

# Funding Proposal

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## **FP200: Scaling up the implementation of the Lao PDR Emission Reductions Programme through improved governance and sustainable forest landscape management (Project 2)**

Lao PDR | Deutsche Gesellschaft fuer Internationale Zusammenarbeit GmbH (GIZ) | Decision B.35/05

11 April 2023



GREEN  
CLIMATE  
FUND

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### ***Note to Accredited Entities on the use of the funding proposal template***

- Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc.
- Accredited Entities should ensure that annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents.
- The total number of pages for the funding proposal (excluding annexes) **should not exceed 60**. Proposals exceeding the prescribed length will not be assessed within the usual service standard time.
- The recommended font is Arial, size 11.
- Under the [GCF Information Disclosure Policy](#), project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Accredited Entities are asked to fill out information on disclosure in section G.4.

**Please submit the completed proposal to:**

[fundingproposal@gcfund.org](mailto:fundingproposal@gcfund.org)

**Please use the following name convention for the file name:**

“FP-[Accredited Entity Short Name]-[Country/Region]-[YYYY/MM/DD]”

A. PROJECT/PROGRAMME SUMMARY				
<b>A.1. Project or programme</b>	Project	<b>A.2. Public or private sector</b>	Public	
<b>A.3. Request for Proposals (RFP)</b>	Not applicable			
<b>A.4. Result area(s)</b>		<b>GCF contribution</b>	<b>Co-financers' contribution<sup>1</sup></b>	
	<b>Mitigation total</b>	80 %	90 %	
	<input type="checkbox"/> Energy generation and access	Enter number %	Enter number %	
	<input type="checkbox"/> Low-emission transport	Enter number %	Enter number %	
	<input type="checkbox"/> Buildings, cities, industries and appliances	Enter number %	Enter number %	
	<input checked="" type="checkbox"/> Forestry and land use	80 %	90 %	
	<b>Adaptation total</b>	20 %	10 %	
	<input checked="" type="checkbox"/> Most vulnerable people and communities	10 %	5 %	
	<input type="checkbox"/> Health and well-being, and food and water security	Enter number %	Enter number %	
	<input type="checkbox"/> Infrastructure and built environment	Enter number %	Enter number %	
<input checked="" type="checkbox"/> Ecosystems and ecosystem services	10 %	5 %		
<b>A.5. Expected mitigation outcome</b>  <i>(Core indicator 1: GHG emissions reduced, avoided or removed / sequestered)</i>	Project 2* (4 years) 4.6 million t CO <sub>2</sub> eq**	<b>A.6. Expected adaptation outcome</b>  <i>(Core indicator 2: direct and indirect beneficiaries reached)</i>	Programme: 997,082 total beneficiaries (498,541 men and 498,541 women direct and indirect beneficiaries)	
	Programme (7 years) <sup>2</sup> 11.7 million t CO <sub>2</sub> eq		Project 2: 486,690 total beneficiaries (243,345 men and 243,345 women, direct & indirect beneficiaries) <sup>4</sup>	
	Project 1*** (4 years) 7.1 million t CO <sub>2</sub> eq <sup>3</sup>		Programme: 273,700 direct beneficiaries (136,850 men and 136,850 women)	Programme: 723,382 indirect beneficiaries (361,691 men and 361,691 women)
	*Initially the Programme was planned as a single project which had to be reframed into 3 projects due to the limited funding available in 2019 (GCF Replenishment Process). Therefore, this Funding Proposal refers to Projects 2+3 (hereafter Project 2) which is embedded in the Programme (FP 117) approved by the Board at B.24. **figures are based on revised Forest Reference Level (FRL) for the ER-Programme under the FCPF Carbon Fund. ***5.6 CO <sub>2</sub> eq as of FP117 + 1.5 CO <sub>2</sub> eq as of footnote 3.		Project 2: 153,700 direct beneficiaries (76,850 men and 76,850 women)	Project 2: 332,990 indirect beneficiaries (166,495 men and 166,495 women)
		Programme: 3.8% of the national population (direct beneficiaries)	Programme: 10% of the national population (indirect beneficiaries)	
		Project 2: 2.15% of the national population (direct beneficiaries)	Project 2: 4.6% of the national population (indirect beneficiaries)	

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<sup>1</sup> Co-financer's contribution means the financial resources required, whether Public Finance or Private Finance, in addition to the GCF contribution (i.e. GCF financial resources requested by the Accredited Entity) to implement the project or programme described in the funding proposal.

<sup>2</sup> Project 1 and Project 2 will overlap for one year, resulting in a total programme length of 7 years (i.e. from the year Project 1 started until the end of Project 2).

<sup>3</sup> During the development of the Feasibility Study, the ex-ante programme and project estimates of emission reductions were revised. Project 1 generates a larger amount of emission reductions during the programme due to the fact that removals/enhancements of forest carbon stocks are calculated over a 7-year period, whereas for Project 2 they are only estimated over a 4-year period.

<sup>4</sup> Population data is based on Lao Population and Housing Census Data 2015 ([https://lao.unfpa.org/sites/default/files/pub-pdf/PHC-ENG-FNAL-WEB\\_0.pdf](https://lao.unfpa.org/sites/default/files/pub-pdf/PHC-ENG-FNAL-WEB_0.pdf)); direct beneficiaries are all villagers in all target villages, indirect beneficiaries are all rural villagers in the target districts without direct beneficiaries. More detail is provided in Chapter D.1 and within the Logframe in Section E.

<b>A.7. Total financing (GCF + co-finance<sup>5</sup>)</b>	74.08 million Euros	<b>A.9. Project size</b>	Medium (Upto USD 250 million)
<b>A.8. Total GCF funding requested</b>	32.82 million Euros		
<b>A.10. Financial instrument(s) requested for the GCF funding</b>	<p><i>Mark all that apply and provide total amounts. The sum of all total amounts should be consistent with A.8.</i></p> <p> <input checked="" type="checkbox"/> Grant      Euro 32.82 million      <input type="checkbox"/> Equity      <u>Enter number</u>  <input type="checkbox"/> Loan      <u>Enter number</u>      <input type="checkbox"/> Results-based payment      <u>Enter number</u>  <input type="checkbox"/> Guarantee      <u>Enter number</u> </p>		
<b>A.11. Implementation period</b>	4 years	<b>A.12. Total lifespan</b>	20 years <sup>6</sup>
<b>A.13. Expected date of AE internal approval</b>	5/30/2022	<b>A.14. ESS category</b>	B
<b>A.15. Has this FP been submitted as a CN before?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>A.16. Has Readiness or PPF support been used to prepare this FP?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>A.17. Is this FP included in the entity work programme?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>A.18. Is this FP included in the country programme?</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>A.19. Complementarity and coherence</b>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>The Programme “Implementation of the Lao PDR Emission Reductions Programme through improved governance and sustainable forest landscape management” (FP117) was approved by the GCF Board in 2019 at B.24. Initially, FP117 was conceptualized as a pure mitigation single project which had to be reframed as a programme, with 3 Sub-Projects due to limited GCF funding available. GCF Funding Proposal 117<sup>7</sup> explicitly outlined a programmatic approach with Project 1<sup>8</sup> covering 3 out of 6 provinces of the Lao Emission Reductions Programme (ER-Programme) under the Forest Carbon Partnership Facility (FCPF) and the subsequent Sub-Projects 2 and 3 (hereafter Project 2) to expand the programme intervention area the remaining 3 provinces (approx. 240 villages) covered by the ER-Programme, as well as 50 additional villages (totalling the number of the villages to 530 at programme level) in the current project location<sup>9</sup> to fully reach the envisioned transformational change of forest and land management in the uplands of the Lao PDR.<sup>10</sup> More information is provided in Section B.1 below.</p>		
<b>A.20. Executing Entity information</b>	<p>The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, besides being the Accredited Entity (AE) of the project, acts as well as an Executing Entity (EE). Besides GIZ, there will be the following Executing Entity:</p> <ul style="list-style-type: none"> <li>▪ The Government of the Lao People's Democratic Republic (Lao PDR or the Host Country), represented by Lao PDR Ministry of Agriculture and Forestry (MAF) and Lao PDR Ministry of Natural Resources and Environment (MoNRE) as co-chair and chair of the Environment Protection Fund (EPF) board <sup>11</sup></li> </ul>		

## A.21. Executive summary (max. 750 words, approximately 1.5 pages)

### A.21.1 Country context

1. Lao Peoples Democratic Republic (PDR) is a landlocked Least Developed Country (LLDC) where the economy is dependent on natural resources, especially forestry, agriculture, electricity generation (especially hydropower) and mining. Agriculture, forestry and fisheries account for 16% of gross domestic product (GDP) and employ 64% of the Lao workforce.<sup>12</sup> Forests are among the most important economic sectors, providing income, a source of nutrition, and livelihoods for the rural population and, in particular, the rural poor.
2. Northern Lao PDR is particularly at risk of climate change due to its high exposure, low capacities, and high sensitivity (as further described in Chapter B.1). This region is among the poorest in the country, and villagers in the region are largely dependent on rainfed upland agriculture to maintain their livelihoods. The mountainous terrain is highly sensitive to climate change due to its sloped terrain, which is naturally prone to erosion events and landslides. At the same time, high rates of deforestation and forest degradation further exacerbate the northern regions' vulnerability to climate change. Six provinces in Northern Lao PDR (Bokeo, Houaphan, Luang Prabang, Luang Namtha, Sayaboury and Oudomxay) experienced more than 40% of the country's deforestation and forest degradation during the period from 2005-2015.<sup>1</sup> Deforestation and forest degradation exacerbate the risk of climate-related natural hazards (drought, flooding, forest-fires), and reduce the provision of key ecosystem services that could otherwise strengthen the coping capacity of local ecosystems and the persons who depend on them.
3. Deforestation and forest degradation also contribute to increases in global emissions. Overall, the agriculture, forestry and other land use (AFOLU) sector in Lao PDR is critical for the country's mitigation efforts, as it is responsible for 78% of all emissions in the country. Laos has embraced REDD+ to address its principal source of greenhouse gas (GHG) emissions. Lao PDR has been a partner country in the Forest Carbon Partnership Facility (FCPF) since 2008. Its Emission Reductions Programme Document (ER-PD) was accepted into the FCPF Carbon Fund in June 2018<sup>13</sup> and an Emission Reductions Payment Agreement (ERPA) was signed in December 2020 for 8.4 million tCO<sub>2</sub>eq and up to USD 42 million in results-based payments.<sup>14</sup> However, the ER-PD clearly highlights the needs for additional financial and technical support to implement measures and support the country to achieve emission reductions.

### A.21.2 Overview of the overarching programme

4. This project is embedded in the overarching programme '*Implementation of the Lao PDR Emission Reductions Programme through improved governance and sustainable forest landscape management*' (Funding Proposal (FP) 117), which was approved by the Green Climate Fund (GCF) Board at its 24<sup>th</sup> board meeting (B.24) in 2019.<sup>15</sup> The objective of the overarching programme is to support the Government and people of the Lao PDR transition to sustainable and climate resilient management of forests and landscapes at scale. This will reduce approximately 11.7 million tCO<sub>2</sub>eq and directly increase the resilience of more than 273,000 villagers and 2,112,000 ha of ecosystems over the 7-year implementation period of Projects 1 and 2. The programme contributes to the successful implementation of the Lao PDR Emission Reductions Programme (ER-Programme) under the FCPF in the aforementioned six provinces covered by the ER-PD.

<sup>5</sup> Refer to the [Policy of Co-financing](#) of the GCF.

<sup>6</sup> Impacts are calculated over a 20-year period, except for mitigation results which are calculated only for the duration of the project. Mitigation results are calculated against a sub-national Forest Reference Emissions Level (FREL) for Lao PDR's Emission Reductions Programme and thus are not extrapolated for the 20-year lifespan of the programme.

<sup>7</sup> <https://www.greenclimate.fund/project/fp117>.

<sup>8</sup> Project 1 which was approved under FP 117 reached effectiveness on 19th May 2020. Since then, the Project has made significant progress. More details on the specific progress can be found under the Annual Performance Reports (APR) in Annex 18 (a-c).

<sup>9</sup> "The programme consists of 3 projects: Project 1 (mid-2020 to mid-2024) addresses the three provinces of Houaphan, Sayaboury and Luang Prabang, which contain the highest rates of deforestation and forest degradation within the programme area; Project 2 (mid-2024 to end-2029) scales-up the number of participating communities in the same geographical area; and Project 3 (2022 to end-2029) extends the geographical reach of the programme to the 3 additional provinces of Luang Namtha, Bokeo and Oudomxay." (GCF FP 117, page 3).

<sup>10</sup> FP 117 A.21.1 Programme Executive Summary: "This Funding Proposal presents a stand-alone GCF project (Project 1) for Board approval. Two subsequent stand-alone projects, embedded in the same programmatic context and theory of change as this project, will be submitted at a future date for Board approval. Board approval for the project presented in this Funding Proposal is wholly separate from, and does not pre-judge, Board approval for future related projects."

