implementation plans will include information on planned stakeholder engagement.

Consultation, trainings and workshops

Consultations will inform stakeholders of the programme's progress, encourage feedback, support capacity building and implementation, raise awareness and validate findings. They will serve as an important tool to foster ongoing two-way communication throughout the programme from its inception until completion. The following considerations will be followed when designing consultations:

- Consultations will be conducted in a manner that is accessible and culturally appropriate, paying due attention to the specific needs of beneficiaries and others who may be affected by programme implementation (including gender, literacy, language or accessibility of technical information).
- The objective and the anticipated results of the consultation will be clearly stated
- Consultation design will take into account the specific stakeholders targeted, and their context (interests, capacities, cultural background).
- Information provided in consultations will be transparent, easy to understand, promote inclusiveness and gender sensitivity
- Suitable trainers and facilitators will conduct the consultations, including trainers who are trained in social inclusion and gender equality. Translation services should be provided for non-Lao speaking ethnic groups (when necessary)
- Transparent, accurate, and consistent documentation and reporting will be required from all consultations. Attendance sheets should be collected from each meeting, along with meeting summaries and photos. A record of all consultations conducted within the framework of the programme should be managed by the programme management units, with reporting conducted by the NPMU.

Within each Activity, there are various actions and action inputs planned that include stakeholder engagement and consultations, with detailed actions described in Chapter 3, information on inputs provided within the Log Frame in Chapter 4, and detailed budgeting for stakeholder engagement within the financial and economic analysis Excel file (separate excel file).

Reporting on stakeholder engagement

GIZ and MAF/DoF will provide regular updates on programme implementation, through various media sources (online, print, workshops, among others). Online communications and information-sharing will be promoted, including through a bilingual national REDD+ website hosting data, communication and educational materials regarding REDD+ (including the ER Program). When appropriate, information will be presented in other local languages to reach diverse ethnic groups (see the Knowledge Management Plan in Annex 7 for further information).

Annual programme reporting will further provide an overview of consultations and workshops conducted, and will provide insight into upcoming events for the following year. In order to ensure the widest dissemination and disclosure of programme information, including any details related to applicable environmental and social safeguards, local and accessible disclosure tools including audiovisual materials such as flyers, brochures, videos and community radio broad-

casts will be utilized in addition to other communication modes. Furthermore, particular attention will be paid to women, ethnic groups, illiterate or technologically illiterate people, and people with hearing or visual disabilities, people with limited or no access to internet and other groups with special needs. The dissemination of information among these groups will be carried out with the programme counterparts and local actors such as village and *kumban* leaders, producer associations, CSOs, Lao Women's Union, among other regional actors. For additional information refer to Chapter 12 on programme monitoring and evaluation.

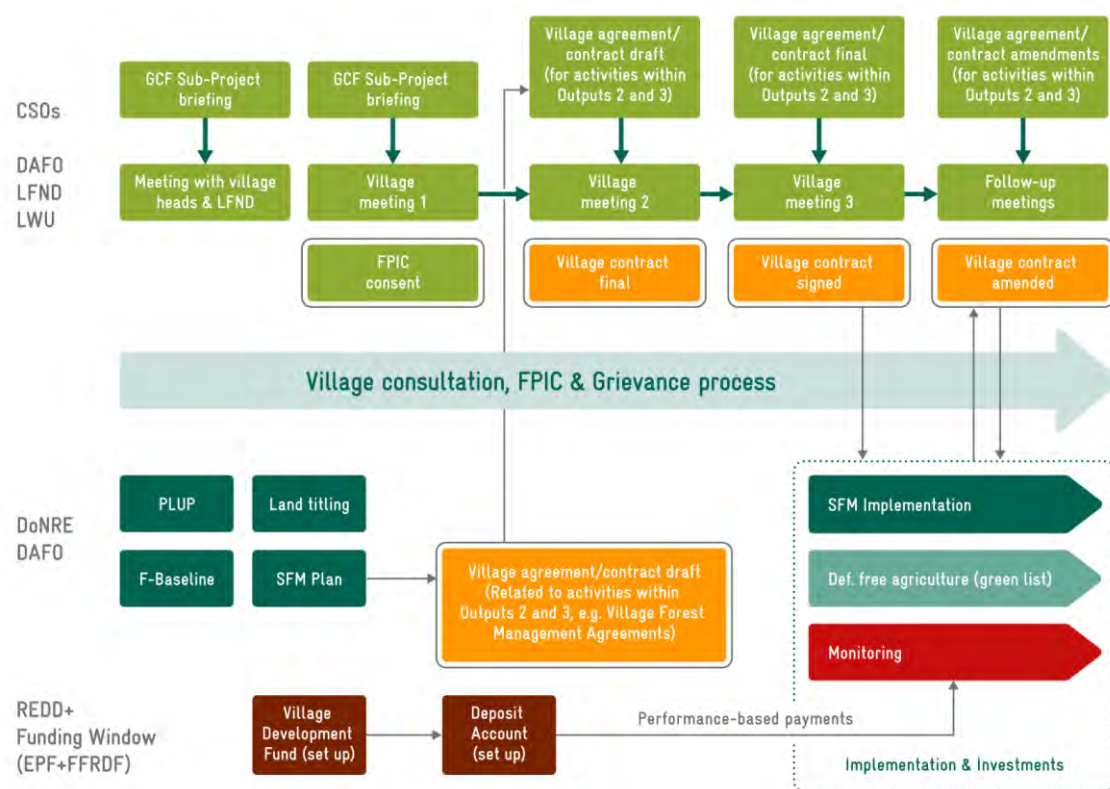


Figure 27. Overview of local level processes and arrangements for programme implementation

Local level processes and arrangements are presented in the figure above. Village consultations, a comprehensive FPIC and grievance process is central to ensure proper implementation and participation at village level. The GCF programme builds on best practices and experiences of baseline projects, such as CLiPAD and ICBF, in developing village agreements covering activities under Output 2 and 3. However, before such agreements can be enacted, participatory land use planning and delineation of forest and agricultural land needs to be undertaken, and a FPIC process will be carried out.

Since village agreements can lead to access- and use restrictions for forest areas within the territory of the local community that support village livelihoods, it is essential that villagers fully understand what these impacts might be. The FPIC process is designed to give communities the opportunity to give or withhold their consent, which is sought at different levels and stages of project planning and implementation by the villagers, based on an iterative process on participatory and open negotiation with the villagers. The FPIC process is not a one-event task, rather it is a continuous process. However, in order to elaborate a final agreement to implement the village agreements, the FPIC process will seek three main consents.

1. The first will be sought at an early stage where villagers are able to give or withdraw their consent to continue the discussions on the proposed activities such as village forest management. During a village meeting CSOs or the Lao Front for National Development (LFND), in collaboration with the Lao Women Union (LWU), act as the local FPIC facilitation team, villagers are provided with all relevant information including possible impacts. In case the village agrees to continue the collaboration, the project will start the implementation of certain activities such as land use planning or village forest management.
2. If the villager agree to the plans (e.g. village forest management plan) and elaborated activities, a second consent will be given.
3. The third consent will be the signing of the final agreement to implement the activities. It also covers procedures for amending the agreement and the grievance or dispute settlement mechanism.

In any case of payments being made to the villages in supporting the implementation of the village agreements, the village must have an account. Under the VDF system, an account is opened in the name of the village. The VDF account is managed by a Village Development Fund Committee. The VDF is used for the allocation of grants from the EPF through the FFRDF to the village.

The overall objective of signing the village agreement is to promote and strengthen sustainable management and protection of village forest areas and to link management efforts to performance-based payments.

12.2.3 Incorporation of women, ethnic groups

Incorporation of women

A Gender Action Plan (GAP) has been elaborated to mainstream gender-related measures into the programme, ensuring that gender-related risks are avoided or mitigated, and to maximize climate and development co-benefits for both men and women. It pays special attention to women, considering that women are not a homogenous group, and the additional challenges that women from different ethnic groups may face. The plan includes:

- Gender-responsive actions for all programme activities, as well as cross-cutting measures that address and strengthen the voice and agency of women in climate action within the context of the proposed programme. Timelines and responsibilities are indicated within the GAP.
- Gender-responsive result indicators and sex-disaggregated targets to be integrated into the programme's results framework.
- Presentation of gender-responsive development impacts

The plan provides an overview of how women's engagement throughout the programme will be positively targeted, and how the programme will promote gender equality through all of its activities and within programme management (refer to the gender assessment and gender action plan for more detailed information).

Incorporation of ethnic groups

“Lao PDR has endorsed the *International Labour Organization Convention 169 on Indigenous and Tribal Peoples (ILO 169, 1989)* and *United Nations Declaration of Indigenous Peoples’ Rights (UNDRIP, 2007)* but the Government of Lao PDR (GoL) does not recognize the concept of indigenous peoples in its policies and legislation. Instead, the term “ethnic group” is officially used to describe its people, who are categorized into 49 broad ethnic groups. [...] Ethnic group diversity is reflected in a rich diversity of **ethnic languages**. Each ethno-linguistic family is divided into main ethnic groups and is further described through sub-ethnic groups. Some ethnic languages are only spoken languages, and do not have written forms.”³³³

“As described in Chapter 1, the programme area is home to an array of inhabitants from diverse ethnic groups. The three major ethno-linguistic families in the ER Program area are the Lao-Tai, the Mon-Khmer, and the Hmong-Hmien. According to 2005 data, around 45% of the regional population belong to the Lao-Tai ethno-linguistic family, 30% to the Mon-Khmer, 15% to the Hmong-Mien and the remaining groups in the Sino-Tibetan compose the remaining 10%.³³⁴ [...] Thus, these six Northern provinces are notable insofar as in this region, the Lao-Tai ethnic groups comprise less than half the population, whereas nationwide they comprise two-thirds of the population. Thus, other ethnic groups are more numerous in these Northern provinces (refer to Chapter 1 and the ESIA for more detailed information)[...] Generally speaking, these groups tend to have lower rates of education, especially among girls and women, lower rates of self-reported land ownership, higher rates of poverty, and more food insecurity than Lao-Tai groups³³⁵.”

While the programme is anticipated to have largely positive impacts for these groups, if improperly implemented or if safeguards are not sufficiently in place there could be negative impacts on the livelihoods and wellbeing of ethnic groups in the programme region.

The socio-economic risks that may arise during the implementation of the programme will certainly be higher in some areas than others but are also likely to fluctuate over time. This underscores the requirement for site-specific Environmental and Social Management Plans and a programme Environmental and Social Management System that is based on adaptive management. The high percentage of non-Lao-Tai ethnic groups in the programme area requires a higher degree of risk management as per the GCF Indigenous People Policy.

Targeted participation and enhanced support for vulnerable ethnic groups

The programme will make sure that ethnic groups, especially particularly vulnerable groups, will benefit from the programme’s activities. Vulnerable households at the village level will be positively targeted through programme activities utilizing participatory approaches and providing necessary technical support and other inputs.

For the successful implementation of this programme, the specific situation of different ethnic groups, and in particular vulnerable households, are taken into account. The programme will

³³³ ER-PD SESA Report 2017, p. 27

³³⁴ Lao PDR Housing and Population Census 2005

³³⁵ ER-PD 2018, p. 33

finance measures that enable diverse 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. Such measures include:

- FPIC and existing national laws and international commitments related to ethnic groups (and indigenous peoples) must be respected. FPIC processes will be initiated with all participating villages prior to the implementation of land use investments. FPIC agreements are mandatory to participate in programme activities.
- A participatory and inclusive approach will be applied that take into account regional and cultural diversity within the programme area. For example, Activity 1.4 allows for village land use planning to be based on participatory processes, where prioritized activities are identified based on the village's priorities, context and differentiated vulnerabilities and needs.
- Programme staff and trainers will include male and female representatives from diverse ethnic groups. They will all receive training on gender equality and social inclusion within the context of the programme.
- Outreach, extension / technical support at the community-level, workshops and capacity building activities will be socially inclusive, aware of culturally diverse contexts and norms, and take into consideration local knowledge. Where necessary, the programme will ensure the availability of translators (either from within the community or from external sources, if necessary) to facilitate the dissemination of knowledge and information. Translation can be provided for oral workshops, extension materials and other programme -related materials (e.g. videos, radio programs, publications, etc.).
- Particular attention will be paid to women, ethnic groups, illiterate or technologically illiterate people, and people with hearing or visual disabilities, people with limited or no access to internet and other groups with special needs. The dissemination of information among these groups will be carried out with the programme counterparts and local actors such as village and *kumban* leaders, producer associations, CSOs, Lao Women's Union, among other regional actors.
- Opportunities for collaboration with other stakeholders (e.g. CSOs) will be sought out to strengthen stakeholder outreach and the engagement of various ethnic groups and vulnerable households. This includes local CSOs/ NGOs, the Lao Front for National Construction, and the Lao Women's Union.
- Alternative livelihood activities will be supported in the agriculture and forest sectors, where extension trainers will develop a strategy to target and engage highly vulnerable households and provide technical support in culturally-appropriate ways (see Activity 2.1). Livelihood interventions were identified as important to support the transition to low-carbon development pathways, based on REDD+.

12.2.4 Incorporation of stakeholder feedback into management decisions

Feedback and the results of consultations and workshops will be shared with the NMPU, PPMUs, DPMUs and NPSC as key information to facilitate decision-making from an informed point of view. Programme management will ensure proactive programme management and will respond

as necessary, based on stakeholder feedback, to ensure the programme's implementation is on track and respects social and environmental safeguards.

NPMU and PPMUs will include safeguard and M&E specialists, responsible for overseeing social and environmental safeguards.³³⁶ At the district level, a representative of the DPMU will be designated as the district safeguard and M&E officer and will receive training on safeguards and the programme's grievance redress mechanism. They will work closely with the safeguard and M&E specialists within the NPMU and PPMUs. They will ensure ongoing environmental and social management throughout the programme and will further cover measures related to stakeholder engagement.

During programme inceptions, planning documents, standard operating procedures, guidelines and management systems will be established or specified, where the safeguards expert will be responsible to ensure that they promote gender equality and social inclusion.

They will further be responsible for ongoing monitoring of social and environmental safeguards, ensuring that the programme is able to respond as necessary to any unforeseen changes. This includes closely coordinating with programme partners and PPMU/DPMU staff to ensure programme activities are conducted in an inclusive and equitable manner, closely overseeing the implementation of the gender action plan and environmental and social management plans.

12.2.5 Timetable

The following Table provides information on key considerations and events during programme inception and implementation.

Table 45: Timeline for stakeholder engagement activities

Activity	Programme Phase	Timeline*	Responsibility
Establishment of programme management units (NPMU, PPMU and DPMU)	Inception	Early 2020	MAF
Appointment of officers responsible for safeguard-related issues within DPMU, PPMU and PSC	Inception	Early 2020	NPMU
Integration of updated contact information for grievance mechanism	Inception	Early 2020	NPMU
Identification and training of staff and trainers for conducting community mobilization and sensitization	Inception	Early 2020	NPMU

³³⁶ A central function of these officers within the NPMU and DPMU will be the monitoring and evaluation of programme activities, including safeguards and the operationalization of the project's grievance redress mechanism. At the district level the officer responsible for safeguards will not solely work on M&E and safeguards, but will support the NPMU and PPMU officers as necessary with reporting and data collection, and will support the management of district-level grievances. They will receive training on safeguards and the grievance mechanism, as well as gender and social inclusion.

Community mobilization and sensitization	Inception	Early 2020	NPMU, PPMU and DPMU in cooperation with government authorities
Ongoing stakeholder engagement events embedded in programme activities (training, awareness raising, land use planning etc.; refer to Chapter 3 for more detailed information at the activity and action level, as well as the detailed programme timeline in the excel workbook)	Implementation	2020-2029	NPMU, PPMU, DPMU
Periodic stakeholder update meetings and information dissemination	Implementation	2020-2029	NPMU, PPMU, DPMU
Regular monitoring and periodic reporting of programme implementation (as described in Chapter 12)	Implementation	2020-2029	NPMU, PPMU and DPMU responsible for monitoring and reporting, in cooperation with government authorities supporting programme implementation

**Assuming programme start in mid-2020*

12.2.6 Resources and responsibilities

The implementation of the social engagement plan is seen as an important contributor to the programme's success. Long-term safeguard and M&E specialists will be embedded within the NPMU and PPMUs. They will oversee, guide and coordinate stakeholder engagement within the programme, and ensure the successful implementation of the gender action plan and ESMPs. Monitoring will be compiled by the NPMU safeguard officer

Responsibilities

The responsibilities of the safeguard and M&E specialist in the NPMU include (among others):

- Liaison with all programme stakeholders
- Responsibility for overseeing programme communication and stakeholder engagement
- Dissemination of information about the grievance mechanism to programme partners, local communities, CSOs, among others
- Identification of local and provincial CSOs for collaboration on community outreach, information dissemination and other programme activities
- Mediation between the programme and the community
- Overseeing (implementing, monitoring and reporting) on the grievance resolution system
- Monitoring programme progress, including in achieving the ESMP and GAP, and ensuring adaptive management (as needed).

The responsibilities of the safeguard and M&E specialists in the PPMUs include (among others):

- Liaison with programme stakeholders at the province level
- Responsibility for overseeing programme communication and stakeholder engagement in their province
- Dissemination of information about the grievance mechanism to programme partners, local communities, CSOs, among others within the province
- Identification of local and provincial CSOs for collaboration on community outreach, information dissemination and other programme activities
- Mediation between the programme and the community for grievances filed at the provincial level
- Monitoring the grievance resolution system (in cooperation with the NPMU M&E specialist), with a focus on grievances filed in the province
- Supporting NPMU safeguard and M&E specialist for programme monitoring as required

The responsibilities of the DMPU officer responsible for safeguards include (among others):

- Overseeing programme implementation at the district level
- Liaison with programme stakeholders at the district level
- Programme communication at the district level (in coordination with the PPMU and NPMU)
- Dissemination of information about the grievance mechanism to programme partners, local communities, CSOs, among others within the district
- Mediation between the programme and the community for grievances filed at the district level in coordination with the PPMU and NPMU safeguard and M&E specialists (as requested)
- Supporting NPMU and PPMU safeguard and M&E specialists for programme monitoring as required

Budgetary implications

Safeguard and M&E specialists will be hired within the NPMU and PPMU. Their core responsibilities will be overseeing safeguards and programme M&E.

At the district level, a district officer will be appointed the responsibility of overseeing safeguards and will receive training on safeguards and the programme's grievance redress mechanism. They will have other tasks (i.e. will not only work on safeguards and monitoring), but they will support the safeguard and M&E specialists within the NPMU and PPMU as needed.

All costs have been integrated into the programme budget.

12.3 Stakeholder grievance mechanism³³⁷

12.3.1 Context of the stakeholder grievance mechanism

A grievance mechanism has been developed to acknowledge and address any negative impacts or complaints that arise as a result of the programme. 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.

12.3.2 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.

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.

³³⁷ Description adapted from the R-Package (2018) and ER-PD (2018, p.199-202)

Type of Grievance Mechanism	Key Considerations
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 Construction, 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

Figure 28. Overview of feedback and grievance redress mechanisms applied for REDD+ in Lao PDR

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+ Program.

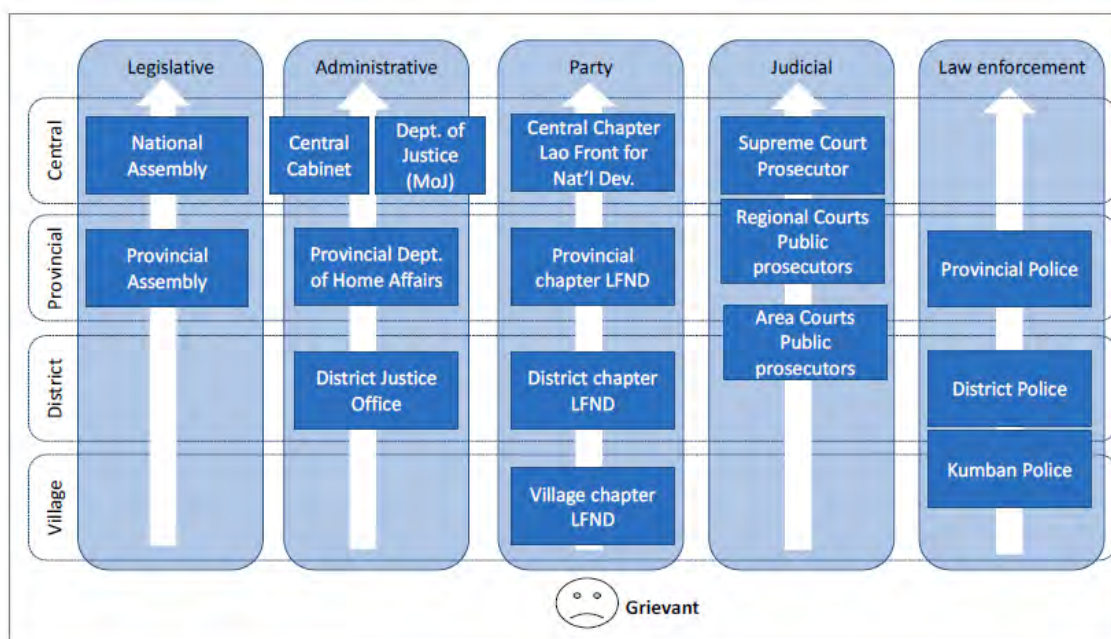
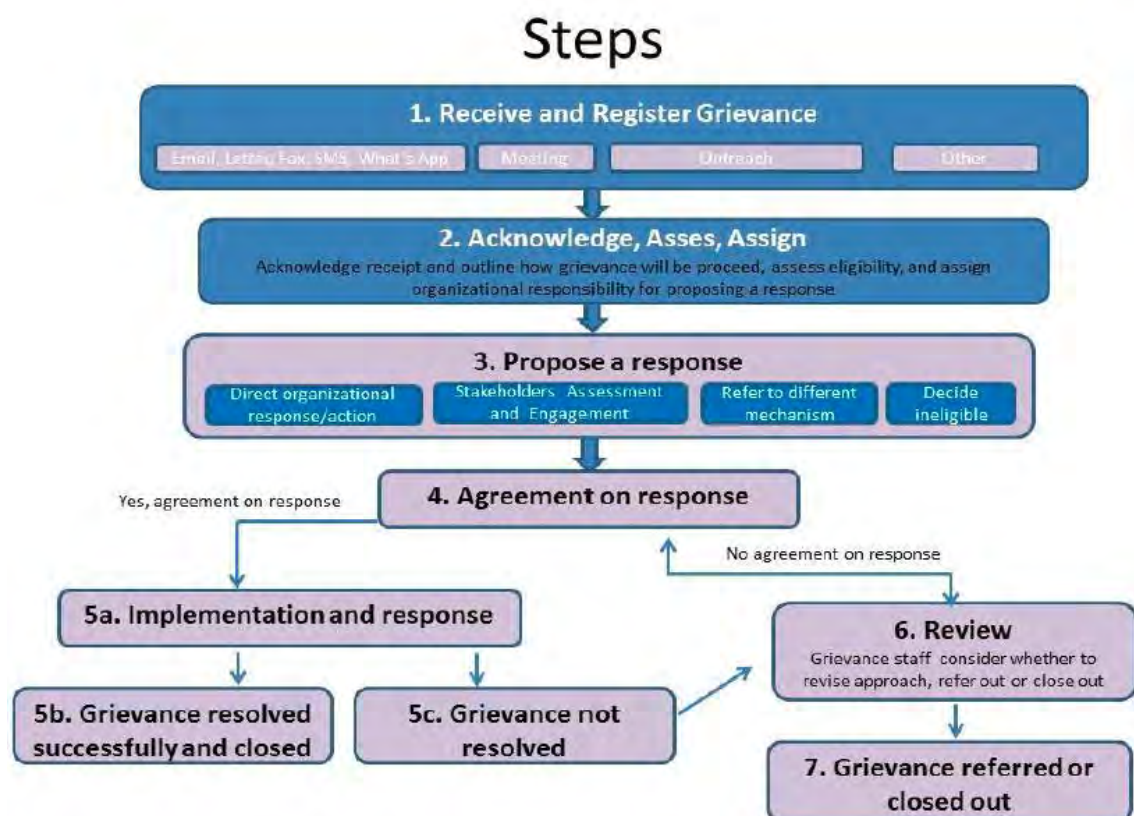


Figure 29. Options for grievance redress under REDD+

Source: ER-PD 2018, p. 201

The following Figure highlights the core steps to file and resolve a grievance with the programme's grievance redress mechanism (note – the mechanism is further described in regard to its application for the programme-specific grievance redress mechanism described in the next sub-section). 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.



Source: ER-PD 2018, p. 202

Figure 30. Overview of grievance redress mechanism

12.3.3 GCF Programme Grievance redress mechanism

The resolution of claims and complaints arising from the GCF programme shall be based on existing grievance and redress systems developed for REDD+ in the country (described above), as well as a programme-specific reporting mechanism to the NPMU, PPMU and/or DPMU, and the PPMU will include safeguard and M&E specialists hired to ensure the monitoring and fulfilment of safeguards for programme implementation. At the district level, DPMU will designate an officer responsible for safeguards, who will be responsible for overseeing grievances within their unit. The safeguard officer in DPMU will not work exclusively on safeguards; however, he/she will closely coordinate with the PPMU and NPMU safeguard and M&E specialists to support data collection, monitoring and support the manage grievance complaints received at the district level (i.e. filed to DPMU). 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) 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 NPMU's safeguard and M&E specialist will oversee the process, maintain a record of all grievances filed, report on grievances filed and ensure they are adequately addressed. If it is not possible to address the grievance within the programme structure (i.e. with DPMU, PPMU, NPMU or PSC), the grievance will be sent to a representative in GIZ's country office in Lao PDR. When considered necessary in particularly challenging situations, the GIZ country officer will transfer the case to the GIZ Ombudsman.

Info Box 10. 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 45: Overview of the main steps within the programme-level grievance redress mechanism

Grievance Redress Mechanism Steps	Description
1. Receive and register grievance	<p>Stakeholders submit their grievances to the representative in charge of safeguards (e.g. DPMU officer responsible for safeguards, PPMU safeguard and M&E specialist- see chart below).</p> <p>Grievances can be filed through email, letter, fax, SMS, meetings, outreach events, or other written or oral formats. Local CSOs will also play an important role helping to facilitate complaint and grievance filing (see info box below).</p> <p>All grievances will be registered by the receiving unit (DPMU/ PPMU/ NPMU) using a standard template. All grievances filed must be clearly documented and securely stored.</p>

Grievance Redress Mechanism Steps	Description
2. Acknowledge, assess and assign	The project specialist and/or officer in charge of safeguards at the respective level where the grievance has been filed (DPMU, PPMU, NPMU) must acknowledge receipt of the grievance. They must outline 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 programme officer 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. mechanisms identified in the previous sub-section, e.g. judicial grievance mechanism), or they could decide that the grievance is ineligible.
4. Agreement on response	Based on the responses proposed in step 3, the project officer, representatives responsible for the investigation and proposal of response options will meet with the complainant and other related parties and try to reach an agreement that is acceptable to all parties.
<i>If yes agreement on response refer to step 5, if no refer to step 6</i>	
5a. Implementation and response	The project specialist/ officer in charge of safeguards will assign a relevant officer to oversee the implementation of 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 successfully 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 grievance the implemented response (step 6).
<i>If no agreement on response (step 4)...</i>	
6. Review	If no response can be met, the responsible safeguard specialist/ project officer will review the grievance with the safeguards specialist 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 or closed out	Pending the result of the grievance review, grievances that cannot be resolved 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.

The programme-level grievance mechanism is presented below. Through the mechanism, grievances can be filed at the: (1) district, (2) provincial, (3) national, (4) project steering committee

(PSC), (5) GIZ country office and (6) GIZ headquarter level. In addition to the proposed project-specific mechanism, grievances can be filed through other mechanisms presented in the previous sub-section, as identified within the National REDD+ Program and ER-Program.

Level 1: The complaint should be submitted directly to the DPMU (unless the complaint is about the DPMU, in which case it should be sent to the PPMU or NPMU), who will share the filed grievance with the responsible officer in charge of safeguards within the DPMU. They will receive and begin processing the grievance. The complaint can be provided in writing or orally to the representatives (as described in Table 46). At this stage the grievance will be registered by the DPMU safeguard representative, who will assign a suitable officer to investigate the grievance and propose a response.

A record of the grievance will be made utilizing a standard template, and shared with the NPMU safeguard and M&E specialist to ensure a record and oversight of all grievances is kept.

DPMU in each district	Should respond in 10 working days upon receiving the reported grievance. <i>[Contact information for the DPMU officer responsible for safeguards to be included within 6 months of programme inception.]</i>
------------------------------	---



Level 2: If the complaint cannot be solved at the DPMU level or the complaint is filed against the DPMU, the complaint should be submitted to the PPMU at the provincial level. The PPMU safeguard and M&E specialist will receive and begin processing the grievance. The complaint can be provided in writing or orally to the representatives. At this stage, the grievance will be registered and investigated by the provincial PMSU.

Record of the grievance will be made utilizing a standard template (or revising the existing template if the grievance had been previously filed at the district level), and shared with the NPMU safeguard and M&E specialist for their record.

PPMU in each province	Should respond in 10 working days upon receiving the reported grievance. <i>[Contact for PMSU safeguard and M&E specialist to be included within 6 months of programme inception]</i>
------------------------------	--



Level 3: If the grievance cannot be solved at the PPMU level or the grievance is filed against the PPMU, the complaint should be submitted to the NPMU at the national level. The NPMU safeguard and M&E specialist will receive and begin processing the grievance. The complaint can be provided in writing or orally to the representatives. At this stage, the grievance will be registered and investigated by the NPMU.

Record of the grievance will be made utilizing a standard template (or revising the existing template if the grievance had been previously filed at the district level), and stored by the NPMU.

NPMU (national level)	Should respond in 10 working days upon receiving the reported grievance. <i>[Contact for NPMU safeguard and M&E specialist to be included within 6 months of programme inception]</i>
------------------------------	--



Level 4: If the NPMU cannot address the grievance, the grievance will be sent to the project steering committee (PSC), in particular the PSC representative responsible for safeguards. They will coordinate with the NPMU safeguard and M&E specialist to assess the grievance.

Project steering committee	<i>Should respond in 10 working days after consultation with the NPMU safeguard officer.</i> <i>[Contact for PSC representative responsible for safeguards to be included within 6 months of programme inception]</i>
-----------------------------------	--



Level 5: If the PSC cannot address the grievance, the grievance will be sent to the GIZ safeguard representative within the GIZ Lao PDR Country Office. They will coordinate with the PSC safeguards representative and the NPMU safeguard and M&E specialist to assess the grievance.

GIZ Programme Director	Should respond in 10 working days upon receiving the reported grievance. They will consult with the NPMU and PSC safeguard officers. <i>[Contact for GIZ Programme Director to be included within 6 months of programme inception]</i>
-------------------------------	---



Level 6: Only in particularly difficult cases will the GIZ Country Office for Lao PDR request the assistance of the GIZ Ombudsman. If transferred to the Ombudsman, they will follow their own internal protocol to address the grievance.

GIZ	To report potential fraud, misconduct and other crimes or rule violations, contact the GIZ Ombudsman via the following contact information (information as of January 30, 2019): Name: Edgar Joussen Email: ombudsmann@ra-js.de Telephone: +49 30 3151870
------------	---

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 responsible officer for safeguards within 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 inception workshops
- 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
- Programme webpage
- Included as part of other communication material that is designed and distributed during programme implementation

REFERENCE LIST

- Braeutigam, D. 2015. Integrated Conservation of Forests and Biodiversity ICBF – Introduction. KfW and MoNRE, Vientiane, Lao PDR.
- Charmaz, K. 1983. The grounded theory method: An explication and interpretation. *In Contemporary Field Research: A collection of readings*, edited by R.M. Emerson, 109-126. Boston: Little, Brown.
- Climate Watch. 2018. Lao PDR. Available online: <https://www.climatewatchdata.org/countries/LAO>
- ClipAD, Climate Protection through Avoided Deforestation Project. 2016. Village Forest Management Planning Guideline. Vientiane, Lao PDR.
- DOF/ MAF. 2018. Lao PDR's Forest Reference Emission Level and Forest Reference Level for REDD+ Results Payment under the UNFCCC. Vientiane, Lao PDR.
- Eastham, J., F. Mpelasoka, M. Mainuddin, C., Ticehurst, P. Dyce, G. Hodgson, R. Ali and M. Kirby, 2008. Mekong River Basin Water Resources Assessment: Impacts of Climate Change. CSIRO: Water for a Healthy Country National Research Flagship.
- EU FLEGT Facility. 2017. Laos-EU Voluntary Partnership Agreement. Available online: <http://www.euflegt.efi.int/background-laos>
- Fischer, M., Aschenbacz, C. and Phimmavong, S. (2013). *Recommendation for a Capacity Development Strategy for the Public Forest Sector of Lao PDR*. GFA Consulting Group.
- GoL [Government of Laos]. *Promoting REDD+ through Governance, Forest landscapes & Livelihoods in Northern Lao PDR*. Submitted May 2018.
- IMF. 2018. Lao People's Democratic Republic. 2017 Article IV Consultation – Press Release; Staff Report; and Statement by the Executive Director for Lao People's Democratic Republic. IMF Country Report No. 18/84. Available online: <https://www.imf.org/en/Publications/CR/Issues/2018/03/23/Lao-Peoples-Democratic-Republic-2017-Article-IV-Consultation-Press-Release-Staff-Report-and-45750>
- IUCN. 2011. NBSAP Assessment: An assessment of Lao PDR's National Biodiversity Strategy to 2020 and Action Plan to 2010. Gland, Switzerland: IUCN. 46pp.
- KfW. 2017. Village Fund Disbursement and Management Guideline.
- Koch, S. 2017. The struggle over Lao PDR's forests: New opportunities for improved forest governance? *Pacific Geographies*, 47: 13pp.
- Koch, S., Kallabinski, J., Okfen, T. 2015. Village Forest Management Agreements (VilFoMA) as a performance-based payment scheme under REDD+ in Lao PDR. XIV World Forestry Congress, Durban South Africa, 7-11 September 2015.
- Lao PDR. 2009. National Adaptation Programme of Action to Climate Change. Vientiane, Lao PDR.
- Lao PDR. 2011. Forest Investment Program Lao Investment Plan. Vientiane, Lao PDR.
- Lao PDR. 2013. Second National Communication to the UNFCCC. Available online: <https://unfccc.int/documents/116664>
- Lefroy, R., Collet, L., Grovermann, C. 2010. Study on the Potential Impacts of Climate Change on Land Use in the Lao PDR. Available online: https://landportal.org/si0tes/default/files/june_2010_cc_land_use_change_ciat-gtz_-_j.pdf

- Lestrelin, G., Trockenbrodt, M., Phanvilay, K., Thongmanivong, S., Vongvisouk, T., Pham, T.T., Castella, J.C. 2013. The context of REDD+ in the Lao People's Democratic Republic: Drivers. Agents and institutions. Occasional paper 92. Bogor, Indonesia: CIFOR.
- Mark-Herbert, C., Prejer, B. 2017. Social Entrepreneurship in an Inclusive Business Model: A New Business Model for Sustainable Agroforestry. Available at: <https://www.intechopen.com/books/entrepreneurship-development-tendencies-and-empirical-approach/social-entrepreneurship-in-an-inclusive-business-model-a-new-business-model-for-sustainable-agrofore>
- Miles, M.B., Huberman, A.M. and Saldana, J. (2014) *Qualitative Data Analysis: A Methods Sourcebook*. CA: SAGE.
- Phanvilay, K. 2010. Watershed management in the Lao PDR. Presentation, National University of Laos, Vientiane, Lao PDR.
- Phommakaysone, K. 2012. The Geology and Mineral Resources of Lao PDR. Department of Geology and Mineral Resources, MONRE, Vientiane, Lao PDR. Available online: http://mric.jog-mec.go.jp/kouenkai_index/2012/briefing_120316_3.pdf
- Sisoumang, Bounthom; Wangwacharakul, Vute; and Limsombunchai, Visit. 2013. Operation and Management of the Village Development Fund in Champasak Province, Lao PDR. *Social Sciences* 34: 335 – 349.
- Sirivongs, K. 2016. FLEGT VPA Process in Lao PDR. 5th Sub-Regional Training Workshop on Timber Legality Assurance, December 6-8, 2016, Jakarta, Indonesia. Available at: <http://www.euflegt.efi.int/documents/10180/396025/11.+Lao+PDR+Country+Progress+Report.pdf/1967bac5-be8f-6580-9eec-94595d219a46>
- Smith, H. Alounsayath, O. 2015. Forest Legality Compendium. Department of Forestry Inspection and Department of Forestry, Vientiane, Lao PDR.
- Smith, H., Ling, S., Boer, K. 2017. Teak plantation smallholders in Lao PDR: what influences compliance with plantation regulations? *Australian Forestry*, 80(3): 178-187.
- UNDP. 2018. Lao PDR's eligibility for graduation from LDC status confirmed. Available online: http://www.la.undp.org/content/laopdr/en/home/presscenter/pressreleases/2018/3/19/laopdr_s-eligibility-for-graduation-from-least-developed-countr.html
- UNDP [United Nations Development. (2008). *Capacity Assessment Methodology*. Capacity Development Group. Bureau for Development Policy.
- University of Notre Dame. 2018. Notre Dame Global Adaptation Initiative Available online : <https://gain.nd.edu/our-work/country-index/rankings/>
- WHO, World Health Organization. 2016. Climate and health country profile – 2015 Lao People's Democratic Republic. Available online: <http://apps.who.int/iris/bitstream/handle/10665/246139/WHO-FWC-PHE-EPE-15.39-eng.pdf;jsessionid=449060C1FA8148FFBA3AEC5A496FA09B?sequence=1>
- World Bank. (2017). *Doing Business 2017. Equal Opportunity for all. Economic Profile 2017. Lao PDR*. International Bank for Reconstruction and Development / The World Bank
- World Bank. 2017. Lao PDR Economic Growth: Lowering Risks and Reviving Growth. Macroeconomic and Fiscal Management Global Practice, East Asia and Pacific Region. December 2017. Washington, DC.
- World Bank. 2018. Lao People's Democratic Republic– Sustainable Forestry for Rural Development Project. Independent Evaluation Group, Project Performance, Assessment Report 125929. Washington, DC: World
- WRI, World Resources Institute. 2014. Laos. Available online: <http://cait.wri.org/profile/Laos>

ANNEXES

Annex 1: Presence of selected financial institutions in programme provinces

Province ³³⁸	District	Banque Pour Le Commerce Extérieur Lao		Lao Development Bank		Agricultural Promotion Bank		Nayoby Bank		ACLEDA Bank Lao, Ltd	
		Branch	Service Unit	Branch	Service Unit	Branch	Service Unit	Branch	Service Unit	Branch	Service Unit
Luang Namtha	Luangnamtha	1	2	1	1	1		1		1	
	Sing		1		1		1				
	Long				1		1		1		
	ViangPhoukha						1		1		
	Nalae						1		1		
Oudomxay	Xai	1		1	1	1		1		1	
	La								1		
	Namo						1		1		
	Nga								1		
	Beng						1		1		
	Houn		1		1		1		1		
	Pakbeng						1		1		
Bokeo	Houayxai	1		1	1	1	1			1	

³³⁸ Adapted from Rural Finance in Northern Laos: Opportunities and Limitations for “Green Finance.” GIZ. 2018.