<sup>11</sup> The Environment Protection Fund (EPF) under the MoNRE will continue to act as a fund manager of the Climate Change Funding Window, already established an operationalised under FP117. The Funding Window will therefore continue to be utilised as a financial delivery mechanism for this project in the entire project area. More information is provided in Chapters B.3 and B.4 below.

<sup>12</sup> World Bank. N.d. Data Bank. Available online: <https://data.worldbank.org/country/lao-pdr?view=chart>.

<sup>13</sup> For more information refer to: <https://www.forestcarbonpartnership.org/carbon-fund-eighteenth-cf18-june-20-22-2018-paris>.

<sup>14</sup> For more information refer to: [Carbon Fund of the Forest Carbon Partnership Facility – Emission Reductions Payment Agreement – Promoting REDD+ through Governance, Forest Landscapes and Livelihoods in Northern Lao PDR Program](#).

<sup>15</sup> "The programme consists of 3 projects: Project 1 (mid-2020 to mid-2024) addresses the three provinces of Houaphan, Sayaboury and Luang Prabang, which contain the highest rates of deforestation and forest degradation within the programme area; Project 2 (mid-2024 to end-2029) scales-up the number of participating communities in the same geographical area; and Project 3 (2022 to end-2029) extends the geographical reach of the programme to the 3 additional provinces of Luang Namtha, Bokeo and Oudomxay." (GCF FP 117, page 3).

5. Initially, FP117 was conceptualized as a pure mitigation single project which had to be reframed as a programme, with 3 Sub-Projects due to a limitation in available GCF funds at the time of board approval. FP117<sup>16</sup> explicitly outlined a programmatic approach with Project 1<sup>17</sup> covering 3 out of 6 provinces of the Lao ER-Programme (Houaphan, Luang Prabang and Sayabouri), and the subsequent Sub-Projects 2 and 3 (hereafter Project 2) expanding the programme intervention area to all six provinces covered by the ER-Programme to fully reach the envisioned transformational change of forest and land management in the uplands of the Lao PDR.<sup>18</sup>
6. Project 1 (FP117) laid the ground for the transformational change in the project area, including supporting policy mainstreaming, strengthening the regulatory framework, and implementing and improving the measurement, reporting and verification (MRV) system, among others. It also supported interventions on the ground in 3 provinces, namely: Houaphan, Sayabouri and Luang Prabang. However, to fully reach the paradigm shift towards low-emission and climate resilient forest and land use practices outlined in the programmatic approach within FP 117, additional support is needed.

### A.21.3 Overview of project 2

7. Project 2 aims to further advance and consolidate the programme's objective of supporting the Government and people of Lao PDR transition to sustainable and climate resilient management of forests and landscapes at scale. Project 2 is comprised of three components<sup>19</sup> (see Figure below):
  - Component 1 addresses barriers at the national and sub-national levels, including measures that aim to scale-up climate-informed participatory land use planning, strengthen land tenure security, improve forest law enforcement and monitoring, and scale-up and ensure access to sustainable financing for the AFOLU sector.
  - Component 2 builds on the enabling environment (Component 1), and addresses key drivers of deforestation and degradation within the agricultural sector. It delivers emission reductions at scale through reducing the expansion of agricultural activities into forested landscapes, and promotes climate resilient agricultural practices that increase the resilience of local farmers and agri-ecosystems.
  - Component 3 builds on the enabling environment (Component 1),<sup>20</sup> and will reduce emissions and strengthen the resilience of local livelihoods and forest ecosystems through sustainable forest landscape management and the promotion of Forest Landscape Restoration (FLR), with a focus on village and conservation forests.<sup>21</sup>

**Figure 1: Overview of project 2 components, outputs and activities**

<sup>16</sup> The full proposal is available on the GCF website: <https://www.greenclimate.fund/project/fp117>.

<sup>17</sup> Project 1 which was approved under FP 117 reached effectiveness on 19th May 2020. Since then, the Project has made significant progress. More details on the specific progress can be found under the Annual Performance Report (APR) in Annex 18bc.

<sup>18</sup> The following excerpt is from FP 117's Programme-level Executive Summary: "This Funding Proposal presents a stand-alone GCF project (Project 1) for Board approval. Two subsequent stand-alone projects, embedded in the same programmatic context and theory of change as this project, will be submitted at a future date for Board approval. Board approval for the project presented in this Funding Proposal is wholly separate from, and does not pre-judge, Board approval for future related projects."

<sup>19</sup> Project 1 used the term 'outputs' instead of components. In order to ensure alignment with the GCF Integrated Results Management Framework and new Funding Proposal Template, the term 'component' is applied under Project 2.

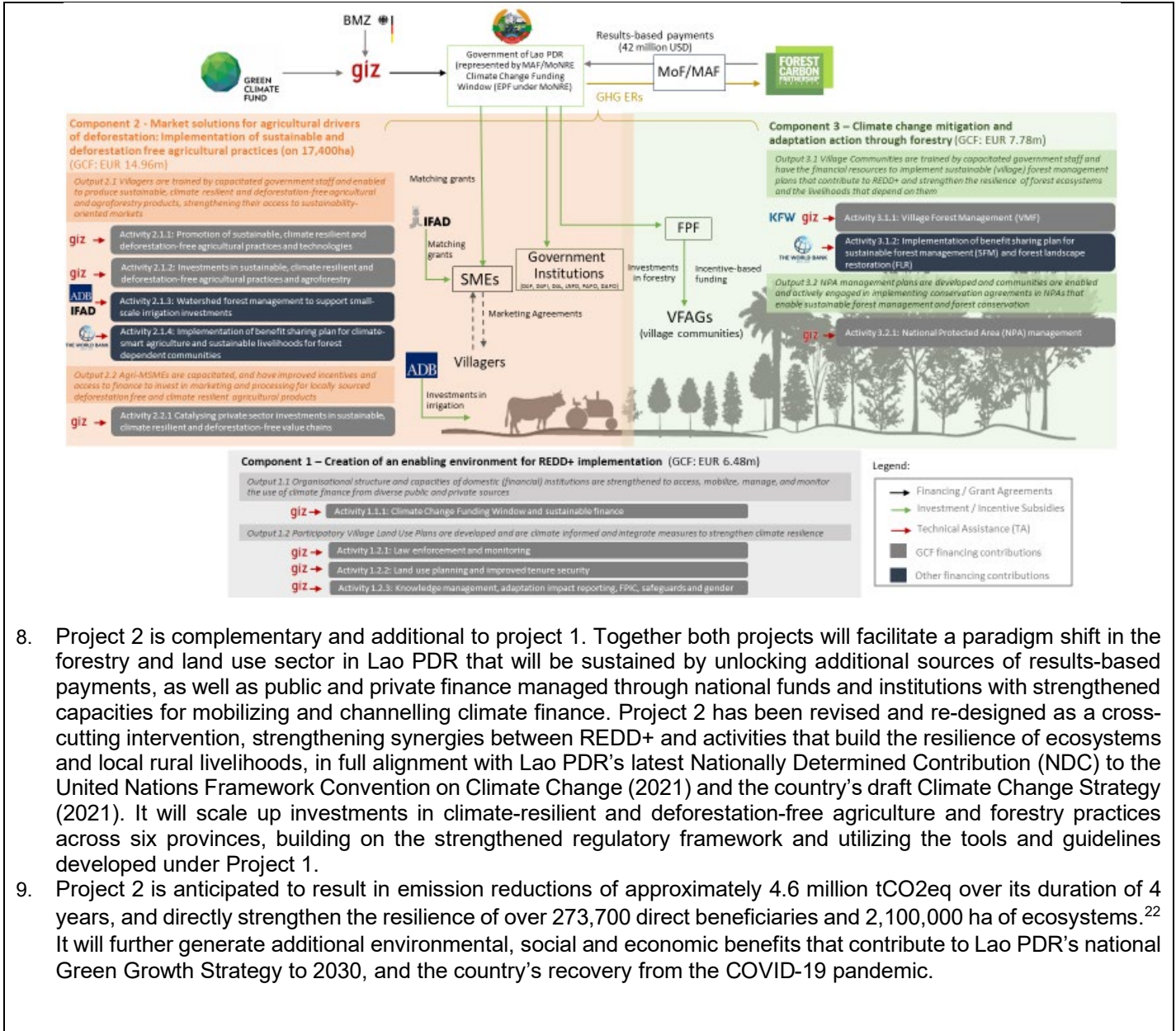
<sup>20</sup> Specifically, Activities under Component 3 that are subject to Component deliverables are:

For Activity 3.1: Village Forest and Agriculture Grants (VFAG) must be in place after Village Forest Management (VFM) planning is concluded, to provide funds for the implementation of annual plans; Land use planning and improved tenure security – Land Use Plans have to be in place as a precondition for VFM, ensuring full compliance with the project's Environmental and Social Management Plan (ESMP), Ethnic Group Development Plan and Gender Action Plan. Free, prior and informed consent (FPIC) is required, where the procedures are outlined in detail within Chapter B.3 of the Funding Proposal, and within the ESMP located in Annex 6b.

For Activity 3.2: Identification of existing and/or establishment of new VFAGs to channel climate finance to target villages – VFAGs must be in place after National Protected Area (NPA) management planning is concluded, to provide funds for the implementation of annual plans. Again, full compliance with the ESMP and FPIC procedures are required.

<sup>21</sup> Conservation forests will focus on 5 national protected areas (NPAs) and 1 national park within the project area.





- Project 2 is complementary and additional to project 1. Together both projects will facilitate a paradigm shift in the forestry and land use sector in Lao PDR that will be sustained by unlocking additional sources of results-based payments, as well as public and private finance managed through national funds and institutions with strengthened capacities for mobilizing and channelling climate finance. Project 2 has been revised and re-designed as a cross-cutting intervention, strengthening synergies between REDD+ and activities that build the resilience of ecosystems and local rural livelihoods, in full alignment with Lao PDR's latest Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (2021) and the country's draft Climate Change Strategy (2021). It will scale up investments in climate-resilient and deforestation-free agriculture and forestry practices across six provinces, building on the strengthened regulatory framework and utilizing the tools and guidelines developed under Project 1.
- Project 2 is anticipated to result in emission reductions of approximately 4.6 million tCO<sub>2</sub>e over its duration of 4 years, and directly strengthen the resilience of over 273,700 direct beneficiaries and 2,100,000 ha of ecosystems.<sup>22</sup> It will further generate additional environmental, social and economic benefits that contribute to Lao PDR's national Green Growth Strategy to 2030, and the country's recovery from the COVID-19 pandemic.

<sup>22</sup> For more detailed information on projects mitigation and adaptation benefits, refer to Chapters D.1 and E.



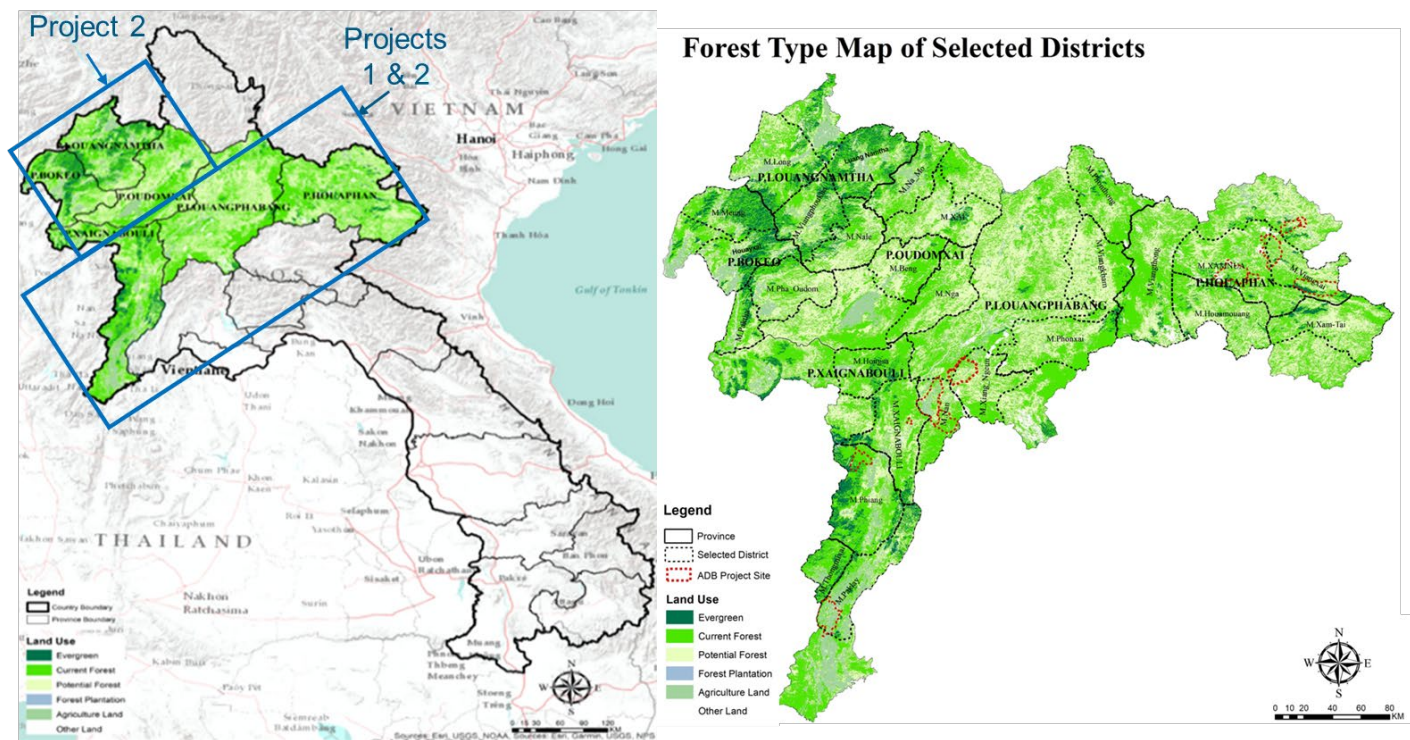
## B. PROJECT/PROGRAMME INFORMATION

### B.1. Climate context (max. 1000 words, approximately 2 pages)

#### B.1.1 Note on the Project Structure and Linkage to GCF FP 117

10. The Programme “Implementation of the Lao PDR Emission Reductions Programme through improved governance and sustainable forest landscape management” (FP117) was approved by the GCF Board in 2019 at B.24.<sup>23</sup> The overarching programme contributes substantially to the successful implementation of the Lao PDR Emissions Reduction Programme (ER-Programme) under the Forest Carbon Partnership Facility (FCPF) in six provinces of Northern Lao PDR: Houaphan, Luang Prabang, Sayaboury, Luang Namtha, Bokeo and Oudomxay (see Figure 2). The programme area constitutes approximately 35% of the national territory and 32% of the country’s forest cover. Around 40% of total national deforestation and degradation (in area terms) takes place within the selected six provinces, which are also among the most vulnerable provinces to climate change in Lao PDR (see B.1.3).<sup>24</sup>