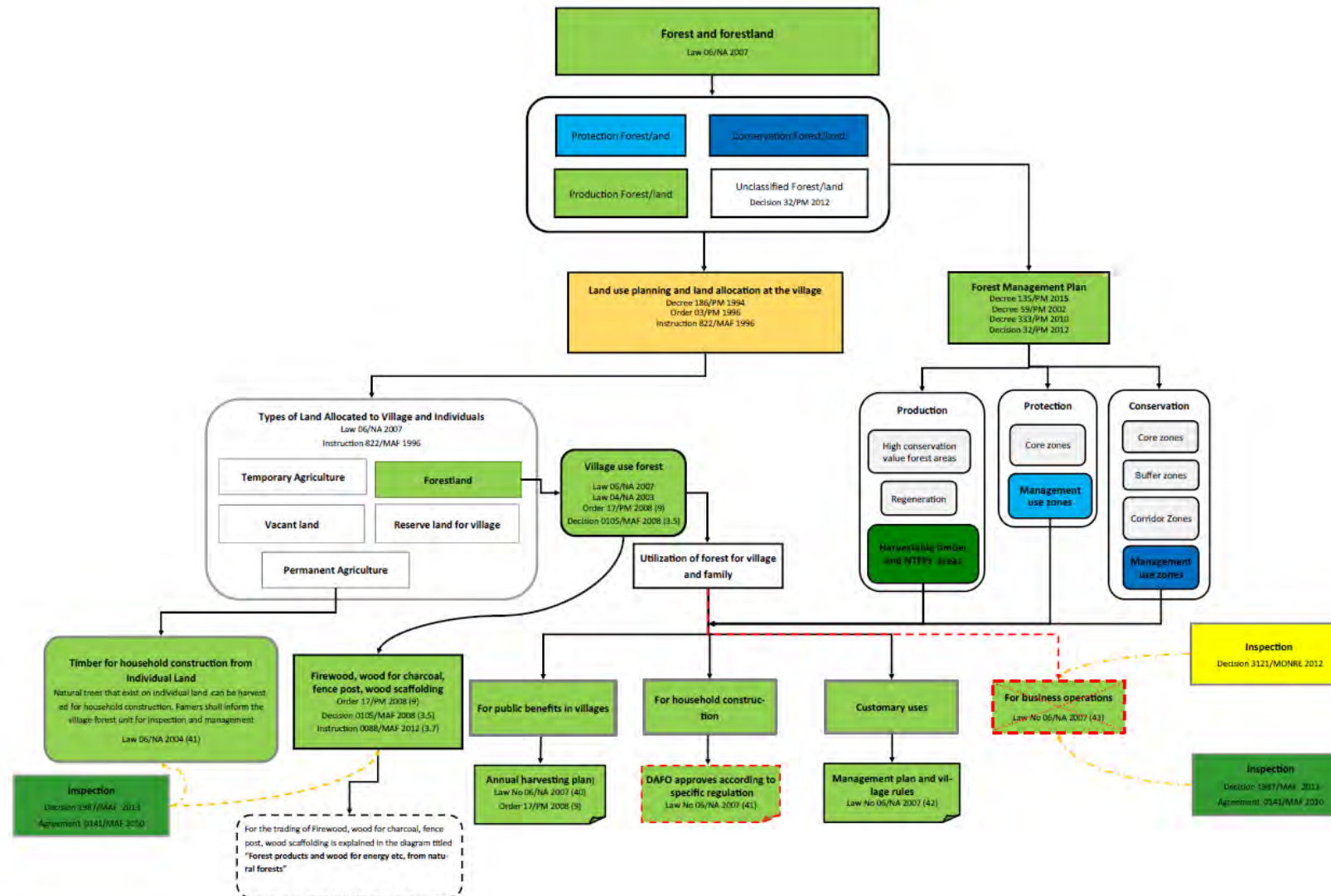
Province ³³⁸	District	Banque Pour Le Commerce Exterieur Lao		Lao Development Bank		Agricultural Promotion Bank		Nayoby Bank		ACLEDA Bank Lao, Ltd	
		Branch	Service Unit	Branch	Service Unit	Branch	Service Unit	Branch	Service Unit	Branch	Service Unit
	Tonpheung		1		1		2				
	Meung								1		
	Pha-Oudom								1		
	Paktha						1		1		
Luang Prabang	Luangprabang	1	5	1	1	1	1	1		1	
	Xiang-Ngeun						1				
	Nan		1		1		1				
	Pak-Ou										
	Nambak				2		1				
	Ngoy		1								
	Pakxeng								1		
	Phonxai								1		
	Chomphet										
	Viangkham								1		
	Phoukhoun								1		
	Phonthong										
Houaphan	Xamneua	1		1	1	1		1			
	Xiangkho						1		1		
	Viangthong				1				0		
	Viangxay				1		1		1		

Province ³³⁸	District	Banque Pour Le Commerce Exterieur Lao		Lao Development Bank		Agricultural Promotion Bank		Nayoby Bank		ACLEDA Bank Lao, Ltd	
		Branch	Service Unit	Branch	Service Unit	Branch	Service Unit	Branch	Service Unit	Branch	Service Unit
	Houameuang								1		
	Xam Tai				1		1		1		
	Sopbao				1						
	Hiem								1		
	Et		1				1		1		
	Sayabouri	1		1		1			1	1	
	Khop										
	Hongsa		1		1		1				
	Ngeun				1		1				
	Xianghon						1		1		
	Phiang		1		1		1				
	Paklai		1		1		1				
	Kenthao		1		1		1				
	Boten										
	Thongmixai										
	Xaisathan										

Annex 2: Figures highlighting forest regulations for different forest categories

The forest compendium (2015), provides a comprehensive overview of the regulations for each forest type.³³⁹ The following figure from the compendium provides an overview of the key regulations and processes related to forest land use in Lao PDR that will be followed for the implementation of this programme. More detailed figures describing the different regulations for all programme activities within the main forest types are also included within this Annex.

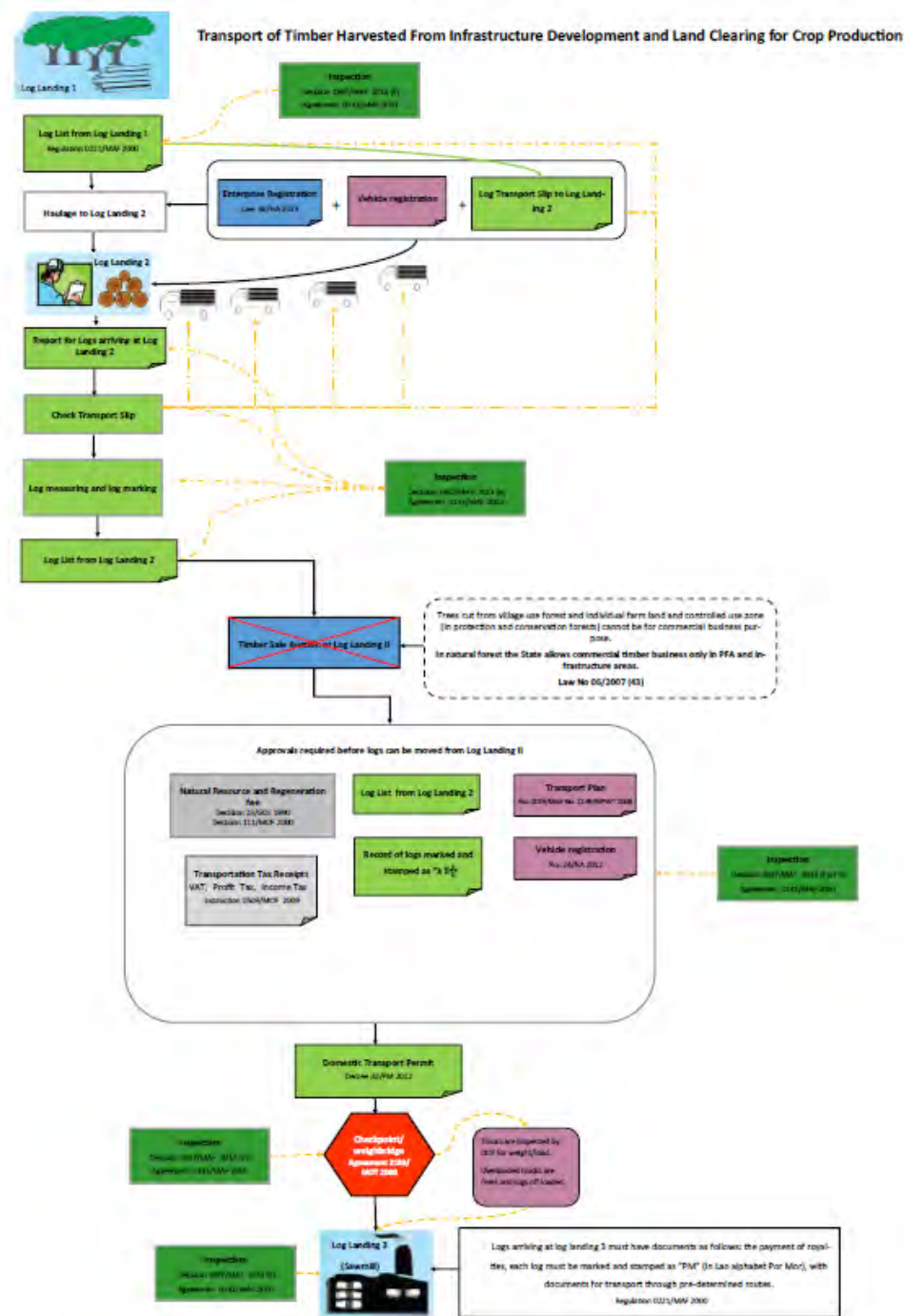
³³⁹ Smith and Alounsavath 2015



Overview of key forest land use regulations for protection, conservation, production, village and unclassified forest land

Source: Smith and Alounsavath 2015, p. 119

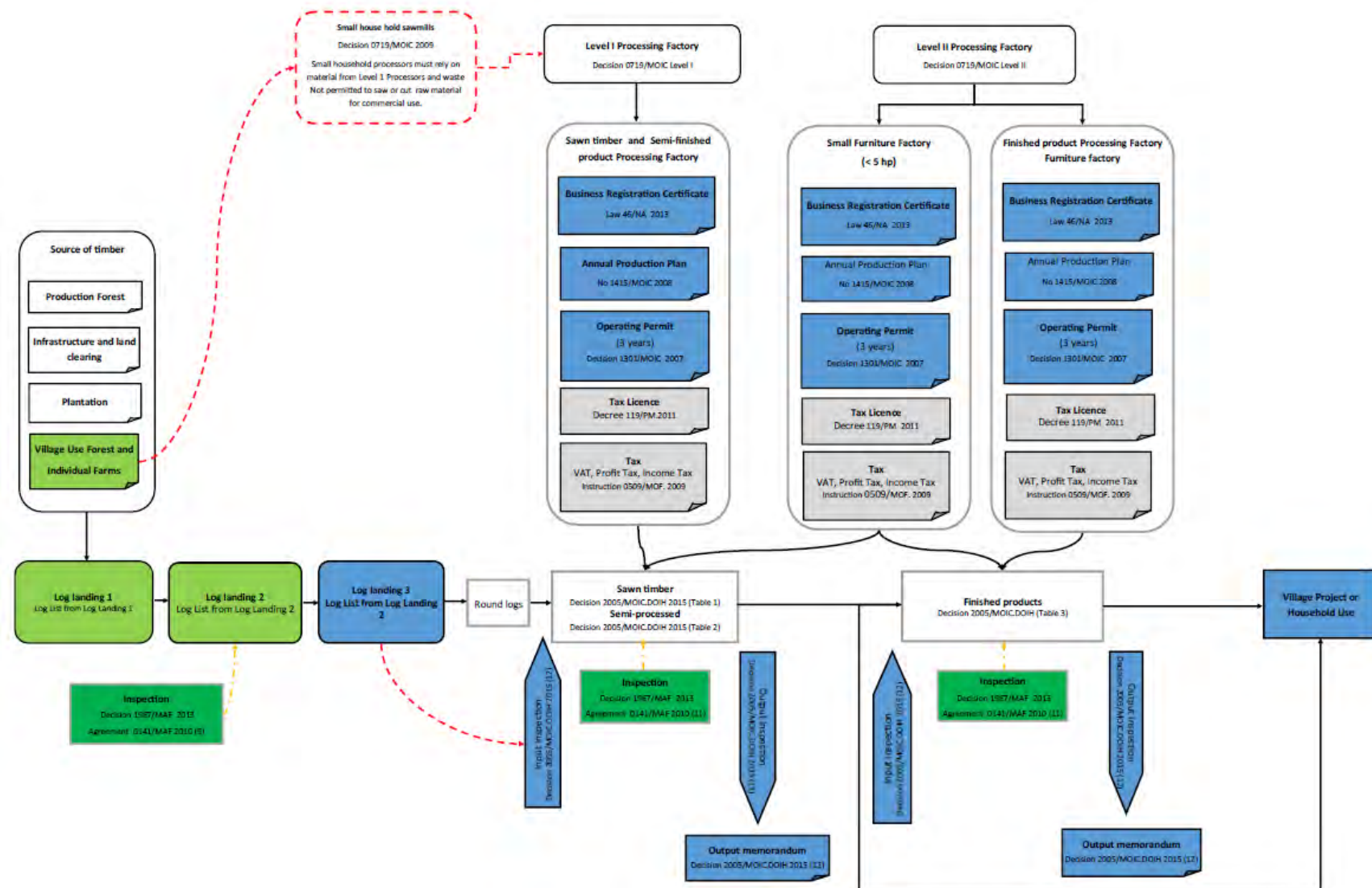
The following figure provides an overview of regulations for village forestry.