Figure 2: a) Programme/Project Area in Lao PDR, and b) forest type map of selected districts<sup>25</sup>



11. Initially, FP117 was conceptualized as a mitigation-focused single project. Due to limited GCF funding available at the time of submission, it was reframed as a programme, with 3 Sub-Projects. GCF Funding Proposal 117<sup>26</sup> explicitly outlined a programmatic approach with Project 1<sup>27</sup> covering 3 out of 6 provinces of the Lao ER-Programme (Houaphan, Luang Prabang and Sayaboury), and the subsequent Sub-Projects 2 and 3 (hereafter Project 2)

<sup>23</sup> “The programme consists of 3 projects: Project 1 (mid-2020 to mid-2024) addresses the three provinces of Houaphan, Sayaboury and Luang Prabang, which contain the highest rates of deforestation and forest degradation within the programme area; Project 2 (mid-2024 to end-2029) scales-up the number of participating communities in the same geographical area; and Project 3 (2022 to end-2029) extends the geographical reach of the programme to the 3 additional provinces of Luang Namtha, Bokeo and Oudomxay.” (GCF FP 117, page 3).

<sup>24</sup> Each of the six provinces has developed Provincial REDD+ Action Plans (PRAPs), which analyse key drivers of deforestation and forest degradation, major barriers and proposed actions and measures to reduce emissions from deforestation and forest degradation.

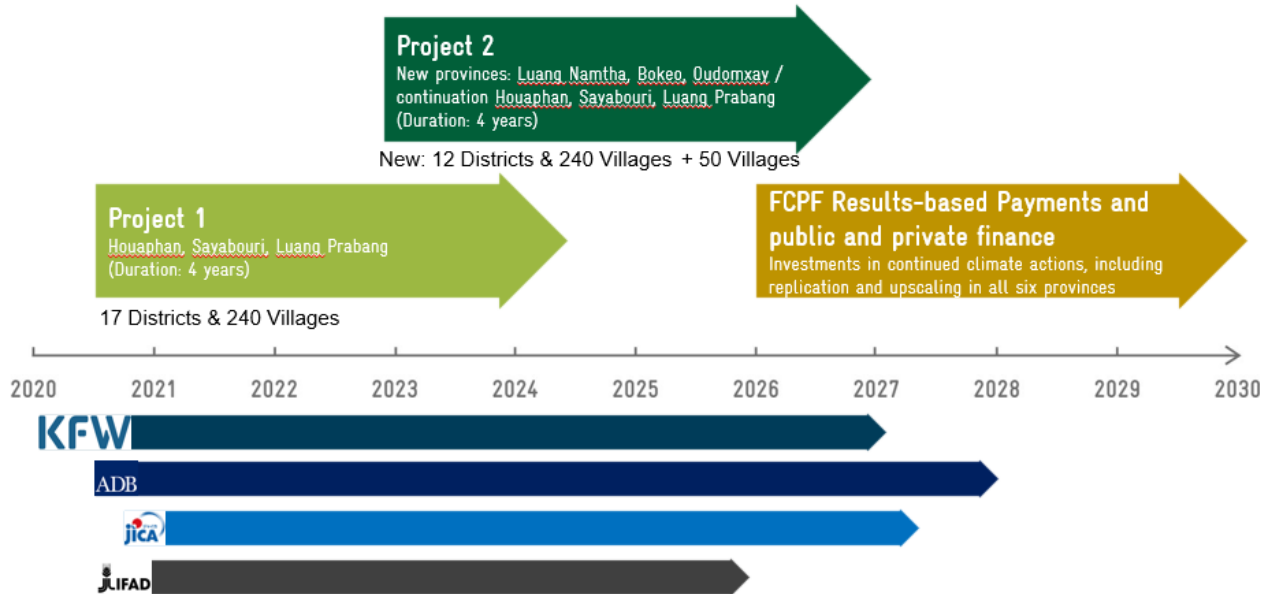
<sup>25</sup> Each target province shares an international border with one of the surrounding countries of Thailand, Myanmar, China and Viet Nam. The northern region of Laos is characterized by hilly topography, remote accessibility and limited public and industrial infrastructure, unique ethnic communities, and a persistent prevalence of poverty. Of the 50 districts in the six provinces, 29 districts have been selected for programme support. The selected 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). The selection process for the districts combined detailed quantitative and qualitative considerations, which are described in Chapter 2.5 of the Feasibility Study (Annex 2a) and shown in the map.

<sup>26</sup> For more information refer to: <https://www.greenclimate.fund/project/fp117>.

<sup>27</sup> Project 1 which was approved under FP 117 reached effectiveness on 19th May 2020. Since then, the Project has made significant progress. More details on the specific progress can be found under the Annual Performance Report (APR).

expanding the programme intervention area to all six provinces covered by the ER-Programme to fully reach the envisioned transformational change of forest and land management in the uplands of the Lao PDR (Figure 3).<sup>28</sup>

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



12. This Funding Proposal (FP) refers to Project 2 of the aforementioned GCF Programme, which provides a strategic opportunity to fully achieve the paradigm shift towards a low-emissions and climate resilient forest and land-use sector in Lao PDR<sup>29</sup> already initiated with Project 1. While Project 1 was approved as a mitigation only project, Project 2 has been reframed as a cross-cutting project, with climate change adaptation mainstreamed through all activities.<sup>30</sup>
13. Project 2 will scale up project activities in all six ER-Programme provinces. Specifically, it will:
- Implement activities in 12 districts (240 villages) in Luang Namtha, Oudomxay and Bokeo, which are provinces that were *not* included under Project 1. This support will include scaling up successfully implemented approaches to forest restoration and management in village and conservation forests, as well as deforestation free and climate resilient agriculture and agroforestry on agricultural land.
  - Implement activities in an additional 50 villages in Houaphan, Luang Prabang and Sayabouri Provinces (the provinces covered under Project 1), to support replication and upscaling that maintains the momentum for sustainable low-emission and climate resilient land use.
  - Support the continuation of activities in the 240 target villages located within 17 districts included under Project 1 (after 06/2024 when Project 1 ends).<sup>31</sup>
14. To achieve such a paradigm shift, the Programme already outlined in FP 117 (in which Project 2 is embedded) will:

<sup>28</sup> FP 117 A.21.1 Programme Executive Summary: "This Funding Proposal presents a stand-alone GCF project (Project 1) for Board approval. Two subsequent stand-alone projects, embedded in the same programmatic context and theory of change as this project, will be submitted at a future date for Board approval. Board approval for the project presented in this Funding Proposal is wholly separate from, and does not pre-judge, Board approval for future related projects."

<sup>29</sup> The Lao People's Democratic Republic (Lao PDR) and Laos is used synonymously throughout the Concept Note.

<sup>30</sup> Project 2 will, upon request from the GCF Secretariat, include adaptation measures to enable the transition to sustainable and climate-resilient forest and land management in the uplands of Northern Lao PDR. Although the project area has certain climate vulnerabilities (see section B.1.3 on Climate Risk and Vulnerability below, as well as the detailed CRVA in Annex 2d) the main issue in the under Project 1 and 2 selected area is still deforestation.

<sup>31</sup> Continued support for the villages included under Project 1 will not include additional funding support, but instead will focus on technical backstopping (e.g. related to the implementation of annual activity plans, and monitoring of land use plans and changes in forest cover), in addition to the deepening of linkages to private sector companies for sustainable deforestation free, climate resilient and low-emission value chain investments (for select commodities). This will be necessary as many crops selected from the White List will only enter production stage 2-4 years after initial establishment. Continued technical and extension support by Provincial Agriculture and Forestry Office (PAFO) and District Agriculture and Forestry Offices (DAFO) will further strengthen the sustainability of Project 1, and is part of the project's coordinated exit strategy. Funding for the annual forest management plan implementation and investments in sustainable agriculture for these villages will come from bonus payments to the Village Forestry and Agriculture Grant (VFAG) accounts after 2 years of successful forest management which will be fully disbursed by the end of Project 1.

- Strengthens the **enabling environment for REDD+** through the following means: enhancing the availability of financing investments in climate resilient and deforestation free agriculture, forestry and land use – including channelling investments for climate change adaptation and mitigation under the Environmental Protection Fund’s (EPF) Climate Change Funding Window established under Project 1 (Project 2); revising and strengthening the legal and regulatory framework for forestry (completed under Project 1); and improving the enforcement of the new regulatory framework (both Project 1 and 2). Project 2 will further strengthen the framework to improve the implementation of cross-cutting measures, with both climate change adaptation and mitigation benefits, in line with the latest Nationally Determined Contribution (NDC) to the United Nation’s Framework Convention on Climate Change (UNFCCC). This will include ensuring land use and forestry planning are climate-informed, and selected measures not only support reducing deforestation and reducing emissions, but further are informed by climate information and strengthen the resilience of local livelihoods, ecosystems and/ or strengthen food security.
- **Unlocking results-based payments and mobilizing additional public and private climate finance:** Project 2 is needed to build on the efforts of Project 1, while scaling up climate resilient, low-emission and deforestation free agriculture and forestry practices across all six provinces. The Programme will help the country unlock up to USD 42 million in results-based payments for emission reductions (ERs) under the FCPF Carbon Fund (as per the ERPA), the proceeds will be used to strengthen the implementation of activities under the GCF programme and sustain them beyond implementation lifespan. It also builds on the lessons learned from Project 1 and includes additional targeted measures to facilitate the mobilization of additional sources of public and private public finance for climate action. Supporting these efforts, it further includes measures to strengthen the capacities of national institutions (Forest Protection Fund and the EPF) to mobilize additional climate finance and efficiently and effectively channel funds for investments in climate change adaptation and mitigation.
- Supports further **implementation of integrated and improved participatory land use planning processes** (Projects 1 and 2),<sup>32</sup> which include local level planning while ensuring plans are climate informed and feed into broader landscape level planning. This will ensure an ecosystem-based approach to adaptation (EbA), where measures such as resilient agricultural practices, forest landscape restoration and sustainable forest management will contribute to strengthening the resilience of local communities and ecosystems, with a focus on strengthening their resilience to increasing temperatures, droughts and extreme heat, and wildfires, as well as extreme precipitation events and floods.
- Supports the **scaling up of deforestation free and climate resilient agriculture and agroforestry** by promoting climate resilient **value chains** and agricultural interventions (e.g. agroforestry, intercropping), enhancing productivity, strengthening farmers’ adaptive capacities, increasing farmers’ integration into resilient and low-emission agricultural value chains, and improving access to finance and private sector participation in economic activities that reduce pressure on forests (Project 2). As agricultural expansion and the pioneering shifting cultivation are among the main drivers of deforestation, this intervention targets major underlying causes including access to technology and finance, inadequate incentives for agri-micro, small and medium enterprises (MSMEs), market access, and monitoring and enforcement, among others. The project will also support farmers with income diversification, promoting diverse agricultural commodities and farming systems that are suitable for the varied contexts, as well as diverse bio-geophysical and climatic conditions in Northern Lao PDR. Project 2 builds on the lessons learned from Project 1, and identified the need to target agri-MSMEs, where there is a notable absence of incentives for agri-MSMEs to adopt and invest in more sustainable, climate resilient and deforestation free practices and support value chain development. With over 800 MSMEs in the project area, they are often left out of discussions on sustainability, and as a result are insufficiently integrated in deforestation free and sustainability-oriented value chains, limiting the involvement of a critical actor at the intersection of deforestation, production systems and value chains.
- Supports the **implementation of Sustainable Forest Landscape Management (SFM) and Forest Landscape Restoration (FLR)** of approximately 1,422,000 ha of degraded forest lands (Projects 1 and 2).<sup>33</sup> Climate-informed management plans for village forests and national protected areas (NPAs) will be developed and implemented by the project considering measures for reducing deforestation and forest degradation, enhancing forest restoration and rehabilitation, and identifying opportunities to strengthen the resilience of forest ecosystems and communities within the watershed through ecosystem-based adaptation (e.g. restoring riparian zones and gully areas, reducing sedimentation through increasing vegetative cover, among other practices). Project 2 will further strengthen climate change awareness raising and include an enhanced emphasis on climate risk and vulnerability and resilience building within forest management plan development, implementation and monitoring processes for village forestry and protected areas.

<sup>32</sup> Project 1 developed a revised template and improved approach for PLUP that Project 2 will utilize, based on the successful experiences and lessons learned from Project 1.

<sup>33</sup> Considering national parks (NPs), national protected areas (NPAs) and village forests. See Section E for more detailed information on the indicators and assumptions.



- Project 1 laid the ground for the transformational change in the project area, However, to fully reach the paradigm shift towards low-emission and climate resilient forest and land use practices, additional support is needed – as outlined in the programmatic approach within FP 117 and throughout this proposal.

### B.1.2 Country and regional context

15. Lao PDR is a landlocked Least Developed Country (LLDC) with an area of 23.68 million ha, has a population of 6.9 million<sup>34</sup> and an average per capita income of USD 2,490.<sup>35</sup> The country has a human development index (HDI)<sup>36</sup> of 0.613, ranking it 137<sup>th</sup> (out of 189) globally.<sup>37</sup> The country's economy is dependent on natural resources, especially forestry, agriculture, electricity generation (especially hydropower) and mining. Agriculture, forestry and fisheries account for 16% of GDP and employ 64% of the Lao workforce.<sup>38</sup> Forests are among the economically most important sectors, providing income for the rural population and, in particular, the rural poor and providing a source of nutrition and livelihoods. Approximately 80% of the population are heavily reliant on forests for timber, food, fuel, shelter, medicines, and spiritual protection<sup>39</sup>. Laos' forests are at the heart of the globally recognised Biodiversity Hotspot Indo-Burma.<sup>40</sup>

### B.1.3 Climate Risk and Vulnerability<sup>41</sup>

16. Lao PDR is among the top 25-30% of countries in terms of climate change vulnerability, and already experiences the effects of climate change.<sup>42</sup> It is exposed to multiple climate-related natural hazards, including floods, droughts, wildfires, cyclones, and landslides. During the period from 1966-2009, flooding was the most frequent hazard with an occurrence of 50% of all climate-related hazard in the country; followed by storms and droughts with 14% occurrence each.<sup>43</sup> During the period from 1980-2010, at least 33 natural hazard events occurred, affecting approximately 9 million persons, and resulting in damages and losses exceeding USD 400 million.<sup>44</sup> The Intergovernmental Panel on Climate Change (IPCC) in its latest AR6 report noted that the south-east Asia region has had medium impacts in its agriculture and food systems driven by changes in precipitation regime and droughts.<sup>45</sup> Northern Lao PDR where the project's provinces are located is particularly vulnerable to wildfires, where it experienced the most intense wildfires in the country during the period from 2003-2010.<sup>46</sup>

### Overall climatology

17. Lao PDR has a tropical climate with two distinct seasons: i) the rainy or monsoon season (May to mid-October), and ii) the dry season (mid-October to April). The average annual temperature ranges from around 20°C in the Northern and Eastern mountainous areas and plateaus, whereas the plains in the central and southern region have an average temperature in the range of 25 to 27°C.<sup>47</sup> Precipitation ranges from 1,300 to 3,000 mm, with the highest rain concentrated in the far south, and in the north-central region of the country (especially Luang Prabang, Xiengkhuang and Vientiane, Figure 4).<sup>48</sup> The northern mountainous areas (above 1,000m) where the target area is mostly situated

<sup>34</sup> Lao Statistical Bureau. 2015. [Results of Population and Housing Census](#).

<sup>35</sup> World Bank: <https://data.worldbank.org/country/lao-pdr?view=chart>.

<sup>36</sup> HDI takes into account three dimensions to assess the level of development of a country: a long and healthy life (life expectancy at birth), knowledge (expected years of schooling, mean years of schooling), and a decent standard of living (GNI per capita). Additional information can be found at: <http://hdr.undp.org/en/content/human-development-index-hdi>.

<sup>37</sup> UNDP (2018), *Human Development Indices and Indicators: 2018 Statistical Update*: [http://www.hdr.undp.org/sites/default/files/2018\\_human\\_development\\_statistical\\_update.pdf](http://www.hdr.undp.org/sites/default/files/2018_human_development_statistical_update.pdf).

<sup>38</sup> World Bank: <https://data.worldbank.org/country/lao-pdr?view=chart>.

<sup>39</sup> NAFRI (2006), *Improving Livelihoods in the Uplands of Lao PDR – A Sourcebook*.

<sup>40</sup> see <https://www.cepf.net/our-work/biodiversity-hotspots/indo-burma> and MAF (2010): Fourth National Report to the Convention on Biological Diversity.

<sup>41</sup> A detailed climate risk and vulnerability assessment (CRVA) is available in Annex 2d.

<sup>42</sup> Lao PDR ranked 45/180 countries analysed in 2019, and 52/180 countries analysed for the period from 2000-2019. For more information see Eckstein, D., Künzel, V., Schäfer, L. 2021. [Global Climate Risk Index 2021](#).

<sup>43</sup> Government of Lao PDR. 2012. Second National Communication to the United Nations Framework Convention on Climate Change. Vientiane, Lao PDR.

<sup>44</sup> EM-DAT in World Bank. 2011. [Climate Risk and Adaptation Country Profile: Lao PDR](#).

<sup>45</sup> IPCC 2022. Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Lösschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. In Press.

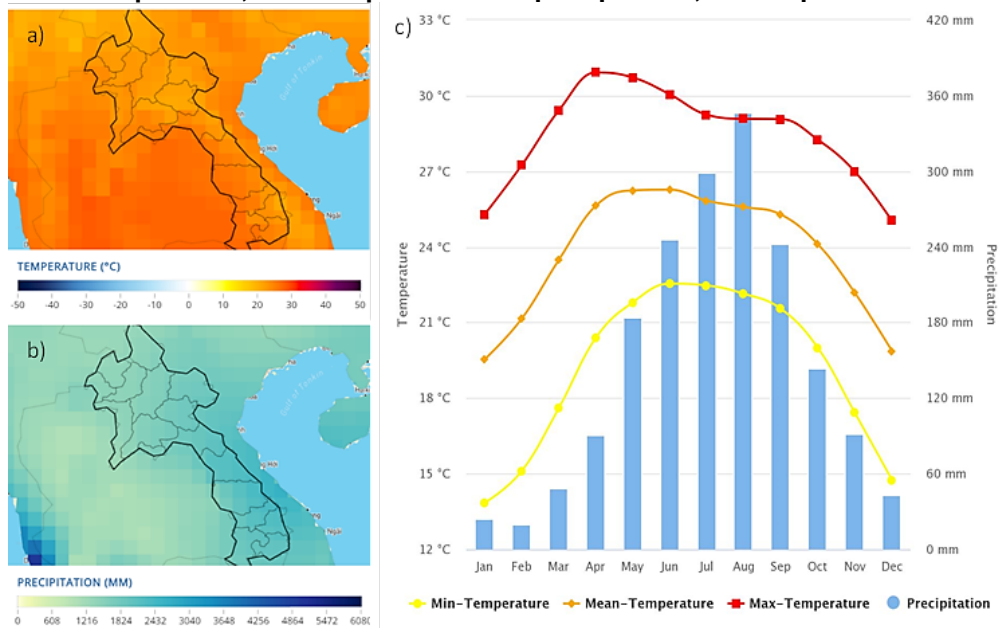
<sup>46</sup> Müller, D., Suess, S., Hoffmann, A.A., Bucholz, G. 2013. [The Value of Satellite-Based Active Fire Data for Monitoring, Reporting and Verification of REDD+ in the Lao PDR](#). Human Ecology, 41: 7-20.

<sup>47</sup> DDMCC 2005 in Government of Lao PDR [*forthcoming*] Third National Communication to the United Nations Framework Convention on Climate Change (UNFCCC)

<sup>48</sup> FAO, Food and Agriculture Organization of the United Nations. 2021. Climate maps for the Lao People's Democratic Republic. Available online: <http://www.fao.org/3/cb3688en/cb3688en.pdf>; and Government of Lao PDR [*forthcoming*] (Draft) Third National Communication to the United Nations Framework Convention on Climate Change (UNFCCC)

are described as having “a montane temperature and hilly sub-tropical climate”.<sup>49</sup> They have an average rainfall between 1,400 to 2,000mm, and average temperatures ranging from 23-28°C.<sup>50</sup>

**Figure 4: Lao PDR’s observed climatology of a) mean temperature, b) precipitation, and c) min-temperature, mean-temperature, max-temperature and precipitation, for the period 1991-2020**

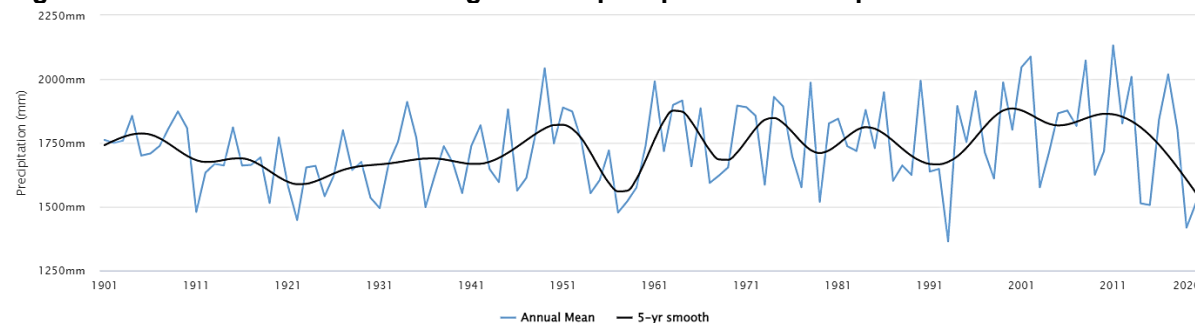


Source: [World Bank 2021<sup>51</sup>](#)

**Observed trends**

18. The country’s average annual rainfall trend during the period 1901-2020 shows a decline, particularly during the last 30 years (Figure 5).<sup>52</sup> During the period 1971-2020, most of the central and northern provinces have experienced negative changes in precipitation, while southern provinces, specially Salavan and Xekong, have had a positive change in rainfall between 1971 and 2020 (Figure 6a).<sup>53</sup> Focusing on the past 30 years (1991-2020), the country experienced declining trends in precipitation in the northwest provinces, particularly in Bokeo, Luang Namtha, Phongsali, Sayabouri, Oudomxay, Luang Prabang, Vientiane, and Xiengkhouang.<sup>54</sup> Seasonal decreases in precipitation were particularly noticeable in Northwest Lao PDR, especially during the planting season from June until August, which has impacted farmers dependent on rainfed agriculture.<sup>55</sup>

**Figure 5: Lao PDR’s observed average annual precipitation for the period 1901-2020**



Source: [World Bank Climate Change Knowledge Portal 2021<sup>56</sup>](#)

<sup>49</sup> Government of Lao PDR [forthcoming] (Draft) Third National Communication to the United Nations Framework Convention on Climate Change (UNFCCC)

<sup>50</sup> Statistical Information Service 2019 in Government of Lao PDR [forthcoming] (Draft) Third National Communication to the United Nations Framework Convention on Climate Change (UNFCCC)

<sup>51</sup> World Bank. 2021. Climate Change Knowledge Portal. [Country: Lao PDR; Current Climate>Climatology](#).

<sup>52</sup> World Bank, 2021. [Climate Change Knowledge Portal. Lao PDR>Current Climate>Climatology](#).