Overview of transport from village forests and other forest areas

Source: Smith and Alounsavath 2015, p. 120

The following Figure provides an overview of regulations for timber processing from village forests or farms

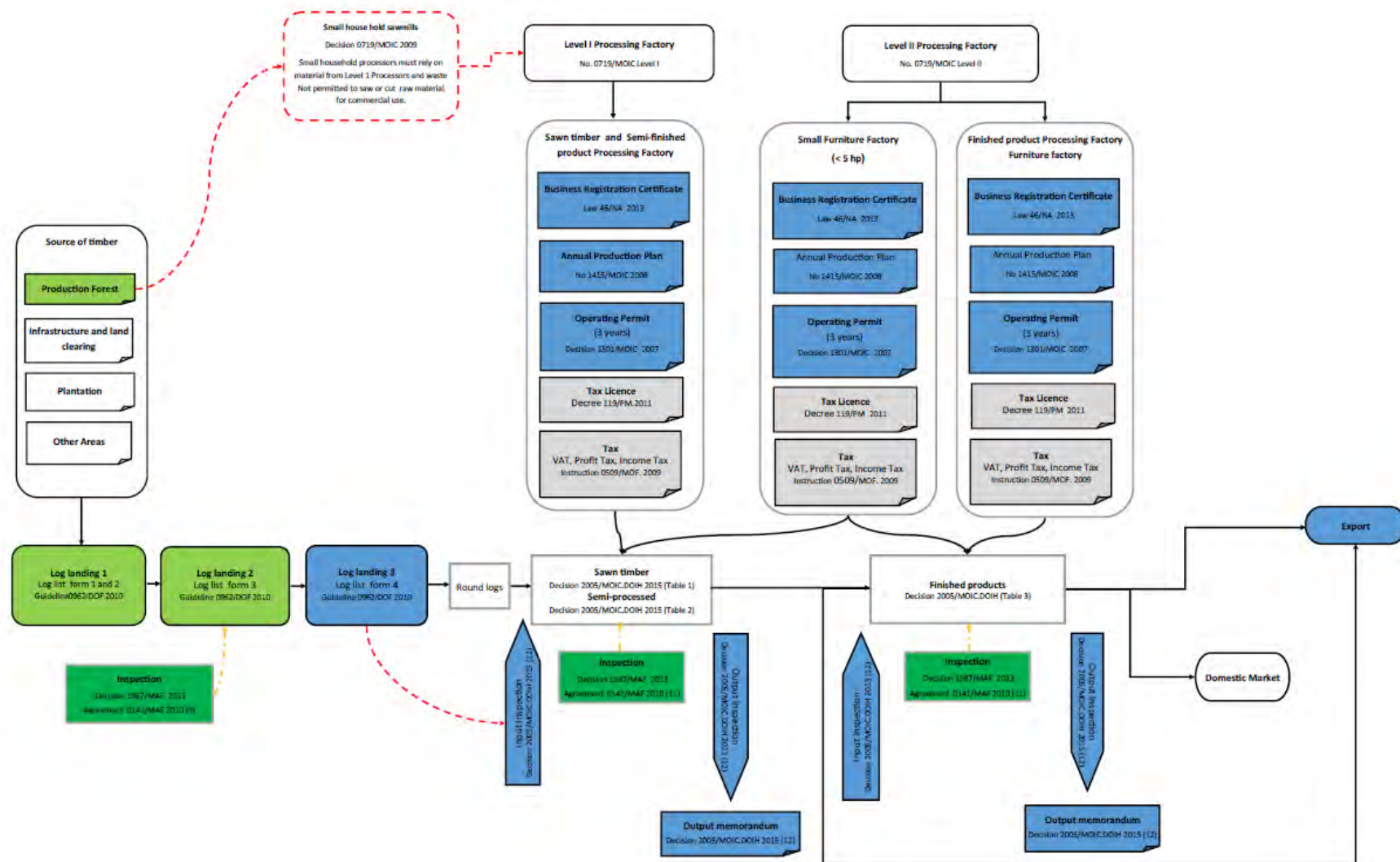


Overview of regulations for timber processing from village forests or farms

Source: Smith and Alounsavath 2015, p. 211

Additional regulations for production forests (Activity 3.2)

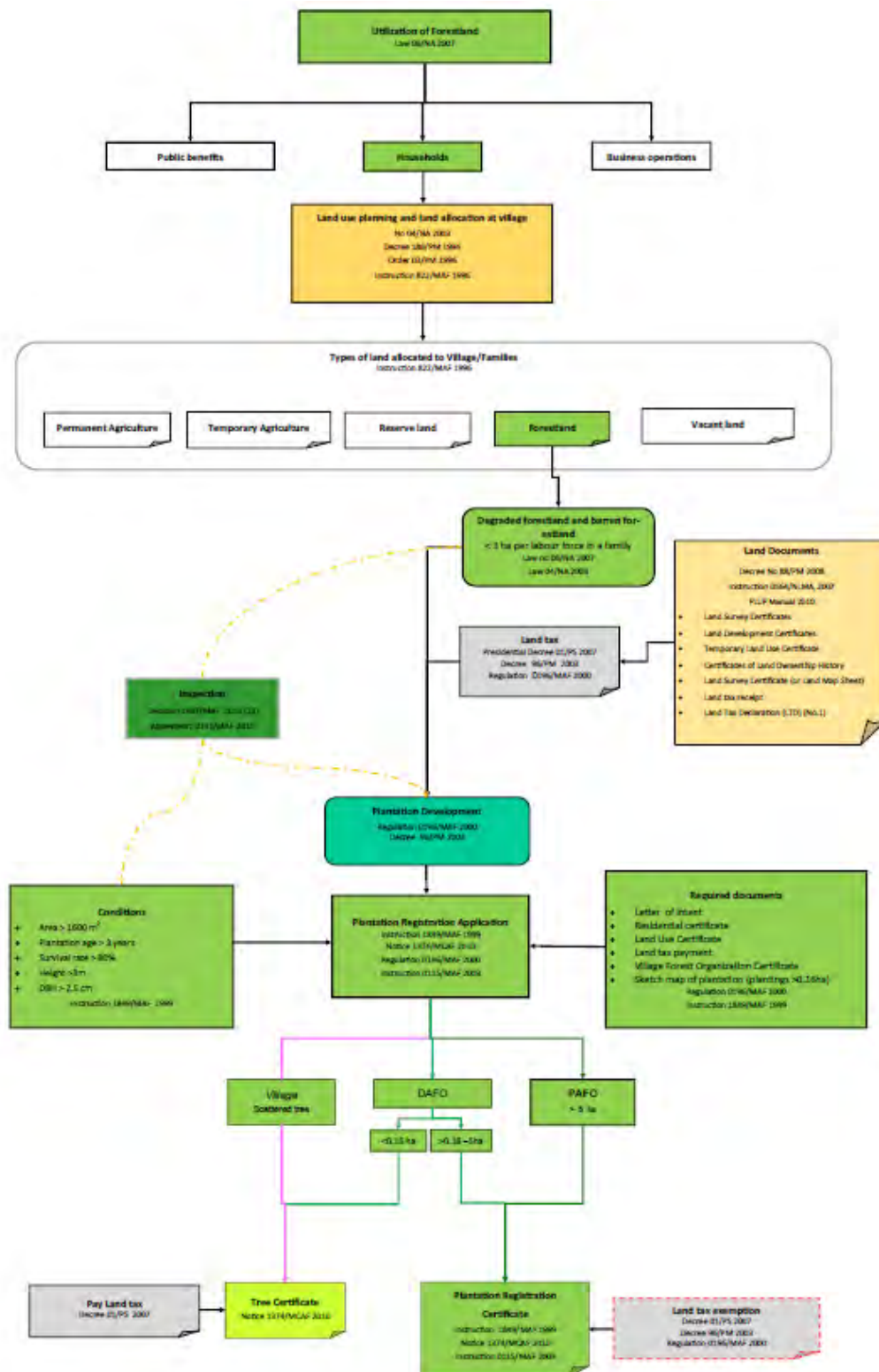
The following figure provides information on key regulations for production forests.



Overview of regulations for timber processing from production forest areas

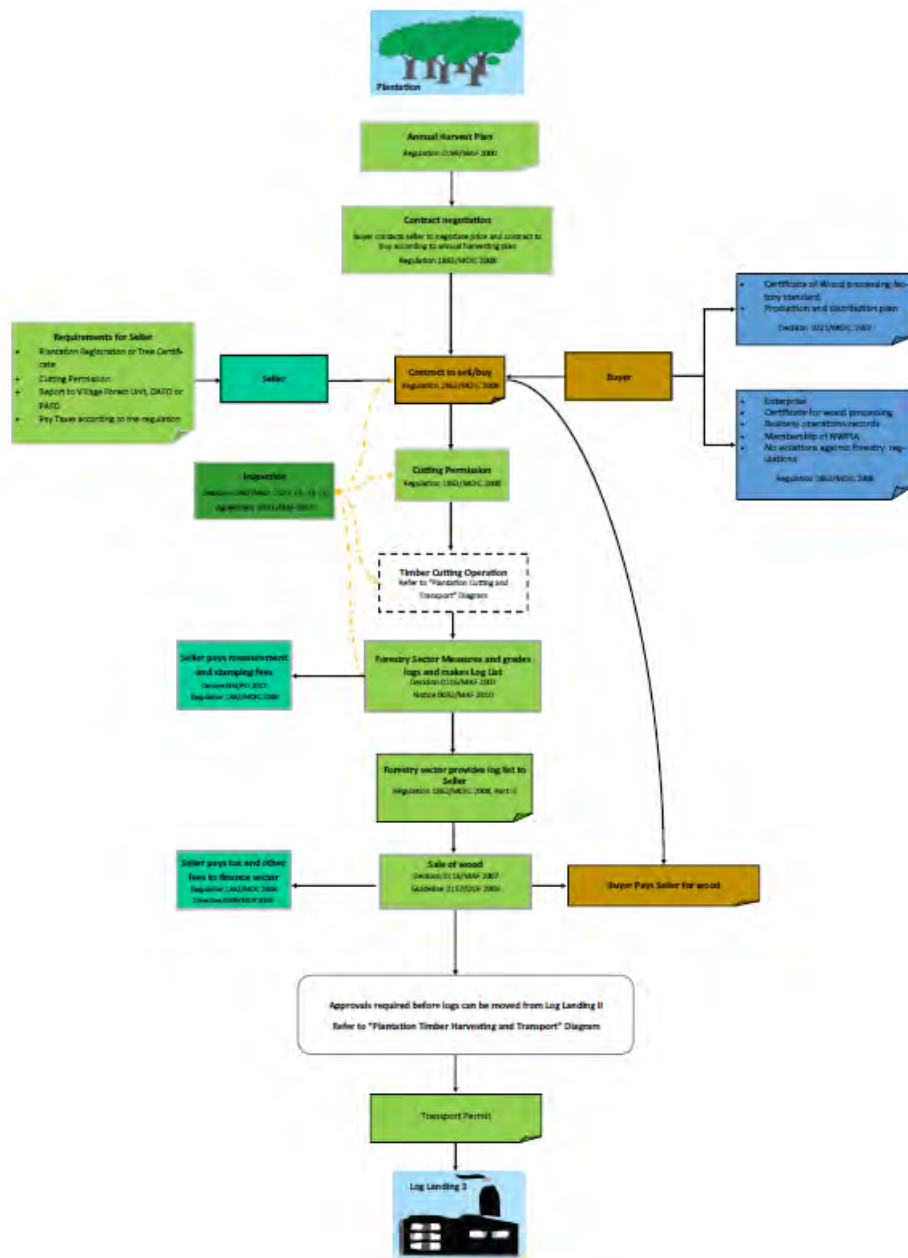
Source: Smith and Alounsavath 2015, p. 209

Regulations for small-holder plantations (Activity 2.2)



Overview of regulations for smallholder plantation investments (relevant for Activity 2.2)

Source: Smith and Alounsavath 2015, p. 182



Overview of regulations for the sale of timber from smallholder plantations (relevant for Activity 2.2)

Source: Smith and Alounsavath 2015, p.184

The flowchart illustrates the Timber Processing and Trade System in Vietnam, detailing the flow from source to export or domestic market, including processing levels and required documents.

Source of timber: Production Forest, Infrastructure and land clearing, Plantation, Other Areas.

Log landing at the Plantation (Primary Processing): Round logs, Square logs, Lumber.

Log landing 3 (Log lot from Plantation): Round logs, Square logs, Lumber.

Level I Processing Factory (Decision 0719/MOIC Level I):

- Sawn timber and Semi-finished product Processing Factory
- Business Registration Certificate (Law 46/NA 2013)
- Annual Production Plan (Decision 2005/MOIC.DOH 2015)
- Operating Permit (3 years) (Decision 530/LMOIC 2007)
- Tax Licence (Decree 119/PM 2011)
- Tax (VAT, Profit Tax, Income Tax Instruction 0509/MOF 2009)

Level II Processing Factory (Decision 0719/MOIC Level II):

- Small Furniture Factory (< 5 hp)
- Finished product Processing Factory Furniture factory
- Business Registration Certificate (Law 46/NA 2013)
- Annual Production Plan (Decision 2005/MOIC.DOH 2015)
- Operating Permit (3 years) (Decision 530/LMOIC 2007)
- Tax Licence (Decree 119/PM 2011)
- Tax (VAT, Profit Tax, Income Tax Instruction 0509/MOF 2009)

Inspection:

- Inspection (Decision 198/MAF 2010, Agreement 0143/MAF 2010 (IV))
- Inspection (Decision 198/MAF 2010, Agreement 0143/MAF 2010 (I))
- Inspection (Decision 198/MAF 2010, Agreement 0143/MAF 2010 (II))
- Inspection (Decision 198/MAF 2010, Agreement 0143/MAF 2010 (III))

Output Inspection:

- Output Inspection (Decision 2005/MOIC.DOH 2015 (I))
- Output Inspection (Decision 2005/MOIC.DOH 2015 (II))
- Output Inspection (Decision 2005/MOIC.DOH 2015 (III))
- Output Inspection (Decision 2005/MOIC.DOH 2015 (IV))

Output memorandum:

- Output memorandum (Decision 2005/MOIC.DOH 2015 (I))
- Output memorandum (Decision 2005/MOIC.DOH 2015 (II))
- Output memorandum (Decision 2005/MOIC.DOH 2015 (III))
- Output memorandum (Decision 2005/MOIC.DOH 2015 (IV))

Flow:

- Log landing at the Plantation (Primary Processing) leads to Round logs, Square logs, Lumber.
- Log landing 3 (Log lot from Plantation) leads to Round logs, Square logs, Lumber.
- Round logs, Square logs, Lumber from Log landing 3 leads to Level I Processing Factory.
- Round logs, Square logs, Lumber from Log landing 3 leads to Level II Processing Factory.
- Level I Processing Factory leads to Sawn timber and Semi-finished product Processing Factory.
- Level II Processing Factory leads to Small Furniture Factory and Finished product Processing Factory.
- Sawn timber and Semi-finished product Processing Factory leads to Sawn timber and Semi-processed.
- Small Furniture Factory and Finished product Processing Factory leads to Finished products.
- Sawn timber and Semi-processed leads to Finished products.
- Finished products leads to Domestic Market.
- Finished products leads to Export.

Annex 3: Overview of good agricultural practices

FAO defines Good Agricultural Practices as a “collection of principles to apply for on-farm production and post-production processes, resulting in safe and healthy food and non-food agriculture products, while taking into account economic, social and environmental sustainability.”³⁴⁰

In the context of the Northern Region of Lao PDR, a range of agricultural practices is considered to enable sustainable intensification of agriculture production and therewith contribute to a reduction of deforestation and forest degradation. In general, improvement of soil quality should enable farmers to practice agricultural production on a certain area for a longer period of time, and thus reduce the risk of deforestation for new agricultural area.

Conservation agriculture, practices that minimize disruption of a soil’s structure, will – especially on hilly terrain where soil degradation is a major problem – contribute to soil conservation and soil quality. Practices such as no-tillage, cover crops, crop rotation and/or crop residue management have already shown to reduce and prevent soil erosion and contribute to soil quality and moisture.³⁴¹

Depending on agriculture activities (crops, livestock) that are identified with high potential in certain districts and/or villages, a range of Good Agricultural Practices is possible. Examples are provided in the table below.

³⁴⁰ FAO 2016 - <http://www.fao.org/3/a-i6677e.pdf>

³⁴¹ Lestrelin, G., Quoc, H.T., Jullien, F., Rattanatrak, B., Khamxaykay, C. and Tivet, F. 2012. Conservation agriculture in Laos: Diffusion and determinants for adoption of direct Seeding Mulch-based Cropping Systems in Smallholder Agriculture. *Renewable Agriculture and Food Systems*, 27 (1), 81-92.

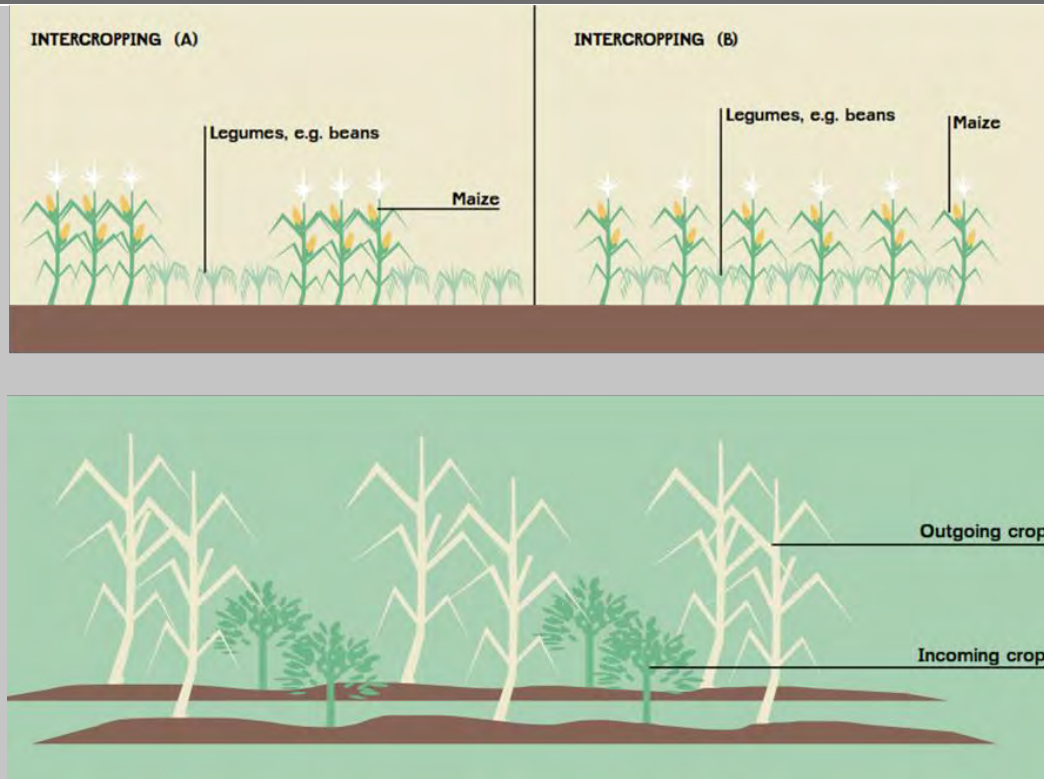
Intercropping

Practice

Intercropping and relay cropping

Intercropping is the planting of two or more crops in the same field at the same time, e.g. maize and legumes (beans).

Relay cropping is the planting of temporary crops within the main crop before the main crop is harvested. Relay cropping ensures the land is used continuously. It reduces the cost of subsequent cultivation while ensuring the availability of organic matter for the new crop.



Benefits

Productivity

- Increases total production and productivity per unit of land. Harvests of multiple crops increase income and food security; provides shade and fixes nitrogen.

Pest and disease control

- Controls weeds

Climate benefits

Mitigation

- Ensures long-term soil cover and conserves Soil Organic Matter. Legume integration increases soil Nitrogen, reducing use of synthetic fertilizer
- It provides a lot of biomass from residues to be returned as organic inputs to the soil in form of mulch and compost, hence increasing soil organic carbon

Adaptation

- Stabilizes soils and reduces the risk of soil erosion e.g. during heavy rainfall.
- Reduces the risk of total crop failure under unfavorable conditions due to crop diversification.
- Relay cropping allows seed sowing even under water scarcity conditions.