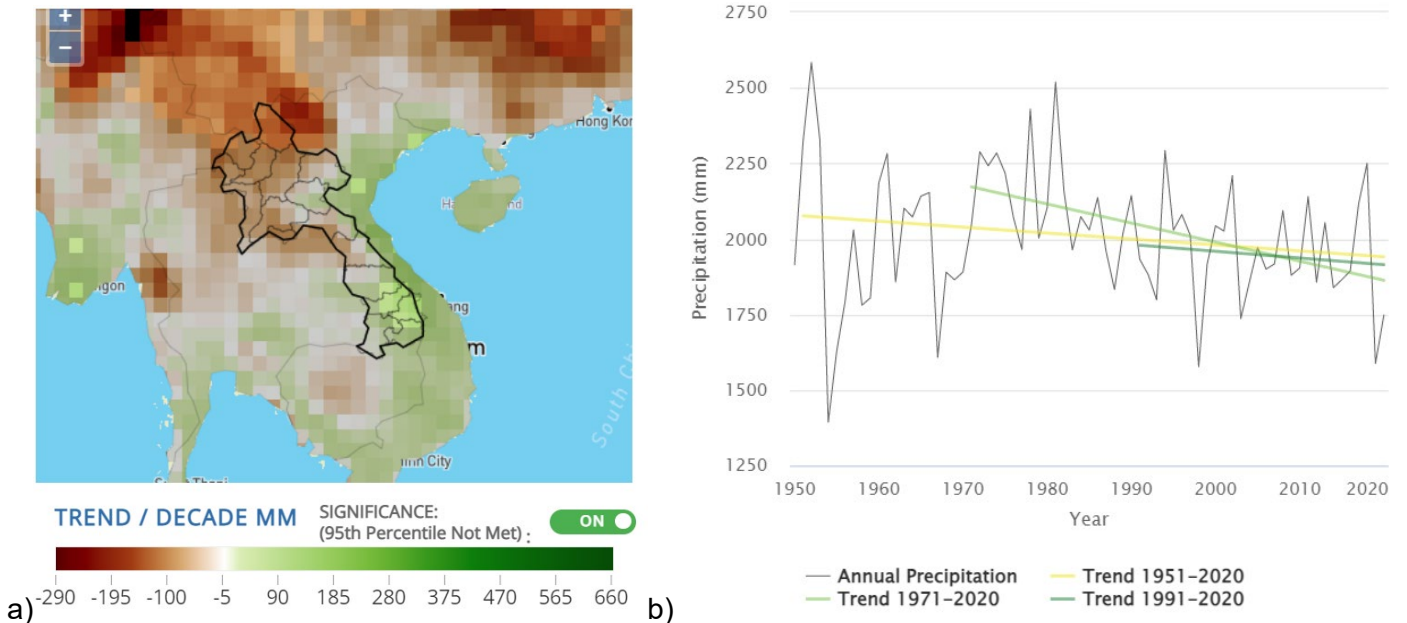
<sup>53</sup> World Bank. 2022. Climate Change Knowledge Portal. [Country: Lao PDR; Current Climate>Climatology](#).

<sup>54</sup> World Bank. 2022. Climate Change Knowledge Portal. [Country: Lao PDR; Current Climate>Climatology](#).

<sup>55</sup> NCA, Norwegian Church Aid. 2009. [Growing Resilience: Adapting for climate change in upland Laos](#).

<sup>56</sup> World Bank. 2022. Climate Change Knowledge Portal. [Country: Lao PDR; Current Climate>Climatology](#).

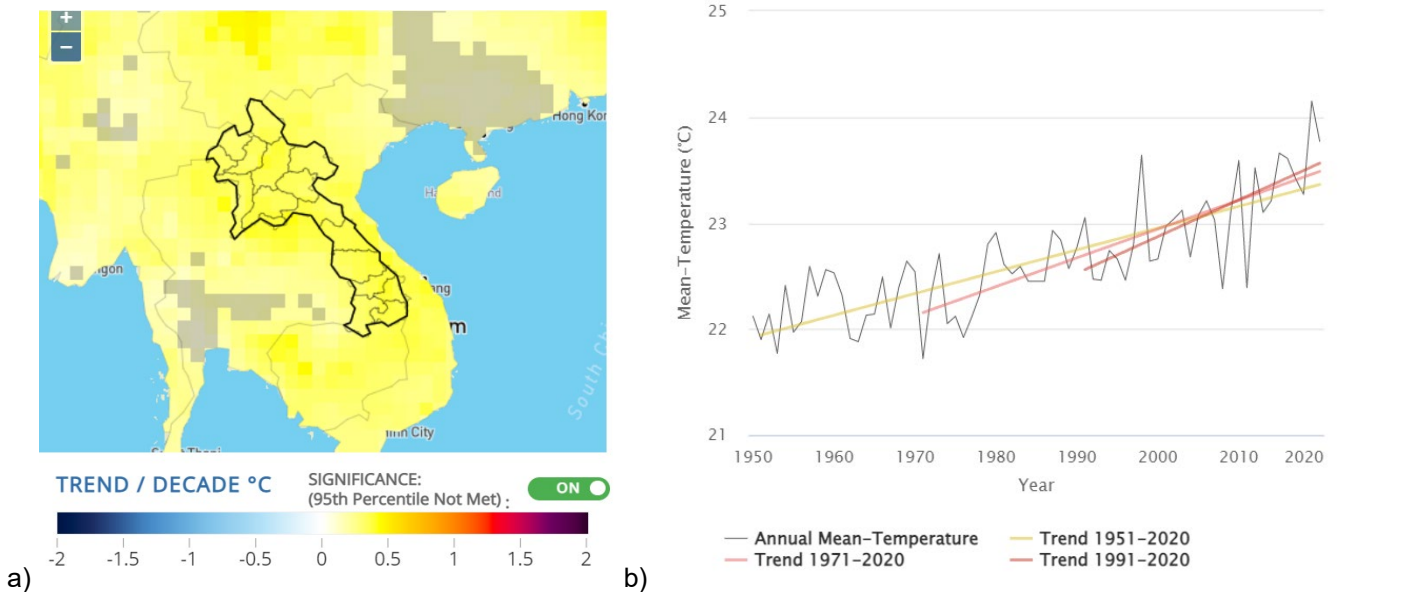
**Figure 6: Trends in annual precipitation a) map of Lao PDR showing trend per decade and b) graph of precipitation trends per decade for the period from 1971- 2020**



Source: World Bank Climate Change Knowledge Portal 2021

19. In terms of temperature, during the period from 1971 to 2020 Lao PDR experienced an increase in temperature in the range of 0.1°C and 0.8°C (Figure 7a). The mean-temperature annual trend in the last 3 decades (period between 1991-2020) has been increasing faster in comparison with the other two trends for the periods 1971-2020 and 1951-2020 (Figure 7b). The average monthly minimum temperature over the last 30 years displayed less variability; while max-temperature experienced a higher monthly variability with a peak value of 30.92°C and 30.72°C during the months of April and May, respectively.

**Figure 7: Trends in a) mean temperature and b) mean-temperature annual trends with trends per decade for the period from 1971- 2020**



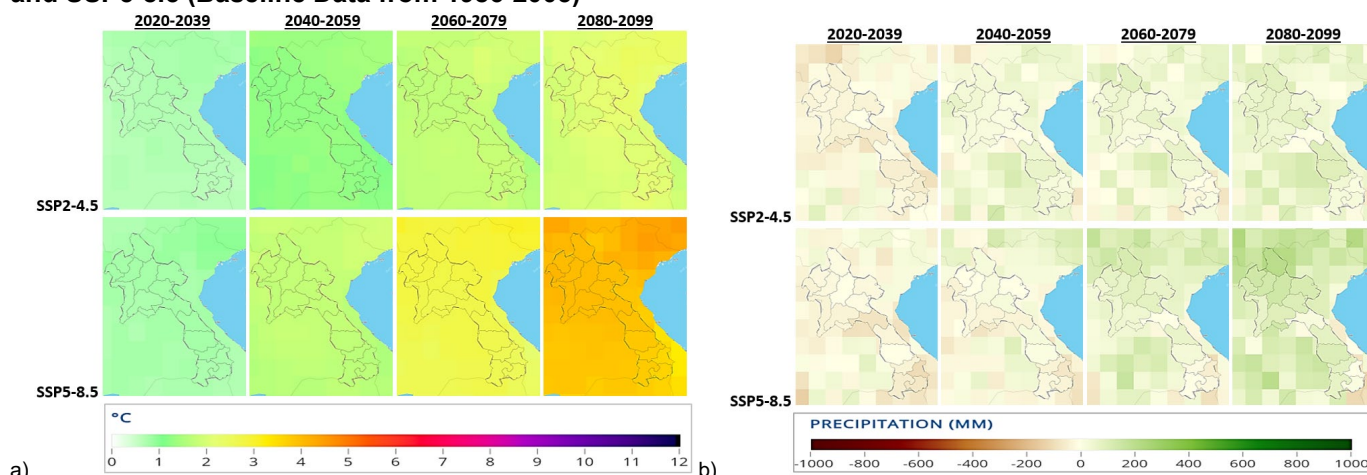
Source: World Bank Climate Change Knowledge Portal 2021

20. According to the World Bank Climate Change Knowledge Portal (2021), average monthly temperatures are expected to increase by up to 2.15°C by the end of the century under SSP2- 4.5, and up to 4.53°C under SSP5-



8.5.<sup>57</sup> The biggest increases are projected to occur in the North, especially under SSP5-8.5 projections. In terms of precipitation from 2020-2039, both SSP2-4.5 and SSP5-8.5 project minor changes with slight decreases in average monthly precipitation in Northern Lao PDR and Central Lao PDR. However, after 2040 annual precipitation is projected to increase in the majority of the country under SPP2-4.5 and SSP5-8.5. SSP2- 4.5 sees the largest increases in precipitation in the Central and Northern provinces of the country, while under SSP5-8.5 the country could experience increases above 100mm in the provinces bordering Vietnam, China and Myanmar (see Figure 8).<sup>58</sup>

**Figure 8: Projected Changes in a) Monthly Mean Temperature and b) Mean Monthly Precipitation under SSP2-4.5 and SSP5-8.5 (Baseline Data from 1986-2005)**



a) Source: Compiled from World Bank Climate Knowledge Portal, n.d.

21. With the aforementioned climate change projections, climate-related hazards are also expected to increase, where “dry seasons will get longer, there will be more intense rainfall events, and more frequent and severe droughts and floods”.<sup>59</sup> In addition, forest fires are likely to become more frequent and affect a greater area.<sup>60</sup> While most fires are initiated by humans, e.g. through the use of fire for shifting cultivation, the continued use of business as usual land clearing practices is expected to trigger more fires in the future due seasonal increases in dry conditions and droughts.<sup>61</sup>

#### Climate change exposure, vulnerability and risk

22. Exacerbated climate related hazards as noted within the draft Third National Communication (TNC) to the UNFCCC are projected to have detrimental impacts on local livelihoods and the ecosystems upon which local communities in the project area depend. Many households in Lao PDR are dependent on the highly vulnerable agricultural sector, where the agricultural sector is the primary source of employment for the majority of people in Lao PDR, with 61% of the working population employed in the sector in 2019 (63% of female employment).<sup>62</sup> Northern Lao PDR is particularly exposed to climate change, where many households are dependent on upland rainfed agriculture, characterized by its low productivity, for their subsistence and livelihoods. In the project area, rain-fed (lowland and upland) paddy rice, maize and vegetables are among the key agricultural crops grown.<sup>63</sup> Changes in temperature, precipitation patterns and the occurrence or intensity of climate-related hazards are expected to have

<sup>57</sup> World Bank, No Date. Climate Change Knowledge Portal, Country Laos. Available online: <https://climateknowledgeportal.worldbank.org/country/laos>.

<sup>58</sup> This assessment is mostly comparable with the results that will be presented in the forthcoming Third National Communication (TNC) to the UNFCCC. Within the draft TNC, mean maximum temperatures are projected to increase by 1.3-1.5°C in Northern Lao PDR under the RCP 4.5 scenario, experiencing the largest increases in the country during this period. In terms of precipitation, it also projects an increase in mean annual rainfall, with majority of the increase occurring in the rainy season. It further highlights Northern Lao PDR is expected to experience different trends, with parts of Sayaboury and Houaphan experiencing among the largest increases in the country with a projected increase in seasonal precipitation, yet Luang Prabang is projected to experience amongst the lowest precipitation increases in the country. More detailed information will be provided within the TNC upon its publication in 2022.; Government of Lao PDR (forthcoming). (Draft) Third National Communication to the UNFCCC.

<sup>59</sup> Inagaki et al., 2011 in EcoLao. 2012. Scoping Assessment of Climate Change Adaptation Priorities in the Lao PDR. Regional Climate Change Adaptation Knowledge Platform for Asia, Partner Report Series No. 6. Stockholm Environment Institute, Bangkok. Available online at [www.asiapacificadapt.net](http://www.asiapacificadapt.net).

<sup>60</sup> WWF Deutschland 2016. [FORESTS ABLAZE. Causes and effects of global forest fires.](#)

<sup>61</sup> WWF Deutschland 2016. [FORESTS ABLAZE. Causes and effects of global forest fires.](#)

<sup>62</sup> World Bank Data Bank. n.d. Employment in agriculture (% of total employment) (modelled ILO estimate) - Lao PDR. Available online: <https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS?locations=LA>.

<sup>63</sup> Agricultural Census Office 2012 in FP117 Feasibility Study.

detrimental impacts on agri-ecosystems and smallholder farmers resulting in:<sup>64</sup> changes in planting/ growing seasons, productivity, outbreaks of pests and disease, crop damage and losses, among other impacts. Focusing on some of the main crops in the region, the following impacts are projected:<sup>65</sup>

- *Maize*, one of the main crops in the region, is projected to be negatively impacted by climate change. A study by UNDP found there may be short-term improvements until 2040, but afterwards there will be long-term negative impacts due to increasingly unsuitable climatic conditions for maize production, especially in Northern Lao PDR.
- *Upland rice* is projected to have either no changes or slightly negative changes in suitability in Northern Lao PDR, depending on the location. A study by UNDP projects a negative change in suitability especially in Houaphan Province, for both the near future and mid-century scenarios.
- *Cassava* is expected to have slight increases in suitability in Northern Lao PDR. A study by UNDP notes that during 2021-2040 by shifting the planting period by up to 2 months earlier it could maximize the suitability of growing conditions.

23. Households in Lao PDR are further highly dependent on forests for their livelihoods. Approximately 80% of the population relies on forests for their income, food, shelter, medicine and other uses.<sup>66</sup> As such, households will be highly exposed to any climate change induced changes on forest ecosystems (e.g. increased frequency and intensity of forest fires, biodiversity loss, changes in species composition and/ or productivity, degradation and disease, among other potential impacts).<sup>67</sup>

*Deforestation and forest degradation exacerbate climate risk and vulnerability in Northern Lao PDR*

24. Northern Lao PDR is particularly vulnerable to climate change due to low capacities (coping capacity and adaptive capacity), and high sensitivity to climate change.<sup>68</sup> The forthcoming Third National Communication to the UNFCCC ranked Northern Lao PDR among the most vulnerable areas in the country. The region has a prevalence of shifting cultivation practices and is one of the poorest regions in the country.<sup>69</sup> The mountainous terrain is highly sensitive to climate change due to its sloped terrain, which is naturally prone to erosion events and landslides (particularly in deforested or degraded areas). At the same time, high rates of deforestation and forest degradation exacerbate the northern regions' vulnerability to climate change. Six provinces in Northern Lao PDR (Bokeo, Luang Namtha, Luang Prabang, Oudomxay, Sayaboury, and Houaphan) experienced more than 40% of the country's deforestation and forest degradation (in area terms) during the period from 2005-2015,<sup>70</sup> which exacerbates the risk of climate-related natural hazards (drought, flooding, forest-fires), and reduces the provision of key ecosystem services that could otherwise strengthen the coping capacity of local ecosystems and the persons who depend on them. The situation regarding forest degradation – which encompasses reductions in forest stocking, changes in species composition and size structure, loss of wildlife and plant habitats, and declines in wildlife and plant populations – is as concerning as deforestation.<sup>71</sup> The main drivers of deforestation and forest degradation are agricultural expansion, shifting agriculture, unsustainable harvesting of wood and non-timber forest products, and infrastructure development (a more detailed description is provided in B.1.3 below).
25. Deforestation and forest degradation also impact the hydrological cycle, and limit water recharge and storage affecting both water quality and quantity for both local and downstream communities.<sup>72</sup> This not only exacerbates the risk and vulnerability to flooding, but also droughts and forest fires. Deforestation and forest degradation increase the exposure of soils to mass erosion events and landslides, given the mountainous terrain in most of the northern provinces.<sup>73</sup> Erosion contributes to sedimentation and river bank rise, which contribute to reduced water quality (for

<sup>64</sup> World Bank. 2011. [Climate Risk and Adaptation Country Profile: Lao PDR](#).

<sup>65</sup> UNDP. 2021. Trends and simulated future changes in climate and crop suitability in Lao PDR. [unpublished, forthcoming report].

<sup>66</sup> Government of Lao PDR. 2005. *Forestry Strategy to the Year 2020*. Vientiane.

<sup>67</sup> World Bank. 2011. Climate Risk and Adaptation Country Profile: Lao PDR; Government of Lao PDR. 2010. [Strategy on Climate Change of the Lao PDR](#); It should be nonetheless noted that there remain major information gaps related to the impact of climate change on forests in Lao PDR. The 2010 climate change strategy states the following on the matter: "Due to the complexity of ecosystem interactions, there are many uncertainties in respect to the impact of climate change on Lao PDR's forestry sector", Government of Lao PDR 2010 P. 10

<sup>68</sup> Government of Lao PDR [forthcoming], In terms of sensitivity the Third National Communication assessed the following variables: population density, dependency ratio, % of economically active population, sex ratio of economically active population, % of population employed off-farm, % of population who are unemployed, retired, sick or too old to work, household access to clean water, household access to sanitation, % of protected area in region. (Lao PDR, forthcoming). In terms of adaptive capacity, the following variables were assessed in the Third National Communication: literacy, educational level achieved, percentage of population with a fixed phone line or telecommunication, % of mobile phone used in districts, percentage of computer or internet used in the district, radio access in the district, percentage of television users in the district, road density, electricity access/ coverage, water pipeline coverage, coverage of health care facilities, percentage of villages with a land use plan. It should be noted the Third National Communication uses the AR4 definition of vulnerability.

<sup>69</sup> FP117 Feasibility Study.

<sup>70</sup> FP117 Feasibility Study.

<sup>71</sup> Thomas, I. L. 2015. Drivers of Deforestation in the Greater Mekong Subregion - Lao PDR Country Report.

<sup>72</sup> World Bank. 2020. [Lao PDR Forest Note: Toward Sustainable Forest Landscapes for Green Growth, Jobs and Resilience](#).

<sup>73</sup> Thomas, I. L. 2015. Drivers of Deforestation in the Greater Mekong Subregion - Lao PDR Country Report.

human consumption, aquatic life), and an increased risk of flooding downstream where sediments are deposited.<sup>74</sup>

<sup>75</sup> Healthy forests would otherwise help reduce flood peaks due to increased vegetative cover that can slow down flooding, increase soil infiltration and water detention, and reduce erosion and sedimentation), but also droughts (trees would otherwise contribute to microclimate buffering, increased water recharge, reduced soil evaporation, and improved water retention, among other benefits).<sup>76</sup>

26. The following lists the two most serious risks posed by climate change in the project region and which will be addressed by Project 2 (see section on Climate Change Exposure, Vulnerability and Risk in the Feasibility Study in Annex 2a or the CRVA in Annex 2d for a more extended list of risks and a more detailed overview of the main hazard-related risks addressed by Project 2):

- **Risk of reduced agricultural production and food insecurity:** An estimated 25% of rural households in the region are food poor.<sup>77</sup> A major limitation for ensuring food security is the region's mountainous terrain, and limited valley space for growing rice paddy.<sup>78</sup> Local households cultivate upland rice for subsistence; however, yields are low, cultivation requires challenging physical labour, and unsustainable practices can further exacerbate climate change vulnerability (e.g. creating conditions for landslides, mass erosion events, sedimentation, and riverbank cutting downstream etc.). At the same time, climate change poses a risk for future yields of upland rice in some Provinces, such as Houaphan. Moreover, the majority of farmers in the region are dependent on rainfed agriculture, and changes in precipitation patterns could have devastating impacts on food security and agricultural livelihoods in Northern Lao PDR, especially where key crops such as maize are posed to be negatively impacted by climate change.<sup>79</sup> The draft Lao Climate Change Strategy (*forthcoming*)<sup>80</sup> notes that droughts and floods, among other climate related hazards, are expected to cause losses and damages to agricultural production. It further highlights how flooding has affected rice harvesting, with losses of 30,000 ha (130,000 tons of rice) due to floods in 2017.<sup>81</sup> Investments are urgently needed in ecosystem-based adaptation, and climate resilient and deforestation free agricultural systems based on climate-informed and holistic planning. Such investments will help strengthen the resilience of agroecosystems and smallholder farming households, while also reducing greenhouse gas emissions and strengthening broader ecosystem resilience (given the current role of agriculture as a main driver of deforestation and forest degradation and which include forest ecosystems, agroecosystems, among others) and the livelihoods that depend on them.
- **Risk of loss of reduced provision of ecosystem services<sup>82</sup>:** Lao PDR's updated NDC notes that "*changes in temperatures and precipitation will trigger variations in hydrology and deteriorations of flood conditions, perturbations for biodiversity, ecosystems and ecosystems services.*"<sup>83</sup> The increase in temperatures may increase the frequency of forest fires, and pests and diseases that contribute to forest degradation.<sup>84</sup> Flooding may lead to substantial erosion, watershed degradation and massive landslides. It further highlights the risk of changes in climatic conditions that could affect the growing conditions and distribution of flora and fauna.<sup>85</sup> Investments in nature-based solutions to strengthen the resilience of ecosystems, including forest landscape restoration, are needed to strengthen the resilience of ecosystems against climate change.

#### B.1.4 Deforestation and forest degradation

##### Greenhouse gas emissions due to deforestation and forest degradation

27. Lao PDR's historical greenhouse gas (GHG) emissions due to deforestation and forest degradation amounted to 40.01 million tCO<sub>2</sub>eq/year in the period 2005-2014, 38.33 million tCO<sub>2</sub>eq/year in the period 2015-2016 and 37.29 million tCO<sub>2</sub>eq/year in the period 2017-2018. Carbon removals due to reforestation and forest restoration accounted

<sup>74</sup> World Bank. 2020. Lao PDR Forest Note: Toward Sustainable Forest Landscapes for Green Growth, Jobs and Resilience.

<sup>75</sup> Government of Lao PDR 2020. National Report on Land Degradation Neutrality Target Setting Programme, October 2020.

<sup>76</sup> World Bank. 2020. Lao PDR Forest Note.

<sup>77</sup> Pimhidzai et al. 2014 in UNDP 2015 in FP117 Feasibility Study.

<sup>78</sup> FP117 Feasibility Study.

<sup>79</sup> Impacts on some of the main crops in the region are as follows:

*Maize*, one of the main crops in the region, is projected to be negatively impacted by climate change. UNDP (*forthcoming*) notes that there may be short-term improvements until 2040, but afterwards there will be long-term negative impacts due to increasingly unsuitable climatic conditions for maize production, especially in Northern Lao PDR.

*Upland rice* is projected to have either no changes or slightly negative changes in suitability in Northern Lao PDR, depending on the location.

UNDP (*forthcoming*) projects a negative change in suitability especially in Houaphan Province, for both the near future and mid-century scenarios.

Cassava is expected to have slight increases in suitability in Northern Lao PDR. UNDP notes that during 2021-2040 by shifting the planting period by up to 2 months earlier it could maximize the suitability of growing conditions.

<sup>80</sup> Lao PDR (*forthcoming*). [DRAFT] Strategy on Climate Change of the Lao PDR. Vision to the year 2050, Strategy and Programs of Action to the year 2030.

<sup>81</sup> *Vientiane Times*. 2018. Flooding Threatens Rice Harvest Target in Laos. 31 July.

<sup>82</sup> Evidence of the impact of climate change on forests and trees itself in Lao PDR is limited.

<sup>83</sup> NDC of the Lao PDR 2021.

<sup>84</sup> NDC of the Lao PDR 2021.

<sup>85</sup> Government of Lao PDR [*forthcoming*]. Third National Communication to the UNFCCC. Vientiane, Lao PDR

for -7.53 million tCO<sub>2</sub>e/year during the period from 2005-2014, and 8.00 million tCO<sub>2</sub>e/year during the period from 2015-2018.<sup>86</sup> Overall, the AFOLU sector is responsible for 78% of all emissions of Lao PDR.

**Table 1: FREL/FRL of the Lao PDR<sup>87</sup>**

Source/Sink	2005-2014		
	Amount (tCO <sub>2</sub> e/year)	Uncertainty range (tCO <sub>2</sub> e/year)	Uncertainty (%)
<b>Emission (5 strata and selective logging combined)</b>	41,013,316	6,562,648	16.0%
<b>Removal</b>	<b>-7,533,558</b>	<b>-1,457,714</b>	19.3%

28. The project accounting area encompasses six provinces of northern Laos (8.1 million ha, of which 4.3 million ha is natural forest in 2015). The baseline Greenhouse Gas (GHG) emissions scenario has been analysed thoroughly as part of Lao PDR's engagement with REDD+ (the UNFCCC Forest Reference Emission Level - FREL),<sup>88</sup> and the FCPF Carbon Fund (the Reference Level (RL) of the ER-P).<sup>89</sup> The RL estimates net GHG emissions of 8.5 million tCO<sub>2</sub>e per year from the forest sector in the six northern provinces that constitute the Programme area, driven primarily by forest degradation (6.8m tCO<sub>2</sub>e/year) and deforestation (3.8m tCO<sub>2</sub>e/year), which are only partially offset by slight gains from reforestation (-1.4m tCO<sub>2</sub>e/year) and forest restoration (-0.5m tCO<sub>2</sub>e/year).
29. Indicative MRV data for the 6 ER-Programme provinces between 2015-2019 show annual emissions of 6.5 million tCO<sub>2</sub>e and 0.7 million tCO<sub>2</sub>e removals. Compared to the 2005-2014 baseline scenario the provinces already show some progress in reducing emissions from deforestation and forest degradation. A province by province assessment shows substantial results being achieved in Houaphan, where BMZ through GIZ and KfW is engaged in Participatory Land Use Planning (PLUP) and Village Forest Management (VFM) since 2012, which is the basis for scaling-up proven approaches through GCF investment. This demonstrates the importance of sustained engagement resulting in the gradual scaling of proven practices combined with investments in developing capacities, establishing a conducive policy and regulatory framework and monitoring support.