Conservation Agriculture

Practice

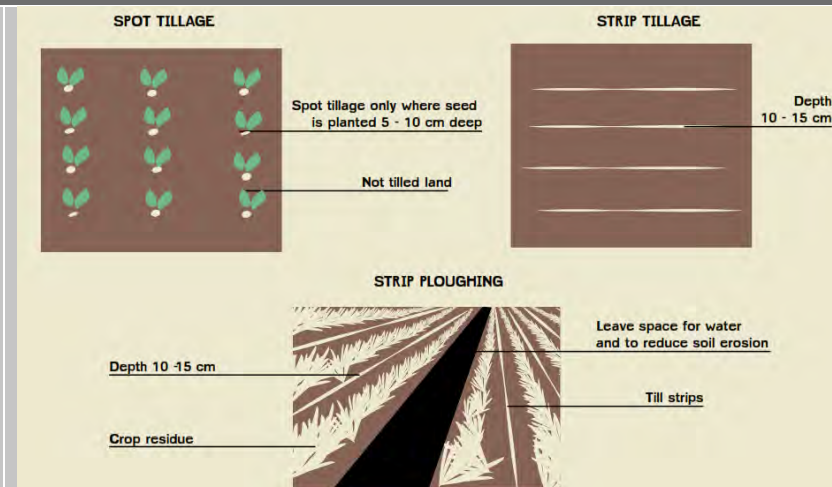
Conservation agriculture

Conservation agriculture is a way in which crops can be grown in a sustainable way while conserving the environment. Conservation agriculture is based on three core principles:

- Permanent soil cover with mulch or crops residues (residue management), to protect the soil
- Minimal soil disturbance during tillage
- Crop rotation/diversification.

Residue management refers to the sound handling and utilization of plant and crop residues that combines mulching, composting, integrative manure and livestock management. Plant residues are a major source of carbon in soil. Residues can be used as trash lines or mulch, or can be used for feeding livestock. Manure from the livestock can then be collected and used on the farm.

Conservation tillage is a planting system that ensures minimal soil disturbance. It leaves at least 30 - 50 % of the field



	surface covered with crop residues such as mulch and stubble after planting has been completed. The top and sub soils are not mixed in the process.
Benefits	<p>Productivity</p> <ul style="list-style-type: none"> • Increases crop productivity • Reduces cost of production • Improves soil conditions such as structure and nutrients. <p>Pest and disease control</p> <ul style="list-style-type: none"> • Reduces weeds
Climate benefits	<p>Mitigation</p> <p>Reduces fuel requirements for tillage and increases soil organic carbon.</p> <p>Adaptation</p> <ul style="list-style-type: none"> • Enhances soil moisture retention and infiltration, thereby increasing resilience against prolonged dry periods (water deficit) • Reduces soil disturbance and hence reduces the risk of soil erosion • Reduces water pollution in rivers and lakes (siltation)

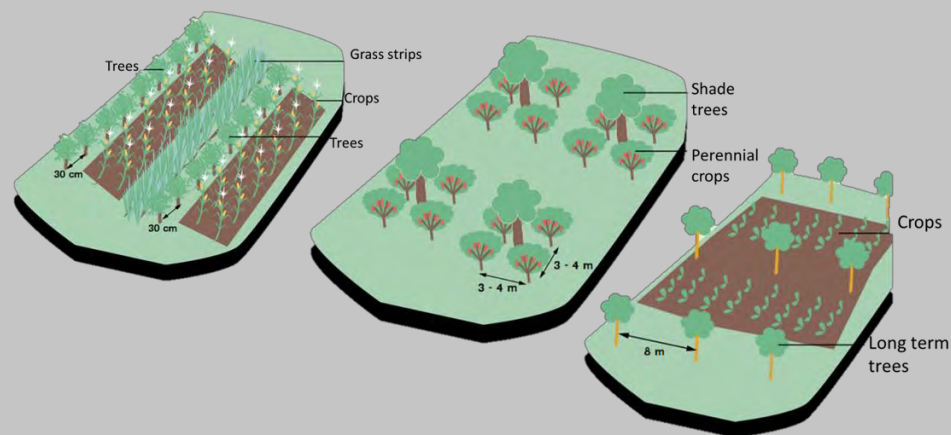
Agroforestry

Practice

Agroforestry: trees between crops, or as live-stock fence/shade trees

One of the bases for establishing resilient and sustainable farming systems is to integrate trees into the system. In mountain areas, the most common farming approach is to use a mixed crop livestock agroforestry system. This can be made considerably more successful if nitrogen-fixing plants (NFPs), especially those that occur naturally in the environment, are deliberately incorporated into the system.

Alley cropping is the growing of annual crops or forage between rows of trees or shrubs to form hedgerows. In dispersed inter-planting, trees are grown in a systematic way in fields alongside crops to provide food, fuel wood, building poles, fodder etc. The trees also provide nutrients and organic matter for the soil, and shade for crops and livestock.



Co-benefits

Productivity

- Trees improve soil fertility and crop productivity
- Nitrogen fixed by the trees enhances soil fertility leading to higher crop production without fertilizers
- Tree provide fodder for animals and increase livestock productivity while reducing grazing pressure on land
- Trees provide firewood, timber, nuts, poles, and sometimes have medical properties

Other

- Trees provide shelter and act as windbreaks and have cultural and psychological values
- Diversified income

Climate benefits

Mitigation

- Trees largely sequester carbon into living biomass

- Trees increase soil organic carbon sequestration
- Adaptation**
- Trees increase biodiversity, reduce deforestation and enable climate change adaptation
 - Trees reduce runoff speed, increase infiltration, increase vegetation cover and therewith control/reduce soil erosion
 - Trees on cropland enhance soil moisture and water retention, contributing to increased resilience during prolonged dry period (water deficit)

Improved livestock management (feeding, animal husbandry)

Practice

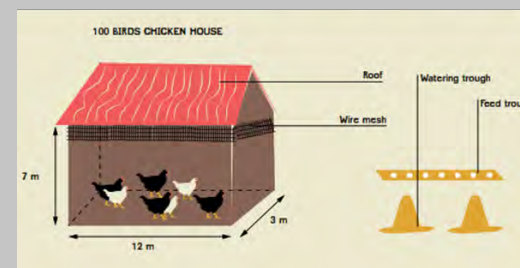
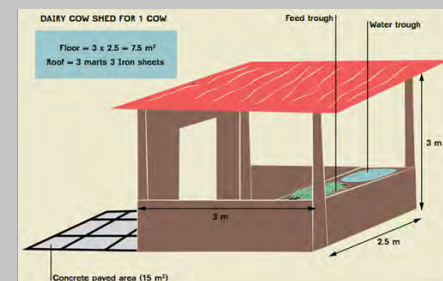
1. Improved feeding (diet)

Livestock mainly feed on pasture (perennial fodders, pastures and legumes), crop residues, or on shrub land. Pasture management - selective sowing of improved varieties of pasture to enhance livestock grazing – can contribute to improved livestock nutrition and therewith increase livestock production (e.g. weight gain, milk production). Rotational grazing for example enables the grassland to recover and thus contributes to improved quality and quantity forage.

Other improved feeding practices include crop residue treatment for improved digestibility, or the feeding of special feedstuffs (grass, hay, silage, grains, beans, or waste products from the rice milling industry such as rice bran) for a balanced diet of carbohydrates, proteins, vitamins and minerals.

2. Animal husbandry

Poorly constructed housing reduces productivity and exposes livestock to pests and diseases. Furthermore, exposure to the sun can cause heat stress to the animal, reducing production and fertility. Proper animal husbandry including manure management can contribute to livestock productivity and health.



Benefits

Productivity

- Increases livestock and farm productivity; enhancing crop production
- Improves animal health

	Other <ul style="list-style-type: none"> • Reduced cases of pests and diseases • Conservation of biodiversity
Climate benefits	Mitigation <ul style="list-style-type: none"> • Reducing the emission of enteric and manure methane (CH₄) gases (by contributing to improved livestock efficiency) • Enhancing soil organic carbon sequestration • Reduced free grazing in forests will reduce emissions from forest degradation Adaptation <ul style="list-style-type: none"> • Reducing land use change (via forest and land degradation due to uncontrolled grazing, ultimately reducing erosion and sedimentation) • Contributes to the restoration and rehabilitation of degraded or eroded land • Reduces animal's stress during extreme climatic conditions by reducing exposure to sun/heat stress

Annex 4: Key steps for the deforestation hotspot and risk analysis

Task 1: Analysis of district level deforestation and forest degradation hot spot

Dataset

- Forest Type Maps (FTM) 2015
- Hansen tree cover loss 2017
- Canopy Disturbance Delta NBR 2017
- Administrative Boundary
- 3 Forest Categories Boundary

Methodology

- Extract the land use class from FTM and stratify the land use class as follow
 - EG = Evergreen
 - MD, DD, CF and MCB = Current Forest
 - P = Plantation
 - B, RV = Potential Forest
 - UC, RP, OA and AP = Agriculture Land
 - The rest of the classes = Other Land
- Calculate area for each stratum
- Calculate area of tree cover loss and canopy disturbance

Task 2: Analysis of selected districts deforestation and forest degradation base on 3 forest categories

- Calculate area for each stratum inside 3 forest categories and ADB Sustainable Rural Infrastructure Watershed Management Sector Project sites
- Calculate area of tree cover loss and canopy disturbance inside 3 forest categories and ADB project sites

Task 3: Analysis of probability of deforestation and deforestation risk

Dataset

- FTM 2010 and 2015
- Road
- Village Location
- Digital Elevation Model (DEM)

Methodology

- Identify the UC (Shifting Cultivation) by extracting the UC from Forest Type Map (FTM) 2015
- Overlaying UC with FTM 2010 to roughly predicting the LU classes which UC occurred in 2015 FTM as a result we can identify that UC are mostly occurred in these stratified LU classes:
 - High Probability in Current Forest (Score 1)
 - Medium Probability in Potential Forest (Score 2)
 - Low Probability in Evergreen Forest (Score 3)
 - Low Probability in Agriculture Land (Score 3)
 - Low Probability in Forest Planation (Score 3)
 - Low Probability in Other Land (Score 3)
- Prepare the Ruggedness Data (Elevation)

Using DEM to Calculate Focal Statistic to analyze the ruggedness of the selected district. The lower the ruggedness the higher the probability

- High (3)
- Medium (2)
- Low (1)

- Prepare the Distance to Road Data

Using the road network to calculate distance to road with the maximum range of 6 kilometers and divide it into 3 score. The closer the road the higher probability

- 0 - 2000 meters High (3)
- 2000 - 4000 m Medium (2)
- 4000 - 6000 m Low (1)

- Prepare the deforestation and forest degradation risk map

Using the LU, Ruggedness and Distance to Road calculate a Weighted Sum to produce the risk maps.

The weight for each data is as follow

- FTM (0.4)
- Distance to Road (0.4)
- Ruggedness (0.2)

Annex 5: Regulations for the purchase of vehicles

Purchase of vehicles under the programme will be done according to GIZ policy, which are as follows:

As a **matter of principle**, vehicles are **procured via the Contracting, Procurement and Logistics Division (E210)** in accordance with the specifications in 'Orientation and Rules' (O&R).

In **exceptional cases**, vehicles may be procured locally in consultation with Head Office if...

- the standard vehicle can be procured locally at the same price or more cheaply;
- There are substantial and plausible reasons compliant with the German Contracting Rules for the Award of Public Service Contracts (VOL) in favor of local procurement, or if it is not possible to import vehicles.

Generally speaking, the GIZ standard vehicle is to be procured as the **programme vehicle**. The vehicle class is to be selected in accordance with the vehicle's purpose and use. The principle of **cost efficiency** is to be given **top priority** for the vehicle class to be selected. The selected vehicle class must match its purpose and use under the most cost-efficient procurement, use and running aspects. **Environmental standards** with regard to fuel consumption, CO₂ output and emission classes have been taken into account in the tender documents. The standards are listed in GIZ's SRM eKataloge for view only (vehicle catalogue).

Applications for procurement (locally or via Head Office) of vehicles that **differ** from the **GIZ standard** must be **justified by the officer responsible for contracts and cooperation (AV)** and agreed **in advance** via the local GIZ Office with Head Office **Eschborn**, E210 – vehicle procurement. Local vehicle procurements are processed and documented by the responsible GIZ country office via Pro-Soft. Procurements via the Head Office in Eschborn are to be registered in 'Beschaffung Online' (procurement online) by the local GIZ Office or officer responsible for contracts and cooperation (AV).

As a **matter of principle**, vehicles **with diesel engines** are procured. Vehicles with petrol engines are only procured in cases where important reasons favor the use of vehicles with petrol engines, e.g. bans on imports, use at very high altitudes, integration into the partner's fleet, etc.

Heavy-duty all-terrain vehicles, 4WD station wagons (class 6 in the catalogue) are procured for projects in which the project objectives and activities can only **be met and performed if such vehicles are used**. These reasons are to be stated **in writing** and placed in the procurement file. Procurement of vehicles in classes not included in the vehicle catalogue (e.g. people carriers, single-cab pickups, as well as lorries, buses, agricultural machinery and commercial vehicles) are to be coordinated with E210 – Procurement at Head Office.

Motorcycles: It is within the jurisdiction of the local office or procurement officer to decide whether to request advice/support from E210. As a rule, procurement by HQ is only economical for larger quantities (e.g. more than 5). This is, however, dependent upon the manufacturer, type and model.

The officer responsible for contracts and cooperation and the respective managers are responsible for observing these rules.

Annex 6: Stakeholder consultation annex

This Annex provides an overview of the stakeholder consultations conducted for the elaboration of the GCF funding proposal and its supporting documents. As mentioned in Chapter 13, extensive consultations have been conducted for the ER-PD and national REDD+ program.

The following table provides an overarching summary of the consultations:

Overview of stakeholder consultations

Description of consultation(s)	Dates	Stakeholders engaged	No. of Participants		
			Total	Male	Female
1. Scoping mission for the development of the programme's concept note	April 3-7, 2018	FAO, GIZ-FLEGT, JICA F-REDD, Head of German Development Cooperation in Laos (BMZ), DOFI Director General (MAF), DOF Deputy Director General (MAF), Department of Climate Change Deputy Director General (MONRE), Planning and Cooperation Division (MONRE), Division of Village Forest and NTFP Management. Head of the REDD+ Division in DOF (MAF), UNDP	11	10	1
2. Second scoping mission for the development of the programme's concept note	April 23-30, 2018	Head of the REDD+ Division within DOF (MAF), Vice Minister of MAF, DOF Deputy Director General (MAF), Division for Planning and Cooperation within DOF (MAF), Division for Village Forest and NTFP Management within DOF (MAF), KfW (representative from the ICBF program)	6	5	1
3. National inception workshop for GCF feasibility study and proposal development	October 5, 2018	From DOF/MAF: Production Forest Division, Forest Protection Division, Planning and Cooperation Division, National Protected Areas Division, REDD+ Division, Aquatic and Wildlife Division, Administration Division, Legal Division, Forest and Forestry Resources Development Fund, Forest Inventory and Planning Division, Deputy Director General of DOF, Village Forests and NTFP Division, REDD+ Division	17	13	4
4. Stakeholder consultations in Vientiane to inform feasibility study and proposal preparation	October 2-5, 2018	Vice Minister of MAF, SUFORD-SU, Head of German Development Cooperation/ BMZ, Forest and Forest Resources Development Fund Division, Burapha Agro-Forestry Co. Ltd., GIZ ProFEB/ ProFLEGT Component, World Bank, JICA, KfW country director, ADB, FAO, Environmental Protection Fund, GIZ Country Director, KfW ICBF program	18	16	2
5. Provincial stakeholder consultations to inform feasibility study and proposal preparation	October 8-16, 2018	In each province meetings with: Provincial REDD+ Task Force Members, Representatives from PRO, POFI, PAFO and PONRE, District representatives, villagers and village authorities.	572	483	89
6. National debriefing workshop	October 18, 2018	JICA, KfW, EPF, Buapha Agro-forestry Co. Ltd., DOF (MAF), Production Forest Division (DOF/MAF), SUFORD-SU, REDD+ Division (DOF/MAF), Planning and cooperation division (DOF/MAF), Village Forests and NTFP Division (DOF/MAF); GIZ Country Office, DDG of DOF (MAF); FFRDF, Department of planning and finance (MAF), DOFI (MAF), Forest Protection Division (DOF/MAF), REDD+ Division (DOF/MAF), Forest Inventory and Planning Division (DOF/MAF)	29	22	7

7. Agribusiness interviews in Luang Prabang, Luang Namtha and Oudomxay Provinces	November 7-11, 2018	25 local producers, 15 traders (paddy, maize, Jobs-tear, NTFPs), 12 rice miller and 2 banks.	N/A	N/A	N/A
8. Workshop with GCF representatives on opportunities for climate finance with a focus on REDD+ and the forestry sector, as well as private sector engagement	November 19, 2018	FAO, Department of Climate Change (MONRE), UNDP, Village Focus International, NAFRI, JICA, Investment and Business Division within the Department of Planning and Finance (MAF), Department of Agriculture, REDD+ Division (DOF/MAF), DOFI (MAF), Division of Planning and Cooperation (MAF), DDG Department of Forestry, EPF, DG Department of Forestry (MAF)	28	24	4
9. Stakeholder consultations in Houaphan Province to identify forest priorities for inclusion in the GCF funding proposal	November 21, 2018	Village authorities, villagers from Huayhu village, PAFO Houaphan (forestry Section, REDD+ section, Inspection), DAFO Houameuang (forestry unit, inspection unit), district governor's office	30	18	12
10. Stakeholder consultations for the elaboration of the programme's capacity needs assessment and capacity building strategy	November 26-30, 2018	FFRDF, SUFORD-SU, FAO, LMDP-GIZ, RECOFTC, ProFLEGT Component (GIZ), Department of Land (MONRE), Department of Climate Change (MONRE), Department of Agriculture and Land Management (DALAM/MAF) DDG of DOF (MAF) and others from DOF/MAF: Division for Planning and Cooperation, Production Forest Management Division, Protected Area Management Division, REDD+ Division, Village Forest and NTFP Management Division, DOFI, Plantation Promotion and Forest Restoration Division	19	18	1
11. Stakeholder consultations for the design of the REDD+ Funding Window under the EPF	November 28-29, 2018	EPF (All heads of Divisions, EPF-GF Focal Points, Safeguard Officers, Monitoring and Evaluation Officers)	N/A	N/A	N/A
12. Stakeholder consultations for the development of the programme's gender assessment and gender action plan	January 16-24, 2019	PAFO and Lao Women's Union (Houaphan), DAFO in Xam Neua, District LWU Office in Xam Neua, Villagers (Ban Yard Village; Ban Nam Mad Mai, Ban Nam Dee), PAFO Luang Namtha, Provincial LWU in Luang Namtha, DAFO and LWU in Luang Namtha	148	79	69
13. Stakeholder consultations for development of the ESMPs	January 28-February 4, 2019	Phonekeo village (Sayabouri Province, Sayabouri District); Hong Oy village (Houaphan Province, Houameung District); Nangew village (Oudomxay Province, Xai District); also district-level meetings.	118	59	59
14. Final validation workshop	February 8, 2019	MAF, MoNRE, MPI, REDD+ Task Force, FFRDF, EPF, PAFOs, DAFOs, RECOFTC, GIZ, KfW, World Bank, FAO, JICA, EU, IFAD, ADB, German Embassy, Village Focus International,	70	67	3

Total No. of Participants in Stakeholder Consultations³⁴²	1,066	814 (76%)	252 (24%)
---	--------------	------------------	------------------

³⁴² Note: there is overlap of participants in different meetings.