***Drivers and underlying causes of deforestation and forest degradation***

30. Pioneering shifting cultivation<sup>90</sup> is the greatest single proximate driver of deforestation and forest degradation in the project area, responsible for 22% of forest disturbances greater than 5 hectares in size. Agricultural land expansion (19%) and plantation agriculture development (13%) are also significant contributors. Other drivers include road construction (12%), selective logging (10%) and the establishment of tree plantations (7%).<sup>91</sup>
31. Shifting cultivation, if managed properly (including control of fires), can be sustainable (i.e. rotational shifting cultivation). However, a number of underlying factors are transforming it into an unsustainable, and highly damaging, practice in northern Lao PDR (i.e. pioneering shifting cultivation):
- **Economic factors:** With increasing competition for land from cash-crops, combined with a growing population, fallow periods are becoming shorter, leading to lower productivity, increased soil degradation and the need to clear more forests for subsistence purposes. Expanding agriculture – notably upland rice, an important subsistence crop in northern Lao PDR– into forest areas through slash and burn practices is typically a last resort among poor families with no other livelihood options. In this respect, shifting cultivation practices act as a safety net for poor and vulnerable groups.

<sup>86</sup> Technical Annex to the Biennial Update Report 2020. <https://unfccc.int/documents/274307>.

<sup>87</sup> Technical Annex to the Biennial Update Report 2020.

<sup>88</sup> [https://redd.unfccc.int/files/2018\\_frel\\_submission\\_laopdr.pdf](https://redd.unfccc.int/files/2018_frel_submission_laopdr.pdf).

<sup>89</sup> FCPF Carbon Fund (2018), Emission Reductions Programme Document: Promoting REDD+ through Governance, Forest Landscapes and Livelihoods in Northern Lao PDR, [https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR\\_ER-PD\\_FinalDraftMay.2018-Clean.pdf](https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR_ER-PD_FinalDraftMay.2018-Clean.pdf).

<sup>90</sup> The Government of Lao PDR clearly distinguishes between two types of shifting cultivation practices in the uplands of Lao PDR, namely: i) rotational (*haimounviang*) and ii) pioneering practices with encroachment into (designated) forest land (at village level) (*thangpha hed hai*). The primary focus of this project is to stabilize the landscape and reduce/avoid so-called pioneering shifting cultivation practices. Rotational shifting cultivation has a long tradition, especially for ethnic groups in northern Laos, and will be respected. Clearly distinguished boundaries between agricultural and forest land are key success factors for landscape stabilization, which will be facilitated through participatory and inclusive processes. For more information refer to Chapter B.3 below, as well as the project's Ethnic Group Development Plan within the Annex 6d.

<sup>91</sup> FCPF Carbon Fund (2018), Emission Reductions Programme Document: Promoting REDD+ through Governance, Forest Landscapes and Livelihoods in Northern Lao PDR, [https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR\\_ER-PD\\_FinalDraftMay.2018-Clean.pdf](https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR_ER-PD_FinalDraftMay.2018-Clean.pdf).



- **Agro-technological factors:** Upland agricultural yields are often limited by seasonal precipitation. For example, upland rice is highly susceptible to drought, weed infestations and a lack of soil conservation practices to limit erosion, which contribute to low productivity. Continual planting of upland rice without intercropping can lead to significant reductions in soil fertility – as much as 80% over 5 years.<sup>92</sup> This reduction of yields drives villagers to clear new forest land that is more productive after clearance. After a few years, the productivity declines again and places pressure on other forest areas.
  - **Policy and institutional factors:** Insufficient and inappropriate land use planning is a major underlying cause of deforestation, either because of the complete absence of plans or through a lack of compliance with plans (which, in the past, have often been designed in a top-down manner involving limited consultation with villagers). The absence of integrated spatial planning and watershed planning, as well as village-level participatory land use planning in some villages, 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 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.<sup>93</sup> Unclear land and resource rights and land allocation remain a challenge. Land allocation processes, especially in rural areas, have been hindered by a lack of government capacities, resources and equipment.<sup>94</sup>
32. The expansion of agricultural land (permanent agriculture) and plantation agriculture in the project area is driven by:
- **Economic factors:** Strong regional markets, especially in neighbouring countries, continue to drive the production of key agricultural export commodities such as rubber, sugar cane, maize and cassava. Demand from Chinese and Vietnamese markets is increasing and incentivises the clearing of forests for agriculture. Lao agri-MSMEs play an important role in these supply chains, as they typically act as traders between Lao producers and Chinese and Vietnamese markets. A further analysis of the role of markets and MSMEs can be found in Chapter 2 of the Feasibility Study (Annex 2a) and in the summary of the recently conducted market assessment (Annex 2j). Cultivation of cash crops is seen as a direct route out of poverty for households and as an important economic pillar for provincial governments. While such commodities and markets are important for economic development in Lao PDR, weak land use planning, law enforcement and agro-technological factors contribute to unsustainable conversion of forested land for agricultural cultivation. At the same time, dependence on one cash crop can make households particularly vulnerable to climate change (e.g. if conditions lead to crop failure, losses, or pests and diseases).
  - **Agro-technological factors:** The use of low-yield crop varieties, a lack of appropriate management practices and nitrogen loss in soil due to continual planting of crops lead to additional forest being cleared for agriculture. 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 are still common.
  - **Policy and institutional factors:** Land use plans and targets established in 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. 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 that are implemented.
33. The primary barriers to sustainable forestry management and reforestation include gaps in forest governance and regulation, poor land use planning, lack of long-term financing for forest management, and insufficient skills and experience in sustainable forest management.<sup>95</sup>

### B.1.5 Priorities for Climate Change Mitigation and Adaptation in the Agriculture, Forestry and other Land Use Sector in Lao PDR

34. The importance of climate action and sustainable land management are enshrined in the country's highest-level policies, including the 9<sup>th</sup> National Socio-Economic Development Plan (9<sup>th</sup> NSEDP 2021-2025) currently being finalized, the National Green Growth Strategy 2030<sup>96</sup>, the Strategy on Climate Change with a vision to the year 2050

<sup>92</sup> Linquist, B., Saito, K., Keoboualapha, B., Phengchan, S., Songyikhansutho, K., Phanthaboon, K., Vongphoutone, B., Navongsai, V., Horie, T. (2005), 'Improving Rice-Based Upland Cropping Systems for the Lao PDR', in: Shifting Cultivation and Poverty Eradication in the Uplands of the Lao PDR: Proceedings, National Agriculture and Forestry Research Institute (NAFRI): p.299-313.

<sup>93</sup> Wildlife Conservation Society and GIZ (2015), Report on the Assessment of Drivers of Deforestation and Forest Degradation in Houaphan Province, <https://www.giz.de/en/downloads/Houaphan-Drivers-of-Deforestation-Report.pdf>.

<sup>94</sup> FCPF Carbon Fund (2018), Emission Reductions Programme Document: Promoting REDD+ through Governance, Forest Landscapes and Livelihoods in Northern Lao PDR, [https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR\\_ER-PD\\_FinalDraftMay.2018-Clean.pdf](https://www.forestcarbonpartnership.org/sites/fcp/files/2018/May/LaoPDR_ER-PD_FinalDraftMay.2018-Clean.pdf).

<sup>95</sup> Detailed analysis of these barriers can be found in the Feasibility Study (Annex 2a).

<sup>96</sup> [National Green Growth Strategy of the Lao PDR till 2030 \(2018\)](#).

and a Strategy and Programs of Action to the year 2030, the 2019 issued Decree on Climate Change<sup>97</sup>, the Central Party's Resolution on Land (2017)<sup>98</sup> and the new Land Law which is effective since June 2019<sup>99</sup>, the new Forest Law which has been revised and adopted by the National Assembly in June 2019 providing improved use rights to local communities, the Forestry Strategy 2035 (final draft May 2021), as well as in Lao PDR's intended Nationally Determined Contribution (NDC, 2015) and updated NDC (2021)<sup>100</sup>.

35. The **(draft) Climate Change Strategy (2021)** provides a comprehensive strategy for climate change adaptation and mitigation in Lao PDR, and strongly highlights the role of nature-based solutions. For instance, it highlights the need to *“enhance deployment of ecosystem-based adaptation such as crop cover, wetland protection, forest and landscape for flood water storage, retention and regulation”* to strengthen the resilience against an increasing risk of droughts and floods.<sup>101</sup> More integrated and well-planned interventions are needed that consider the intersection of deforestation and forest degradation, and climate change adaptation. The country has a National Adaptation Programme of Action (2009),<sup>102</sup> and is in the process of developing a National Adaptation Plan (planned completion in 2021/22), as well as sectoral strategies and action plans.
36. Lao PDRs' updated **NDC (2021)** puts significant weight on the forestry sector, for both mitigation and adaptation. It states that nature-based solutions shall be prioritized to counter climate-induced disasters such as floods, landslides and droughts. It further highlights that *“mitigation co-benefits will be strongly considered in sectoral adaptation strategies and adaptation plans”*, showing the potential to strengthen the promotion of cross-cutting measures. The updated NDC differentiates between an unconditional and a conditional mitigation target by 2030 and the conditional target also aims at climate neutrality by 2050. In terms of Land Use Change and Forestry the conditional target includes to increase forest cover to 70% through reduced emissions from deforestation and forest degradation, foster conservation, sustainable management of forests, buffer zones of national parks and other preserves, and enhancement of forest carbon stocks. The 70% forest cover target is associated with average annual emission reduction/carbon removals of 45 million tCO<sub>2</sub>eq/year. The unconditional target did not mention the 70% forest cover, although it is mentioned in a number of other plans and strategies including the updated Forestry Strategy 205. The financing needs for the conditional mitigation target 2030 is calculated at USD 4.76 billion of which the increase in forest cover alone is estimated at USD 1.7 billion. The unconditional emission reduction target is set at 1.1 million tCO<sub>2</sub>eq/year.
37. In terms of adaptation, forest, agriculture and water resources are listed as priority sectors for climate change adaptation, where there are both mitigation and adaptation benefits of implementing many of the prioritized measures.<sup>103</sup>
- **Forestry:** i) Promoting climate resilience in forestry production and forest ecosystems, including in buffer zones of protected areas and other forested areas, ii) promoting technical capacity in the forestry sector for managing forest for climate change adaptation, and iii) promoting integrated land use planning, natural resources and environment management.
  - **Agriculture:** i) Promoting climate resilience in farming systems and agriculture infrastructure, and ii) promoting appropriate technologies for climate change adaptation, including nature-based and circular economy solutions.
  - **Water resources:** i) Strengthening water resource information systems for climate change adaptation, ii) managing surface water, groundwater and wetlands for climate change resilience, iii) increasing water resource infrastructure resilience to climate change, including through nature-based solutions, iv) strengthening early warning systems in a timely manner.<sup>104</sup>
38. However, the updated NDC (2021) highlights the following barriers and challenges for building climate resilience: weak institutional capacities, absence of sectoral strategies, action plans and indicators in most key sectors, weak

<sup>97</sup> Prime Minister's Office of the Lao PDR, Decree on Climate Change, 19.09.2019.

<sup>98</sup> Resolution of the Party's Central Committee on the Enhancement of Land Management and Development in New Period, No 026/CC, 03.08.2017.

<sup>99</sup> Land Law of the Lao PDR.

<sup>100</sup> INDC of the Lao PDR 2015, NDC of the Lao PDR 2021.

<sup>101</sup> Government of Lao PDR [2020]. Draft Climate Change Strategy. p.30.

<sup>102</sup> The National Adaptation Programme of Action (2009) included priority measures for the agriculture, forestry, water resource and health sectors for the period from 2010-2020. Key measures relevant for this project include: promoting and building capacities on sustainable forest management and village forestry, promoting tree planting in areas prone to flooding, raising awareness and building capacities on forest fire prevention and management, establishment of forest-fire protection buffer zones, supporting land use planning in hazard prone and affected areas, promote crop varieties that are better adapted in hazard prone areas, promote soil improvement, develop appropriate bank erosion protection systems for agricultural land in flood prone areas, promote integrated pest management, among others.

<sup>103</sup> Lao PDR 2021. Nationally Determined Contribution.

<sup>104</sup> The AFD Sustainable Micro-Watershed Management Project in Northern Uplands of Laos (SWAN) will be implemented in four provinces (Xiang Khouang, Houaphan, Luang Prabang, Phongsaly) from 2021-2026 focusing on watershed planning, improvement of water resources and water infrastructure management. The planned GCF project entitled “Promoting Climate Resilient Food Systems for Improved Food and Nutrition Security Among the Most Vulnerable Communities in Lao PDR (CRFS)” of UNDP is an adaptation project focusing, amongst others, on early warning systems.



cross-sectoral coordination, limited information and knowledge on climate change impacts, lack of access to appropriate technologies, and insufficient finance, among others.