1. Scoping mission for the development of the programme's concept note (03. – 07.04.2017)

"Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management"- Scoping Mission (03. – 07.04.2017)

Objective: Scoping Mission / Viability of the Development of a Programme Concept Note for the Green Climate Fund to support the Implementation of the Provincial REDD+ Action Plans (PRAPs) of 6 Northern Provinces in Laos

Consultant: Ms. Ilka Neyla Buss

Overview of consultation(s) and participants:

Date	Topic	Name	Organization
03.04.18	Consultations	Mr. Stephen Rudgard	FAO
	Consultations	Mr. Marc Gross	GIZ FLEGT
04.04.18	Consultations	Mr. Noriyoshi Kitamura	JICA F-REDD
	Consultations	Mr. Christian Olk	Head of German Development Cooperation in Laos / BMZ
05.04.18	Consultations	Mr. Kamphout Phandanouvong	Department of Forest Inspection / Director General / MAF
	Consultations	Mr. Somchay Sanontry	Department of Forestry / Deputy Director General / MAF
	Consultations	Mr. Syamphone Sengchandala	Department of Climate Change / Deputy Director General / MONRE
06.04.18	Consultations	Dr. Margaret Jones Williams	UNDP Laos / Head Natural Resources Management and Climate Change
	Consultations	Mr. Virana Sonnasinh	Planning and Cooperation Department / MONRE
	Consultations	Mr. Oupakone Alounsavath	Division for of Village Forest & NTFP Management / Head / DoF / MAF
07.04.18	Consultations	Mr. Savanh Chanthakoummane	REDD+ Division / Head / DoF / MAF

2. Second scoping mission for the development of the programme's concept note (23. – 30.04.2018)

GCF Programme "Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management" (23. – 30.04.2018)

Objective: Collect relevant information within the country's context in relation to the planned GCF Programme proposal, especially in the forestry and land use sector, agriculture, sectoral and spatial planning and financial mechanism and their relevance for climate change mitigation and adaptation planning

Consultants:

- Ms. Xing Fu-Bertaux, Senior Project Manager, Department for Client Liaison and Business Development and GCF focal point, GIZ Germany
- Mr. Roman Roehrl, Senior Advisor, Climate Change and Environmental Policy, Sectoral Department, GIZ Germany
- Mr. Sebastian Sommer, Technical Advisor, Financial Services Development, Sectoral Department, GIZ Germany

Overview of consultation(s) and participants:

Date	Topic	Name	Organization
23.04.18	Consultations	Dr. Kinnalone Phommasack	REDD+ Division / Head / DoF / MAF
24.04.18	Consultations	HE Dr. Phouang Parisak Pravongviengkham	MAF / Vice Minister
25-30.04.18	Consultations	Mr. Somchay Sanontry	Department of Forestry / Deputy Director General / MAF
	Consultations	Mr. Phouthone Sophathilath	Division for Planning & Co-operation / DoF / MAF
	Consultations	Mr. Oupakone Alounsavath	Division for of Village Forest & NTFP Management / Head / DoF / MAF
	Consultations	Dietmar Bräutigam, CTA KfW ICBF	KfW / ICBF / CTA

3. National Inception Workshop for GCF Feasibility Study and Proposal Development (05.10.2018)

**Stakeholder consultations for the GCF Programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management”
(05.10.2018)**

Objective: National Inception Workshop for stakeholders

Consultants:

1. Mr. Robert Kelly, Lead Editor
2. Mr. Roman Roehrl, GIZ Climate Change Specialist
3. Mr. Eduard Merger, Feasibility Team leader (Unique Forestry and Land Use)
4. Ms. Laura Kiff, Project Design Specialist (Unique Forestry and Land Use)
5. Ms. Suzanne van Dijk, Agriculture Expert (Unique Forestry and Land Use)
7. Prof. Keopphet Phoumphon, Land Use and Consultations ((National Consultant)
8. Mr. Kenkeo Sayarath, Agricultural Expert (National Consultant)
9. Mr. Phanthong Masisonxay, Forestry Expert (Unique Forestry and Land Use)

Overview of consultation(s) and participants:

Date	Name	Organization/Institution
05.10.2018	Mr. Khamkhoun Phinsouvanh	Production Forest Division / DoF / MAF
	Mr. Hongthong, Aphaichit	Forest Protection Division / DoF / MAF
	Mr. Phouthone Sophathilath	Planning and Cooperation Division / DoF / MAF
	Mr. Phouangphet Simouthadee	National Protected Areas Division / DoF / MAF
	Mr. Soukphavan Savathvong	REDD+ Division / DoF / MAF
	Mr. Choumlamany Saiyalath	Aquatic & Wild life Division / DoF / MAF
	Mr. Bouthphavong Khamchanh	Administration Division / DoF / MAF
	Ms. Keota Siphandone	Legal Division / DoF / MAF
	Ms. Phetsomphone Vonghachat	Forest and Forestry Resources Development Fund / DoF / MAF
	Mr. Soukan Bounthapanya	Forest Inventory and Planning Division / DoF / MAF
	Mr. Somchay Sanontry	DDG of DoF / MAF
	Mr. Somsak Sisomvang	Village Forest and NTFP Division / DoF, MAF
	Mr. Phavana Sombanpheng	Division of Planning and Cooperation / DoF / MAF
	Mr. Kamsene Ounekham	Head of REDD+ Division / DoF / MAF
	Dr. Kinnalone Phommasack	REDD+ Division / DoF / MAF
	Mr. Phaivanh Alounsavath	REDD+ Division / DoF / MAF

Date	Name	Organization/Institution
	Ms. Sandy Soukhaserm	REDD+ Division / DoF / MAF

4. Stakeholder consultations in Vientiane with Government Representatives and Donor Organizations to inform feasibility study and proposal preparation (02-05.10.2018)

Stakeholder consultations for the GCF Programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management” (02 – 05.10.2018)

Objective: Preparation, discussions and exchange on national level regarding the development of the GCF Full Funding Proposal

Consultants:

1. Mr. Robert Kelly, Lead Editor
2. Mr. Roman Roehrl, GIZ Climate Change Specialist

Overview of consultation(s) and participants:

Date	Topic	Name	Organization
02.10.18	Consultations	H.E. Dr. Phouangparisack Pravongviengkham	Vice Minister / MAF
		Mr. Esa Puustjärvi	SUFORD-SU
		Mr. Christian Olk	Head of German Development Cooperation / BMZ
		Mrs. Phetsomphone Vonghachack	Forest and Forest Resources Development Fund Division
		Mr. Martin Forsen	Burapha Agro-Forestry Co. Ltd
		Mr. Marc Gross, Mr. Heiko Woerner, Mr. Peter Schwab	ProFEB / ProFLEGT Component / GIZ
03.10.18	Consultations	H.E. Thongphath Vongmany,	Vice Minister / MAF
		Mr. Stephen Danyo	World Bank
		Mr. Noriyoshi Kitamura Mr. Eiji Egashira	JICA / F-REDD
		Mr. Jan Wiegelmann	Country Director / KfW Laos
04.10.18	Consultations	Mr. David Salter	Asian Development Bank (ADB) Laos
		Mrs. Akiko Inoguchi	FAO Office Laos
		Mr. Khampahdith Khammounheung	Environmental Protection Fund (EPF)
		Mr. Wolfgang Hannig	GIZ Country Director Laos

Date	Topic	Name	Organization
05.10.18	Consultations	Mr. Dietmar Bräutigam	CTA KfW ICBF

5. Provincial stakeholder consultations to inform feasibility study and proposal preparation (08-16.10-2018)

Stakeholder consultations for the GCF Programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management” (08. – 16.10.2018)

Objective: Preparation, discussions and exchange on sub-national levels (provinces, districts and villages) regarding the development of the GCF Full Funding Proposal

Consultants:

1. Mr. Robert Kelly, Lead Editor
2. Mr. Roman Roehrl, GIZ Climate Change Specialist
3. Mr. Eduard Merger, Feasibility Team leader (Unique Forestry and Land Use)
4. Ms. Laura Kiff, Project Design Specialist (Unique Forestry and Land Use)
5. Ms. Suzanne van Dijk, Agriculture Expert (Unique Forestry and Land Use)
7. Prof. Keopphet Phoumphon, Land Use and Consultations ((National Consultant)
8. Mr. Kenkeo Sayarath, Agricultural Expert (National Consultant)
9. Mr. Phanthong Masisonxay, Forestry Expert (Unique Forestry and Land Use)

Overview of consultation(s) and participants:

SN.	Level of consultation (provincial, district, and village)	Date	Venue	Target	Participants		Steps/Remarks
					Total	Female	
1	Luang Namtha Province	08.11.2018	PAFO meeting room	All PRTF members and including PRO office members	34	5	
2	Sing District, Luang Namtha	09.11.2018	District Gov. meeting hall	All District related offices	34	9	
3	Ban Don Mai, Sing district, Luang Namtha	09.11.2018	Village meeting room	Village authority and organizations	15	2	Ethnicity: Hmong
4	Houaphan Province	08.11.2018	PAFO meeting room	All PRTF members and including PRO office members	60	9	
5	Viangxay district, Houaphan	09.11.2018	District meeting hall	All District related offices	30	3	

SN.	Level of consultation (provincial, district, and village)	Date	Venue	Target	Participants		Steps/Remarks
					Total	Female	
6	Ban Phonxay, Viengxay district, Houaphan	09.11.2018	Village meeting room	Village authority and organizations	12	0	Ethnicity: Hmong and Khmu
7	Bokeo Province	11.11.2018	PAFO meeting room	All PRTF members and including PRO office members	42	7	
8	Houyxai, Bokeo Province	12.11.2019	District Gov. meeting room	All district offices	30	7	
9	Ban Samork Neua, Houyxai, Bokeo	12.11.2019	Village meeting room	All village authority and organizations	20	2	
10	Sayabouri Province	11.11.2018	PAFO meeting room	All PRTF members and including PRO office members	63	8	
11	Phiang district, Sayabouri	12.11.2019	DAFO meeting room	All district offices	32	5	
12	Ban Phonxay, Phiang district, Sayabouri	12.11.2019	Village meeting room	All village authority and organizations	15	1	Ethnicity: Lao
13	Oudomxay province	15.11.2018	PAFO meeting room	All PRTF members and including PRO office members	40	6	
14	Beng district, Oudomxay	16.11.2018	DAFO meeting room	All district offices	31	7	
15	Ban Napa , Beng district, Oudomxay	16.11.2018	Village authority of-fice	All village authority and organizations	16	4	Ethnicity: Khmu
16	Luang Prabang	15.11.2018	PAFO meeting room	All PRTF members and including PRO office members	56	5	
17	Nan district, Luang Prabang	16.11.2018	DAFO meeting room	All district offices	30	4	
18	Ban Phanid, Nan district, Luang Prabang	16.11.2018	Village authority of-fice	All village authority and organizations	12	5	Ethnicity: Khmu (also target village of F-REDD Project)

6. National debriefing workshop (18.10.2018)

Stakeholder consultations for the GCF Programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management” (18.10.2018)

Objective: National Debriefing Workshop for stakeholders

Consultants:

1. Mr. Robert Kelly, Lead Editor
2. Mr. Roman Roehrl, GIZ Climate Change Specialist
3. Mr. Eduard Merger, Feasibility Team leader (Unique Forestry and Land Use)
4. Ms. Laura Kiff, Project Design Specialist (Unique Forestry and Land Use)
5. Ms. Suzanne van Dijk, Agriculture Expert (Unique Forestry and Land Use)
7. Prof. Keophet Phoumphon, Land Use and Consultations ((National Consultant)
8. Mr. Kenkeo Sayarath, Agricultural Expert (National Consultant)
9. Mr. Phanthong Masisonxay, Forestry Expert (Unique Forestry and Land Use)

Overview of consultation(s) and participants:

Date	Name	Organization/Institution
18.10.2018	Mr. Takayuki Namura	JICA / F-REDD
	Mr. Khampheuane Kingsada	KfW / ICBF
	Mr. Somphone Inkhamseng	EPF
	Mr. Martin Forsein	Buarapha Forestry Company
	Ms. Vanxay Sana	DoF / MAF
	Mr. Khamphone Inthanoun	DoF / MAF
	Ms. Yommala Phaengsuwan	DoF / MAF
	Mr. Khamkhoun Phinsouvanh	Production Forest Division / DoF / MAF
	Mr. Esa Puustjärvi	SUFORD-SU
	Mr. Phaivanh Alounsavath	REDD+ Division / DoF / MAF
	Mr. Phouthone Sophathilath	Planning and Cooperation Division / DoF / MAF
	Mr. Khamkene Ounekham	Head of REDD+ Division / DoF / MAF
	Dr. Kinnalane Phommasack	REDD+ Division / DoF / MAF
	Mr. Soukphavan Savathvong	REDD+ Division / DoF / MAF
	Mr. Eiji Esashira	F-REDD / JICA
	Mr. Somchit Malaloy	F-REDD / JICA
	Mr. Viengsamai Simphasith	Village Forests and NTFP Division / DoF / MAF
	Mr. Yataka Machida	JICA
	Ms. Selma Ulrichs	GIZ Country Office Laos
	Mr. Somchay Sanontry	DDG / DoF / MAF
	Mr. Daovone	Forest and Forestry Resources Development Fund / DoF / MAF

	Ms. Saisamone Vongkhamsouk	Department of Planning and Finance / MAF
	Mr. Phavana Sombanpheng	Division of Planning and Cooperation / DoF / MAF
	Mr. Viengsavanh Sisombath	JICA
	Mr. Thatsomphone	Department of Forest Inspection / MAF
	Mr. Hongthong, Aphaichit	Forest Protection Division / DoF / MAF
	Ms. Phetsomphone Vonghachat	Forest and Forestry Resources Development Fund / DoF / MAF
	Ms. Sandy Soukhaserm	REDD+ Division / DoF / MAF
	Mr. Khamma Homsombath	Forest Inventory and Planning Division / DoF / MAF

7. Agribusiness interviews in Luang Prabang, Luang Namtha and Oudomxay Provinces (07-11.2018)

GCF Programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management” (07-11.11.2018)

Objective: Visiting and interviewing local producers, traders, rice millers and financial institutions to inform activities and actions within Output 2 of the proposed programme.

Participants: 25 producers, 15 traders (paddy, maize, Jobs-tear, NTFPs), 12 rice miller and 2 banks in Luang Prabang, Luang Namtha and Oudomxay provinces. Producers were interviewed while working in the field (harvesting paddy, maize), and whilst bringing their products to sell in the buyer’s place.

Trader and rice miller interviewed during, they are working in their house, coffee shop and buying products from producer at their buying station (the latter with a focus on Lao traders).

Banks were interview in their office and follow-up calls were used to collect for additional information.

8. Workshop with GCF representative on opportunities for climate finance with a focus on REDD+ and forestry sector and private sector engagement (19.11.2018)

Stakeholder consultations for the GCF Programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management”(19.11.2018)

Objective: Workshop with Mr. Juan Alberto Chang Olivas (Green Climate Fund / Principal Forest & Land Use Specialist) on opportunities for climate financing for the REDD+/forestry sector and engagement with the private sector

Overview of consultation(s) and participants:

Date	Name	Organization/Institution
19.11.2018	Mrs. Akiko Inoguchi	FAO Laos
	Mr. Amphayvanh Oudomelath	Department of Climate Change (DCC) / MoNRE
	Chitlatda Keomuongchanh	UNDP
	Ms. Christina Cilentio	Village Focus International (VFI)
	Dr Chanh Samone Phongoudom	National Agriculture and Forestry Research Institute (NAFRI)
	Mr. Eiji Egashira	JICA / F-REDD
	Mr. Hongthong Sirivath	Village Focus International (VFI)
	Mr. Ignacio Tourino Soto	Department of Climate Change (DCC) / MoNRE
	Mr. Justine Sylvester	Village Focus International (VFI)
	Mr. Ketkeo Phouangphet	Investment and Business Division / Department of Planning and Finance / MAF
	Mr. Khamlou Soutinath	Department of Agriculture
	Mr. Khamsene Ounkhame	REDD+ Division / DoF / MAF
	Mrs. Kinnalone Phommasack	REDD+ Division / DoF / MAF
	Mr. Lomkham Sengchanoudom	Department of Forest Inspection / MAF
	Mrs. Margaret Jones Williams	UNDP
	Mr. Noriyoshi Kitamura	JICA / F-REDD
	Mr. Phavana Sombanpheng	Division of Planning and Cooperation / DoF / MAF
	Mr. Pheng Sengsee	Department for Agriculture Land Management / MAF
	Mr. Philaxay Manilack	Division of Planning and Cooperation / DoF / MAF
	Mr. Phouthone Sophathilath	Division of Planning and Cooperation / DoF / MAF
	Mr. Rick Reece	Village Focus International (VFI)
	Mr. Somchay Sanontry	DDG / Department of Forestry / MAF
	Soudaphone Sayason	Environmental Protection Fund (EPF) / MoNRE
	Mr. Sousath Sayakhoummane	DG / Department of Forestry / MAF
	Vannavong MANIVONG	Department of Climate Change (DCC) / MoNRE
	Vansai Boausavhan	Division of Planning and Cooperation / DoF / MAF
	Viengsavanh Sisomsack	JICA
	Yutaka Machida	JICA

9. Stakeholder consultations in Houaphan Province to identify forest priorities for inclusion into the GCF funding proposal
(21.11.2018)

GCF Programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management” (21.11.2018)

Objective: Consultations with stakeholders from provincial, district and village levels and Mr. Juan Alberto Chang Olivas (Green Climate Fund / Principal Forest & Land Use Specialist) to identify forest priorities for inclusion into the GCF funding proposal

Overview of consultation(s) and participants:

SN.	Level of consultation (provincial, district, and village)	Date	Venue	Target	Participants		Steps/Remarks
					Total	Female	
1	Houaphan Province / Houameuang District / Huayhou Village	21.11.2018	Huayhou Village	All village authorities and organizations, PAFO Houaphan (For- estry Section, REDD Section, Inspection), DAFO Houameuang (Forestry Unit, Inspec- tion Unit), District Gov- ernor’s Office	30	12	Course through the village for- est (brief presentation at each station by villagers and/or for- est officials) to introduce Village Forest management Planning and the implementation of An- nual Village Forest Management Plans Ethnicity: Hmong

10. Stakeholder consultations for the elaboration of the programme's capacity needs assessment and capacity building strategy (26-30.11.2018)

Stakeholder consultations for the GCF Programme "Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management" (26. – 30.11.2018)

Objective: Conduct a capacity needs assessment & prepare a Capacity Development Strategy

Consultant: Mr. Nelson Gapare (Unique Forestry and Land Use)

Overview of consultation(s) and participants:

Date	Topic	Name	Organization
26.11.18	Consultations	Mr. Somchay Sanontry	DDG / DoF / MAF
		Mr. Phouthone Sophathilath	Division for Planning & Cooperation / DoF / MAF
		Mr. Somneuk Souksai	Production Forest Management Division
		Mr. Savanh Chanthakoummane	Protected Area Management Division
		Mrs. Phetsomphone Vonghachack	Forest and Forest Resources Development Fund Division
27.11.18	Consultations	Mr. Esa Puustjärvi	SUFORD - SU
		Dr. Oupakone Alousavath	Village Forest & NTFPs Management Division / Head / DoF / MAF
		Mr. Khamsene Ounekham	REDD+ Division / Head / DoF / MAF
28.11.18	Consultations	Mr. Amphayvanh Oudomdeth	Department of Climate Change / MoNRE
		Representative	FAO Office Laos
		Representative	Department of Land / MoNRE
		Mr. Julian Derbidge	LMDP / GIZ Laos
29.11.18	Consultations	Mr. Bounyadeth Phouangmala	RECOFTC Laos
		Mr. Noriyoshi Kitamura Mr. Eiji Egashira	JICA / F-REDD
		Mr. Bounthanh Philachanh	Department of Forest Inspection / MAF
		Mr. Heiko Woerner	ProFEB / ProFLEGT Component / GIZ
30.11.18	Consultations	Representative	Department of Agriculture Land Management (DALAM) / MAF
		Mr. Somvang Sihalath	Plantation Promotion and Forest Restoration Division

11. Stakeholder consultations for the design of the REDD+ Funding Window under the EPF (28-29.11.2018)

Stakeholder consultations for the GCF Programme “Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management” (28. – 29.11.2018)

Objective: Design of a new REDD+ Funding Window under the Lao PDR Environmental Protection Fund (EPF) to act as Executing Entity (EE) under the GCF Programme

Consultant: Mr. Duncan Gromko (Unique Forestry and Land Use)

Overview of consultation(s) and participants:

Date	Topic	Name	Organization
28.11.18	Workshop <ul style="list-style-type: none"> Outline the design of the new REDD+ Funding Window Project cycle for each funding window and operational aspects Safeguards Monitoring and Reporting of EPF to accredited entity (GIZ) 	Mr. Khampahdith Khammounheung / Director General All heads of Divisions EPF-GCF Focal Points Safeguards Officer s M&E Officers	Environmental Protection Fund (EPF)
29.11.18	Consultations	Mr. Stephen Danyo	World Bank
29.11.18	Debriefing Workshop	Mr. Khampahdith Khammounheung / Director General All heads of Divisions EPF-GCF Focal Points Safeguards Officer s M&E Officers	Environmental Protection Fund (EPF)

12. Stakeholder consultations for the development of the programme's gender assessment and gender action plan

Stakeholder consultations for the GCF Programme "Implementation of the Lao PDR Emission Reductions Program through improved governance and sustainable forest landscape management"

Objective: Development of a Gender Assessment and Gender Action Plan (GAP)

Consultant: Ms. Sandra Bode

Note: For more detailed information, refer to the gender assessment and gender action plan documents and annexes.

Overview of consultation(s) and participants:

SN.	Level of consultation (provincial, district, and village)	Date	Venue	Target	Participants		Steps/Remarks
					Total	Female	
1	PAFO and Lao Women's Union, Houaphan province	16.1.2019	PAFO meeting room	PAFO and PLWU	8	2	
2	Xam Neua DAFO	16.1.2019	DAFO meeting room		7	1	
3	DLWU of Xam Neua	16.1.2019	District Lao Women's Union Office		7	4	
4	Ban Yard, Xam Neua district, Houaphan province	17.1.2019	Ban Yard village	Village authorities and villagers	38	16	Ethnicity: Khmu & Hmong
5	PAFO of Luang Namtha	22.1.2019	PAFO meeting room	PAFO	6	2	
6	PLWU of Luang Namtha	22.1.2019	PLWU Office	PLWU	7	4	
7	DAFO of Luang Namtha & DLWU of Luang Namtha	22.1.2019	DAFO office	DAFO of Luang Namtha	17	6	
8	Village 1: Ban Nam Mad Mai, Luang Namtha district, Luang Namtha Province	23.1.2019		Village authorities and villagers	40	28	Ethnicity: Akha village
9	Village 2: Ban Nam Dee, Luang Namtha district, Luang Namtha Province	24.1.2019		Village authorities and villagers	18	6	Ethnicity: Lanten (sub-group of Lumien)

Annex 7: Knowledge management plan

Implementation of the Lao PDR Emission Reductions Programme through Improved Governance and Sustainable Forest Landscape Management

A. Knowledge Required and Created by the Programme

A.1. What knowledge is required by the programme during implementation?

- Public engagement processes are essential for REDD+. However, many institutions do not have the necessary resources to undertake awareness-raising activities and campaigns. Agencies need to be supported in developing awareness-raising strategies and the associated capacities, including budgets, equipment and skills.
- Many government institutions state they have only basic knowledge of REDD+. Knowledge of REDD+, its aim (reducing deforestation and forest degradation) and relation to land use planning, sustainable forest management and improved agricultural productivity, should be built throughout programme implementation.
- The ability to assess the effectiveness of the programme requires knowledge on Monitoring and Evaluation, information and communications technology, data collection and analysis systems, IT software and hardware.

For the sustainable implementation of programme outputs, the following specific knowledge is required:

- Knowledge on Good Agricultural Practices, and financial literacy for business plan development, financial analysis, planning and accounting.
- Knowledge on well-structured cascading data collection and information systems, specifically spatial information systems, for village-level land use planning.
- Knowledge on sustainable land use practices, including sustainable forest management and forest landscape restoration.

A.2. What processes and individuals will contribute to generating, processing and disseminating this knowledge?

Comprehensive communication and exchange of information about topics of crucial relevance for land users, politicians and the broader public will be provided, so they understand the purpose and benefits of REDD+ and the need for behavioural change of business-as-usual land use. Coordination with the Designation National Authority (DNA) at MONRE (the same institution as the GCF NDA) will ensure the provision of relevant information to the DNA for its BUR and National Communication. Communication and collaboration with national universities will be sought to provide the programme with key lessons learned and relevant education material, as well as to support these universities in acquiring research projects related to REDD+.

For awareness raising, three campaigns will be organized:

- One campaign on laws and the regulatory framework of the forestry and agricultural sector (closely linked to Activity 1.3 (improved law enforcement)).
- One local media campaign on REDD+ and the needs to reduce deforestation and forest degradation. The campaign will be implemented in local newspapers in all district of the provinces. It will include the negative impacts of deforestation and the potential strategies to sustainable land use.
- One school campaign on the importance of sustainable land use and REDD+. Education material will be distributed in the target districts and local teachers will be trained.

Other knowledge processing/dissemination activities/processes include:

Output 1

- 2 consultation workshops on integration of REDD+ National Strategy measures into SEDP
- 12 province-level workshops to support REDD+ mainstreaming into province -level SEDPs
- 56 district-level workshops to support REDD+ mainstreaming into district-level SEDPs
- Trainings on key laws and regulations (e.g. Forest Law, Land Law, PMO 9, PMO 15) for government authorities (national, provincial, district and kumban level), civil society organizations and villagers.
- Trainings on strengthened standard operational procedures and anti-corruption safeguards for national, provincial and district authorities (POFI, DOFI; venue, transportation costs, trainers, training materials)

- Trainings for targeted individuals (with intermediate experience on GIS/mapping) to use remote sensing data, generating maps and supporting monitoring of deforestation to support POFI and DOFI with monitoring deforestation.
- Dissemination of regulations and guidelines on permitted and prohibited clearing and utilization of forest (timber and non-timber) products, as well as streamlined, accessible and effective reporting channels to CSOs, villagers, etc.
- Trainings for PAFO, DAFO, PONRE, MONRE, POFI and DOFI staff on reporting channels (venue, transportation costs, trainers, training materials)
- Awareness-raising and capacity building on revised guidelines for land-use planning (including forest landscape restoration (FLR)) on province and district levels.
- FFRDF's capacities will be supported to enable it to become the National REDD+ Fund to receive, manage and disburse REDD+ results-based payments, other international sources and the enhanced national forest sector revenues streams to the province, district and village level.

Output 2

- Exchange workshops on Good Agricultural Practices in each *kumban* and district will be organized. The exchange workshops will contribute to knowledge exchange and sharing of lessons learned, according to the cropping calendar.
- Documentation and dissemination of successful experiences and lessons learned of Good Agricultural Practices. Existing structures and media of national, provincial and district governments will be used. Translation of materials and trainings will be made available as necessary.
- Organization of Multi-Stakeholder Platforms for value chain development.
- Trainings for agriculture value chain actors on business management and financial literacy: production costs, risks, creating business plans, bookkeeping, credit use, financial management, and saving accounts.
- Capacity building for financial institutions on how to roll out the green credit line (e.g. marketing material) and how to monitor impacts.
- Trainings on negotiation and marketing skills for villagers.

Output 3

- Training on Village Forest Management for PAFO, PONRE and DOF.
- Training for DAFO and DONRE staff on equipment use (GPS, camera and relascope).
- Training of PAFO and/or PONRE staff on the preparation of simple maps, data management and GIS applications
- On-the-job training and technical assistance to village land use and forest management committee and DAFO staff.
- Capacity building for VFOs and managing inclusive VFCs, and training for villagers on SFM, forest management plans and monitoring.
- Capacity building for provincial and district officials to support with forest management planning and eventual implementation (especially focused on provision of support to villagers).
- Capacity building for provincial and district authorities, as well as villagers (especially VFCs), on monitoring (e.g. forest inventory revision, remote-sensing and ground truthing) and enforcement (patrolling techniques).
- Capacity development for NPA and DOFI staff, and provision of equipment to support improved monitoring and enforcement of National Protected Area (NPA) management plans.
- Technical assistance, awareness-raising and capacity building to villagers to implement sustainable forest management and land use activities based on approved land use plans and co-management agreements.

A.3. Who are the key beneficiaries of programme-created knowledge?

All categories of programme beneficiaries will benefit from programme -created knowledge:

- The rural population as the primary programme beneficiary group and, at the same time, key agents of deforestation and forest degradation;
- National-, provincial- and district-level government agencies responsible for the management of natural resources in Lao PDR;
- Private sector: at least 210 small and medium enterprises in the forestry and agricultural sector.

B. Knowledge Products
B.1. What knowledge products will be created/supported by the programme?
<ul style="list-style-type: none"> • Development and management of a programme website • Land use planning guidelines and manuals • An in-depth forest sector cluster analysis, including a detailed situation analysis of existing forest sector production, private sector activity and financing streams • Training materials on agronomy, livestock production and agribusiness development (developed in close cooperation with Agricultural Universities/Colleges) • Documentation of successful experiences and lessons learned from Good Agricultural Practices • In-depth value chain studies for key existing and alternative agricultural commodities • Informative materials on sustainable forest management (brochures, posters, informative materials – including picture books, translation of materials into local languages), translation of rules and management plans for ethnic minorities • Documentation of experiences and lessons learned with village-based agroforestry • Training and workshop materials (for all trainings and workshops as described in the Funding Proposal and Feasibility Study)
B.2. How are the different needs of programme beneficiaries (e.g. gender, ethnic and educational backgrounds) addressed?
<ul style="list-style-type: none"> • Outreach, extension/technical support at the community-level, workshops and capacity building activities will be socially inclusive, aware of culturally diverse contexts and norms, and take into consideration local knowledge. Where necessary, the programme will ensure the availability of translators (either from within the community or from external sources, if necessary) to facilitate the dissemination of knowledge and information. • In order to ensure the widest dissemination and disclosure of programme information, including any details related to applicable environmental and social safeguards, local and accessible disclosure tools including audiovisual materials such as flyers, brochures, videos and community radio broadcasts will be utilized in addition to other communication modes. Furthermore, particular attention will be paid to women, ethnic groups, illiterate or technologically illiterate people, and people with hearing or visual disabilities, people with limited or no access to internet and other groups with special needs. The dissemination of information among these groups will be carried out with the programme counterparts and local actors such as village and <i>kumban</i> leaders, producer associations, CSOs, Lao Women's Union, among other regional actors. • Opportunities for collaboration with other stakeholders (e.g. CSOs) will be sought out to strengthen stakeholder outreach and the engagement of various ethnic groups and vulnerable households. • A participatory and inclusive approach will be applied that take into account regional and cultural diversity within the programme area. FPIC processes will be initiated with all participating villages. • Programme staff and trainers will include male and female representatives from diverse ethnic groups. They will all receive training on gender equality and social inclusion within the context of the programme.

C. Knowledge Mainstreaming and Sustainability
C.1. How is the programme's knowledge management approach linked to complementary information channels (e.g. government, donors, CSOs)?
<p>Lessons learned and information sharing will be conducted at the policy-making level to inform national stakeholders and policy makers on programme progress and the key lessons learned that can support the implementation of national REDD+.</p>
C.2. How will knowledge benefits be sustained beyond the lifetime of GCF funding?
<p>The long-term sustainability of programme interventions is enhanced by the programme's focus on individual and institutional capacity building, both of the implementation entities and the key beneficiaries. Measures focused on institutional strengthening at the provincial, district and local levels form an essential element of the individual activities, given local capacities and the generally low level of knowledge on sustainable practices. Government entities and programme beneficiaries will have improved their knowledge and skills for sustainable land use management and REDD+, and thus it is likely they will continue to support such measures after programme completion.</p>

Annex 8: Detailed programme timeline

[illegible]

[illegible]

Annex 9: Management Information System, with community-based data collection

Background

Accessible and user-friendly technologies hold substantial potential to engage local people in land use monitoring, data collection, and can even provide targeted feedback for local people. Mobile phones and web-based solutions, in particular, are increasingly used in community-based monitoring initiatives as they facilitate mobile, and cost-effective data collection and monitoring. Apps and cloud-based database technology offers the opportunity to cost-efficiently link a large number of villagers to a management information system (MIS).

Info box. Early experiences and lessons learned using digital community-based monitoring

While there are no examples of implementing digital community-based monitoring at scale in the program region, there are several examples internationally of programs/ projects developing and implementing such systems.

The development of digital community-based monitoring for REDD+ holds substantial potential to link both local and national REDD+ monitoring, linking local communities to national MRV systems, and even international reporting. One study notes that *“information acquired by communities and local experts constitutes an increasingly justified and independent data stream for national level monitoring, where it may be complementary to the more traditional and established data streams.”*³⁴³ The same study further notes the potential for communities to contribute to on the ground monitoring of deforestation and forest degradation, forest enhancement, and to provide increased insight on dynamics related to the drivers of deforestation, and impact of REDD+ implementation activities on issues such as biodiversity.

In Vietnam, for REDD+ “Cyber Tracker” apps were used to map, measure and monitor forest carbon services. Findings from piloting were relatively positive, noting that it is user-friendly, easy to use, low cost, and overcomes challenges previously experienced with data translation and digitalization.³⁴⁴ Challenges experienced included that the app worked only on android-based phones, battery power in remote areas (although this can be solved by low-cost solar chargers), the lack of automatic backups (local data storage may be lost or damaged, or run out of available space), data entry errors, and initial costs to set up a system – although in the long-term such programs are thought to be cost-effective and timely than hiring external monitoring experts. Capacity building also needs to be guaranteed to ensure backstopping, technical supervision and troubleshooting as needed.³⁴⁵ Regardless, studies from Vietnam, Ethiopia, and Suriname indicate that combined with satellite imagery and other monitoring approaches, that community-based information is complementary and can improve the accuracy of monitoring for REDD+.³⁴⁶

Going beyond REDD+, such mechanisms are also increasingly used in projects within the voluntary carbon market and development projects. For instance, the Livelihoods Fund’s Mt. Elgon

³⁴³ Pratihast et al. 2013, p. 100

³⁴⁴ Pratihast et al. 2012

³⁴⁵ Ibid.

³⁴⁶ DeVries et al. 2016; Bellfield et al. 2015; Pratihast et al. 2014

Project,³⁴⁷ which engages 30,000 farmers in agroforestry and sustainable dairy production, further found that the digital community-based monitoring and reporting systems not only support the monitoring of programme results, in particular related to climate change, nutrition, SDGs and other impacts, but provide meaningful two-way feedback, allowing also farmer benchmarking that permits the provision of targeted extension support based on farm-level data self-reported by farmers. Similar results were found in the Kenya Agricultural Carbon Project,³⁴⁸ which engages over 60,000 farmers in sustainable agricultural land management (incl. good agricultural practices, and agroforestry), where a digital mobile and web-based MIS system facilitates community-based monitoring and self-reporting.

It is recommended for the programme to develop their own mobile and web-based MIS system, which is tailored to the local context and program needs (described in the following sub-sections).

Potential for the program context

To support monitoring and reporting of the program's activities, a program MIS system will be developed, based on community-based data collection (Figure 1). It will involve village-level data collection, using activity surveys and based on self-reporting. Monitoring support staff (at either the kumban-, district level)³⁴⁹ will support the data aggregation process, and support activity monitoring. Aggregated information, and information generated through the app- and web-based MIS system can inform villagers, farmers groups, program management staff, among other stakeholders on key information such as: land use plans (boundaries, activities), market information, targeted trainings (based on reported data), and ultimately support capacity building and knowledge management. The interface will be available in both Lao and English.

³⁴⁷ For more information on the Mt. Elgon Project refer to: <http://www.livelihoods.eu/projects/mount-elgon-kenya/>

³⁴⁸ For more information on the KACP refer to: <https://viagroforestry.org/what-we-do/carbon-offsetting/kenya-agriculture-carbon-project/>

³⁴⁹ To be discussed during the design phase, could also be a village authority, kumban-authority, farmers group or district staff

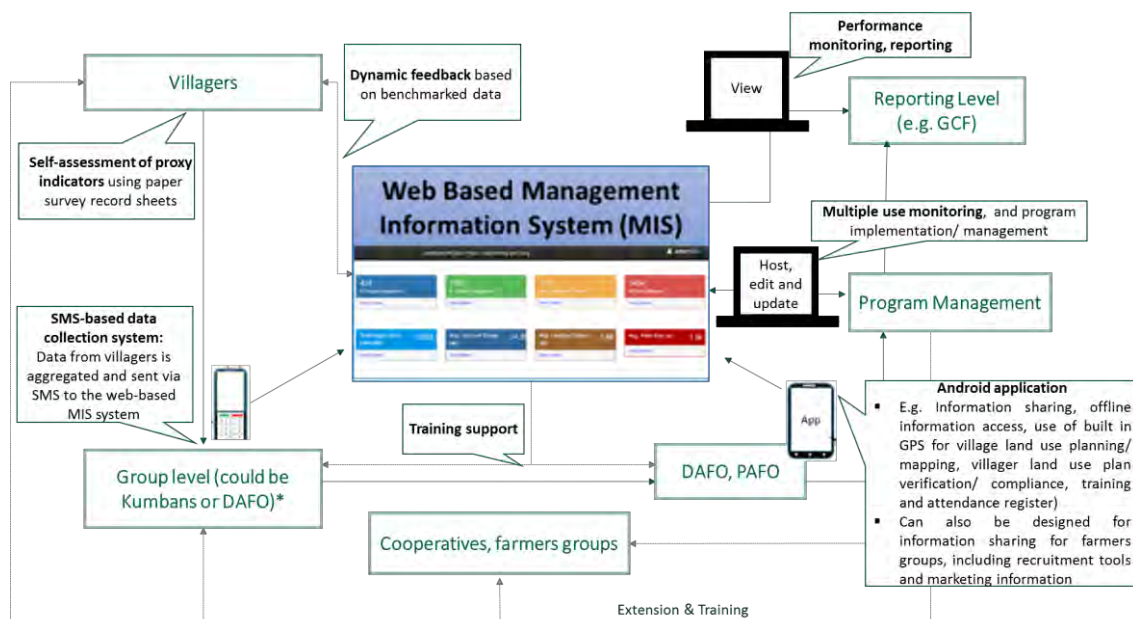


Figure A9.1. Overview of MIS structure (note: additional work is required during program implementation to fine-tune the design and clarify suitable institutional arrangements)

**To be discussed during the design phase, could also be a village authority, kumban-authority, farmers group or district staff*

Time and cost-effective, improved data quality, immediate data access to program management unit and government monitoring agencies, data used for socio-economic and environmental monitoring, and carbon calculations

Data access

13.1 Actions for developing and operationalizing a MIS system within the proposed program

The following are the main steps required during program implementation to develop the community based monitoring system:

1. Participatory design structure of MIS, including institutional arrangements, data collection and management, as well as standard operating procedures
 - An initial workshop will be conducted in Vientiane, combined with a field visit to the program area, for the participatory design of the proposed system. Key topics to clarify and discuss include: program indicators, suitable proxy indicators that are cost-efficient and easy to monitor and interpret, institutional structure (data collection, trainings, and data interpretation), suitable field survey methods for baseline data, specific app-requirements and characteristics.
 - Based on the information from the initial workshop and field visit, survey templates will be designed, protocols on the flow of data collection and analysis, institutional arrangement drafts, SOPs, guidelines, training manuals, and a data quality control protocol³⁵⁰ will be drafted and shared with the Lao Government, and other key stakeholders to receive feedback.

³⁵⁰ The data quality control protocol will disclose various features within the MIS to identify and resolve issues related to quality control.

2. Development of integrated web and mobile-based software for data collection management and reporting
 - Once the design features are finalized, the technical design and development will begin, including the development of Android-based apps to collect field data, as well as the programming of a web-based MIS for data management and reporting. The currently envisioned features of the app and web-based MIS are described in the previous section, however can be adapted during the participatory design process, ensuring that the approach is well suited to the program, and its local context. The following figure is an example from an existing MIS system, including a screenshot of the dashboard, database related to crop-production, and farm boundary maps.

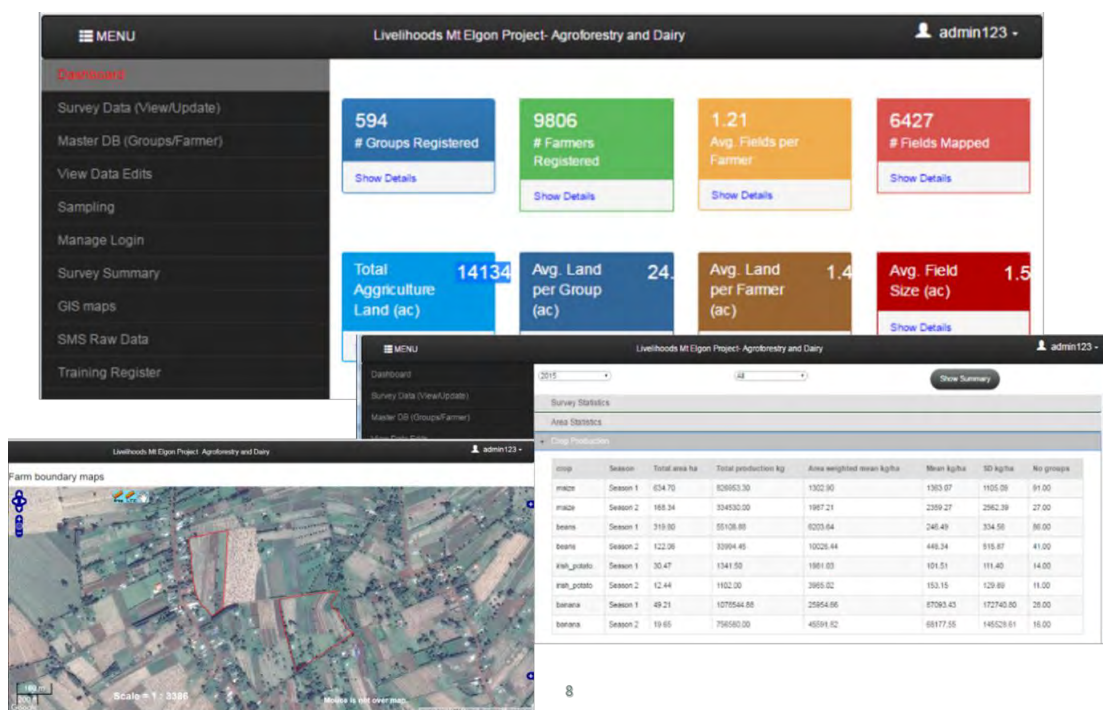


Figure A9.3 Overview of an existing MIS system dashboard, crop production database and farm boundary mapping

3. Testing, implementation, capacity building and maintenance of software
 - Once the app(s), and web-based MIS are developed, they will be tested internally, and then in the field together with program management staff and villagers. The testing phase will be conducted at the same time as trainings with key stakeholders engaged in the monitoring process (likely district and provincial authorities, as well as program management staff who can support training trainer processes as the program is scaled up).
 - A training curriculum will be developed which allows the extension team to train local communities in standardized monitoring procedures. Ideally the monitoring training and implementation will be integrated into the programme activity implementation on the ground
 - Maintenance is an essential requirement for a long-term functioning of the system. Therefore maintenance costs and inputs from an external expert in the first 2-3 years is essential to also hand-over the system after this first implementation phase.

Info Box. Key Considerations for the Selection of Proxy Indicators

To ensure the full consideration of the aforementioned principles and the suitable design of the monitoring and MRV system, the design phase is critical. Systems need to be realistic, user-friendly and effective, yet balance potential tradeoffs with increasing costs and complexity. Substantial training and support is invested in the first years of the program to enable community-based monitoring in the long-run, along with the adoption of sustainable land use practices. During the MIS system design phase a core task is to identify suitable proxy indicators to provide insight into complex processes including climate change adaptation and mitigation, gender, nutrition, food security, and poverty among others. Proxy indicators needed to be simple to understand and monitor, ensuring a cost-effective and efficient approach. Program-level monitoring systems are not able to capture all dynamics, activities and their implications, and thus tradeoffs need to be understood in terms of priority activities, and other criteria such as time requirements, costs and the reliability of proxy indicators among other factors. This process should not be overlooked, as substantial resources are required to build capacities in the early years of the program, and future drastic changes in the system may affect beneficiaries' willingness to continue. Such an approach acknowledges that there is a fine line between the number of indicators, level of complexity, and the willingness of groups to support the monitoring and reporting process. A participatory prioritization process is suggested to select key parameters. Villagers will self-report using farmer interview sheets, supported by key resource persons from DAFO. DAFO representatives will collect the data from villages within their jurisdiction, and aggregates the data and sends it their data to the program team via SMS. The following Figure demonstrates how proxy indicators collected and self-monitored from and by the farmers can be used to monitor measurable impacts of multiple program benefits:

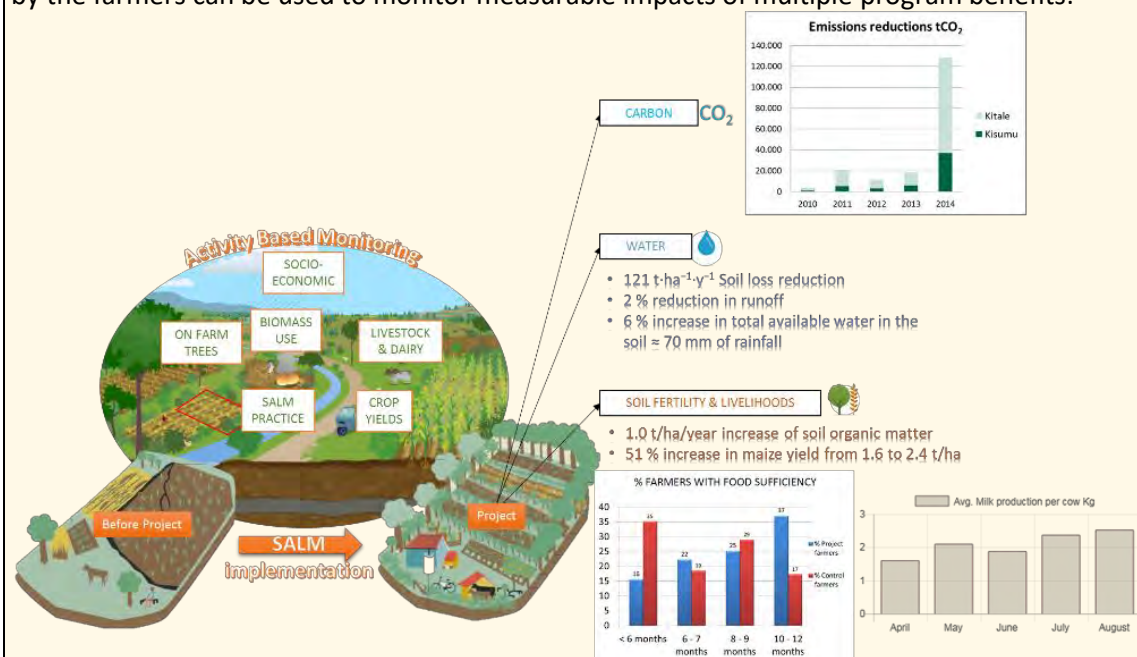


Figure A9.5 Multiple impact monitoring from the ABMS in the program (the impacts shown are either ex-ante estimations or impacts from the KACP project)

Source: UNIQUE, 2017

Potential design considerations for the web-based MIS and mobile-based software

The web- and mobile-based software will be designed utilizing two-way communication. For instance, data collected offline using a mobile phone will be uploaded/ synchronized to the central database, once there is available internet access. Data uploaded to the server can be modified

using authorized user logins, and then updated data can be imported in mobile phones with the latest information. It can further support villagers to receive targeted information, e.g. extension advice related to benchmarks and applied forestry and agricultural activities.³⁵¹

Preliminary ideas for program-specific apps are as follows:

The SMS data collection system, could support the following activities:

1. Villager-level data (proxy indicators, socio-economic information, information on crops, farm size, etc.), collected at either the Kumban or District level (to be discussed during first mission). Such an approach is used in other countries (e.g. Ethiopia) in similar systems where access to mobile phones by all villagers may not be possible, and to improve consistent data entry.
2. Send SMS messages with targeted information (info on trainings, market info, production recommendations, etc.), the extent to which this feature is used will depend on mobile phone availability in the targeted villages (however it could consider messaging contact points in villages, Kumbans, etc.).

The mobile app³⁵² could include the following modules or data collection activities:

1. Land use planning/ mapping: Digital copies of land use maps, improved information base on socio-economic conditions, geo-location mapping
2. Recording of training events, and community visits: Overview of stakeholder consultations, trainings
3. Activity data collection
 - a. Agriculture production and monitoring
 - b. Forest management and monitoring
 - c. Other program-related activity monitoring
4. Reporting illegal activities (e.g. forest clearing, illegal logging)
5. Data import and export utilities: Import data from the server for offline usage, export data to server for central storage and management

The web-based software that accompanies the app is envisioned to have the following modules:

- User-based login system
- Registration data management
 - Access to master database with update utility
 - Summary of data on dashboard
- Sampling tool for selecting samples for surveys
- Reporting and data query tool
- Summary of training events and consultations
- Dashboard to monitor program performance, indicators and targets
- Data quality and data gaps reporting on one page.

³⁵¹ Examples from implemented projects (e.g. the Kenya Agricultural Carbon Project), led to the provision of targeted recommendations for farmers on feed management/ agricultural practices to boost production based data collected at the local level, and thus advice provided via SMS or via trainings.

³⁵² Both smartphones and analogue phones will be utilized with the community-based monitoring system. Smartphones are particularly important for GPS tracking/ land registration, training attendance, whereas analogue phones can be used for interactive SMS-based data collection (e.g. of forestry or agriculture practices).

The following Figure summarizes the benefits from the different SMS, app and web-based systems:

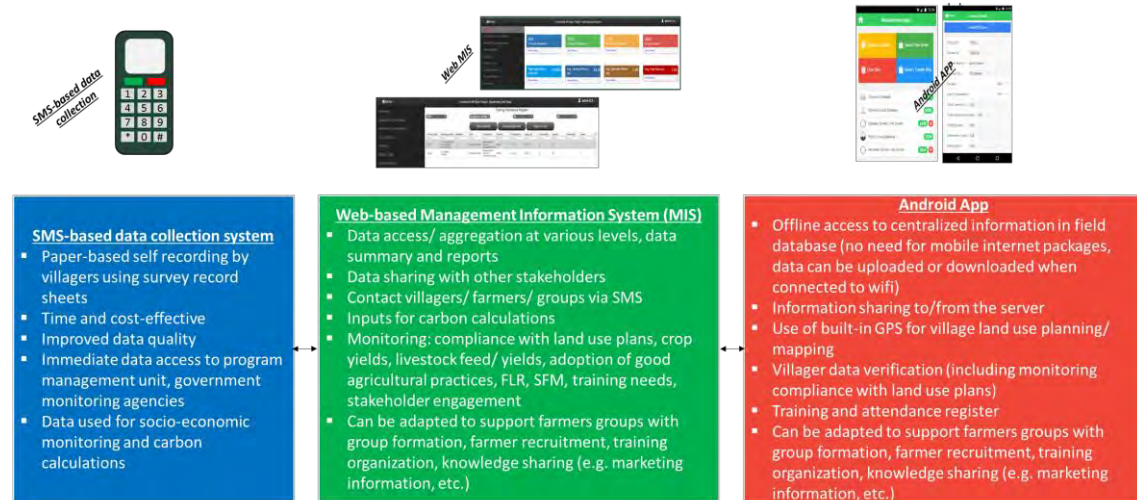


Figure A9.2 Benefits of SMS, web-based MIS and android app systems

Additional benefits:

The community-based monitoring system is expected to improve the monitoring and evaluation of the program, providing detailed insight into the programs impacts. In addition to improving program monitoring and reporting, there are numerous co-benefits associated with such systems:

- Improved engagement and ownership of local people in program implementation and monitoring
- Feedback systems through MIS system can provide local people with production information, market information, management suggestions, and other advice (activity-based approach enables diverse activities, understanding the dynamic nature of the land use sector and shifting smallholder farmer priorities, while balancing MRV needs)
- Enables the identification of training needs, facilitating the design of targeted trainings based on local interests and priorities.
- Efficient and cost-effective MRV design.
- Improved data collection related to climate change adaptation and mitigation at the local level, which can be scaled-up and inform national-level and even international target-setting and reporting. This also strengthens the accuracy of monitoring and reporting.
- Improved data collection on climate-related themes, can in turn also improve the use of climate-related data in decision making and planning, strengthening both low-carbon and climate-resilient land use at the local level through feedback mechanisms and targeted training (incl. digital extension)
- Improved program-learning and strengthened knowledge management that ultimately enable adaptive program management, and strengthen future planning and decision making.

Timeline:

The following timeline is envisioned for the proposed measure

- Step 1:** Participatory design structure of MIS, including institutional arrangements, data collection and management, as well as standard operating procedures – 2-3 months

- **Step 2:** Development of integrated web and mobile-based software for data collection management and reporting – 1-2 months
- **Step 3:** Testing, implementation, capacity building and maintenance of software – 2-3 months testing, implementation, training, and 2-3 years maintenance and refresher trainings

Literature cited for Annex 9

- Bellfield, H., Sabogal, D., Goodman, L., Leggett, M. 2015. Case Study Report: Community-based Monitoring Systems for REDD+ in Guyana. *Forests*, 6: 133-156.
- DeVries, B., Pratihast, A.K., Verbesselt, J., Kooistra, L., Herold, M. 2016. Characterizing Forest Change Using Community-based Monitoring Data and Landsat Time Series. *PLoS One*, 11(3): 1-25.
- Pratihast, A.K., Herold, M., Avitabile, V., de Bruin, S., Bartholomeus, H., Souza Jr., C.M., Ribbe, L. 2012. Mobile Devices for Community-based REDD+ Monitoring: A Case Study for Central Vietnam. *Sensors*, 13: 21-38.
- Pratihast, A.K., Herold, M., De Sy, V., Murdiyarso, D., Skutsch, M. 2013. Linking community-based and national REDD+ monitoring: a review of the potential. *Carbon Management*, 4(1).
- Pratihast, A.K., DeVries, B., Avitabile, V., de Bruin, S., Kooistra, L., Tekle, M., Herold, M. 2014. Combining satellite data and community-based observations for forest monitoring. *Forests*, 5: 2464-2489.