39. The **National REDD+ Strategy to 2025 and Vision to 2030** guides REDD+ implementation in Lao PDR, and together they aim to improve the quality and extent of forests nationwide to provide economic, social and environmental benefits. This is further aligned with the country's **Forestry Strategy 2035**, which includes three core elements: i) ensuring the sustainable management and use of forest resources ii) conserving forest resources in order to protect forests, forestland, flora and fauna, aquatic animals and wildlife, including through preventing and combatting wildfires, supporting forest restoration, and reducing deforestation and forest degradation, among others, and iii) developing the forestry and timber industry in a sustainable manner. Together these strategies require all stakeholders, including households, communities, and the private sector, to actively participate in the reduction of deforestation and degradation, and the promotion of forest restoration and reforestation.
40. Laos 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, its Emission Reductions Programme Idea Note (ER-PIN) was approved in March 2016 and its Emission Reductions Programme Document (ER-PD) was accepted into the FCPF Carbon Fund without conditions at the 18<sup>th</sup> Carbon Fund Participants Meeting in June 2018.<sup>105</sup> 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 – Houaphan, Luang Prabang, Sayabouri, Luang Namtha, Bokeo and Oudomxay – that comprise the Laos ER-Programme area. The GCF project (FP 117) and the proposed GCF Project 2 form the cornerstone of the ER-P implementation. The GCF project area is identical with the ER-Programme area and uses the same GHG-accounting system. This six-province strategy of the ER-P is an aggregation and synthesis of Provincial REDD+ Action Plans (PRAPs) developed for each target province in the period 2016-2018.<sup>106</sup> On December 30<sup>th</sup> the Government of Lao PDR (GoL) and the FCPF signed the ERPA for over 8.4 million ERs.<sup>107</sup>
41. In parallel, GoL has, in recent years, embarked on a number of reforms that provided a platform for launching GCF project interventions. In recognition of emerging conflicting land disputes as well as environmental concerns the Government of Lao issued a suspension on granting new concessions for mining and rubber investments in 2012 which is still in place until today.<sup>108</sup> In addition, besides the temporary ban on logging in National Production Forests (GoL 2013)<sup>109</sup> in order to protect natural forests from unsustainable exploitation, the Government of Lao PDR issued the Prime Minister's Order No. 15<sup>110</sup> (PMO 15) in May 2016 to strengthen enforcement of restrictions to halt illegal logging and illegal timber exports due to large amount of missing state revenues, amongst others. The PMO 15 is already demonstrating significant impact with Lao exports of logs and sawn wood to its main traders of Vietnam and China had decreased by 74% by the end of 2016.<sup>111</sup> In addition, the European Commission is currently developing a new regulation on which means products (palm oil, soy, beef & leather, cacao, coffee, and timber) placed on, produced in, or exported from the EU market need to be deforestation and forest degradation free. Consequently, there will be additional requirements to ensure sustainable sourcing such as but not limited to: development of integrated land use planning processes, improvement of relevant legislation as well as fiscal incentives, sustainable forest management and restoration of forest, transparency in supply chains and access to information, strengthening the rights of forest dependent communities, among others.<sup>112</sup>

### B.1.6 Related ongoing and forthcoming projects with synergies

42. A number of related projects with clear synergies to project 1 and 2 have been and continue to be implemented in the project area. An overview of the main project with synergies is provided in the following Table, and a more comprehensive summary is provided in the Feasibility Study (Annex 2a). Many of these donors and implementing entities have been consulted during the project development process, where opportunities for continued cooperation have been identified, and lessons learned have been shared and, where suitable, reflected in the project design.

<sup>105</sup> <https://www.forestcarbonpartnership.org/carbon-fund-eighteenth-cf18-june-20-22-2018-paris>.

<sup>106</sup> The PRAPs were provided as Annex 22i-22n of the FP 117.

<sup>107</sup> Carbon Fund of the Forest Carbon Partnership Facility – Emission Reductions Payment Agreement – Promoting REDD+ through Governance, Forest Landscapes and Livelihoods in Northern Lao PDR Programme.

<sup>108</sup> Government of Lao PDR, Ministry of Planning and Investment, Notification 1263, Suspension of Concession Consideration on Mining Related Businesses, and Forestry of Eucalyptus and Rubber Trees in the Lao PDR, dated 15 May 2012

<sup>109</sup> Government of Lao PDR. Prime Minister's Order No. 31/PM dated 5 November 2013 on the Temporary Suspension of Logging in Production Forest.

<sup>110</sup> Government of Lao PDR. Prime Minister's Order No. 15, May 2016, on Strengthening Strictness of Timber Harvest Management and Inspection, Timber Transport and Business.

<sup>111</sup> To, P. X., Treanor, N.B., Canby, K., 2017. Impacts of the Laos logs and sawn wood export bans: significant reductions in exports to major markets of Vietnam and China in 2016. Forest Trends Report Series: Forest Policy, Trade and Finance. Forest Trends, April 2017.

<sup>112</sup> It is foreseen that FLEGT will continue, although the FLEGT regulation may need to be amended. FLEGT licensing shall prove the legality of timber and the planned forest partnerships (e.g. EU-Laos) shall be the implementation strategy to enable deforestation and forest degradation free supply chains in the EU context

**Table 2: Overview of related projects and their potential synergies with project 2\***

Project, implementation period, donors	Budget	Description and synergies
<a href="#">Sustainable Rural Infrastructure &amp; Watershed Management Sector project (2020-2027)</a> ADB, EU, IFAD, GIZ	USD 95 million	<ul style="list-style-type: none"> <li>Aims to address issues of productive rural infrastructure (PRI) and watershed management.</li> <li>Provides co-finance for Activity 2.1.3.</li> </ul>
<a href="#">Partnerships for Irrigation &amp; Commercialization of Smallholder Agriculture (PICSA) (2019-2025)</a> IFAD	USD 85 million	<ul style="list-style-type: none"> <li>Aims to enhance livelihood resilience and sustainability towards inclusive local economic development</li> <li>Provides co-finance for Activity 2.1.3.</li> </ul>
<a href="#">ProFEB Protecting forest ecosystems &amp; biodiversity (2021-2024)</a> , BMZ implemented by GIZ	EUR 8 million	<ul style="list-style-type: none"> <li>Aims to implement a multi-stakeholder approach which improves the regulatory and institutional framework to conserve forests and biodiversity.</li> </ul>
<a href="#">Village Forestry Management Project (2018-2025)</a> , BMZ implemented by KfW	USD 8 million	<ul style="list-style-type: none"> <li>Aims to improve forest ecosystems and the livelihood of the population in the project areas by the sustainable management of village forests.</li> <li>Provides co-finance for Component 3 implementation</li> </ul>
<a href="#">Integrated conservation of biodiversity and forests (ICBF) (2015-2022)</a> BMZ implemented by KfW	EUR 18 million	<ul style="list-style-type: none"> <li>Aims for the effective management of selected target landscapes (comprising national protected areas and corridors) sustaining biodiversity in forest ecosystems, while supporting livelihoods of forest-dependent villages.</li> <li>Activity 3.2.1 is modelled off the ICBF approach, and KfW provides co-finance for Project implementation.<sup>113</sup></li> </ul>
<a href="#">FCPF Carbon Fund: Lao PDR Northern Laos Emission Reductions Payments Project (2021-2025)</a> WB	USD 42 million	<ul style="list-style-type: none"> <li>Projects 1 and 2 have been designed to support the implementation of the overarching FCPF Carbon Fund ER-P.</li> <li>Results-based payments achieved under the ER-Programme will be reinvested through Activities 2.1.4 and 3.1.2 under Project 2.</li> </ul>
F-REDD+ 2 (2022-2027), JICA	N/A	<ul style="list-style-type: none"> <li>F-REDD 2 Project will support the GoL to promote the implementation of FS 2035 and national REDD+ strategy, national forest monitoring system, and REDD+ capacity building in Savannakhet Province.</li> <li>JICA support for national level forest monitoring, and capacity building will support the sustainability of Project 2.</li> </ul>
<a href="#">Land Management &amp; Decentralized Planning (LMDP) (2015-2023)</a> BMZ	EUR 7 million	<ul style="list-style-type: none"> <li>Aims to improve land management and support decentralized land use planning</li> <li>Geographical overlap in 3 provinces. Villages with land use plans supported by the LMPD project will be targeted by the GCF project. LMPD project does not support the implementation of the village management plans, the GCF project will fill this gap.</li> </ul>
<a href="#">Scaling-Up Participatory Sustainable Forest Management Project (SUPSFM) (2013-2022)</a> WB/IDA	USD 39 million	<ul style="list-style-type: none"> <li>Aims to reduce carbon emissions through participatory sustainable forest management in priority areas and to pilot forest landscape management.</li> <li>SUPSFM has had a strong focus on activities within production forests, which has informed the design of Projects 1 and 2.</li> </ul>
<a href="#">Lao Agriculture Competitiveness project (LACP) 2018-2024</a> WB	USD 29 million	<ul style="list-style-type: none"> <li>Aims to increase the competitiveness and sustainability of selected agricultural value chains. Geographical overlap is only in Sayabouri.</li> <li>Strongly linked to Outputs 2.1 and 2.3, 2.2. World Bank will oversee the implementation of Activity 2.1.4, and regular communication will be ensured (including on lessons learned and best practices)</li> </ul>
<a href="#">Second Lao Environment &amp; Social Project LENS II (2014-2022)</a> WB/IDA, GEF, GoL	USD 42 million	<ul style="list-style-type: none"> <li>Aims to strengthen selected environmental protection management systems, such as protected areas conservation. Finance has been channelled through EPF.</li> <li>LENSII contributes to capacity building of EFP - who will serve as an EE under GCF Project 2. As WB will oversee the implementation of Activities 2.1.4 and 3.1.2, regular communication will be facilitated.</li> </ul>
<a href="#">Climate Friendly Agricultural Value Chain Project (CFAVCP) (2018-2025)</a> ADB	USD 41 million	<ul style="list-style-type: none"> <li>Aims to improve climate resilience of agricultural infrastructure, and improve crop productivity, diversification, and commercialization.</li> <li>Projects are complementary, while the ADB project focuses on infrastructure and capacity development for farmers and agribusiness, the GCF project in Component 2 will focus on private sector involvement and incentives for investments in deforestation</li> </ul>

<sup>113</sup> Project 2 will provide additional financing after the KfW project ends to revise, implement and scale up village forest conservation agreements.

		free and climate resilient value chains. Coordination with ADB is secured through ADB's role in implementing Activity 2.1.3.
<a href="#">Strengthening Lao PDR's institutional capacity to comply with the Enhanced Transparency Framework under the Paris Agreement</a> (2018-2024) Financed by GEF, with UNEP as the implementing agency	USD 1.39 million	<ul style="list-style-type: none"> <li>Aims to strengthen the national capacity to track progress against actions identified in its NDC for domestic and international reporting requirements under the Enhanced Transparency Framework of the Paris Agreement</li> <li>Project has been consulted with to ensure there is no duplication between projects. Coordination on lessons learned from project implementation, and best practices for compliance with the ETS will be ensured.</li> </ul>
<a href="#">Strengthening the natural capacity of ecosystems to regulate water flows &amp; limiting the exposure of local populations in vulnerable areas to climate effects</a> (2019-2025) GCF project with UNDP (AE)	USD 12 million	<ul style="list-style-type: none"> <li>Aims to test an alternative approach to flood control in urban Lao PDR, moving away from a traditional focus on grey infrastructure and implementing EbA in urban areas.</li> <li>Both projects will strengthen the adaptive capacities of the population, although one focuses on urban and the other rural populations</li> </ul>
<a href="#">Building the Capacity of the Lao PDR Government to Advance the National Adaptation Planning Process</a> (2020-2024) Financed by GEF, with UNEP as the implementing agency	USD 26 million	<ul style="list-style-type: none"> <li>To strengthen the institutional and technical capacity of stakeholders and the government in Lao PDR to advance the NAP process.</li> <li>Outreach will be sought with UNDP and through the NDC to ensure lessons learned from the project can inform NAP development, and vice versa.</li> </ul>
<a href="#">Lao PDR Southeast Asia Disaster Risk Management Project</a> (2017-2024) WB	USD 31 million	<ul style="list-style-type: none"> <li>To reduce the impacts of flooding in target areas and enhance the Government's capacity to provide hydro-meteorological services and disaster response.</li> <li>Will improve climate-information in country, especially related to the provision of hydro-meteorological services and disaster response. Cooperation will be sought to share relevant climate-related information to inform Activity 1.2.2 and Components 2 and 3.</li> </ul>
<a href="#">Business Assistance Facility II (BAF II)</a> , one of four components of the Lao PDR Competitiveness & Trade Project (2019-2024), Australian Aid, Irish Aid, USAID & the WB	AUD 6M; USD 13 million, EUR 360,000	<ul style="list-style-type: none"> <li>Aims to support eligible Lao companies to increase their competitive advantage, and thereby grow into more sustainable businesses.</li> <li>BAFII aims to improve the business sector of the whole. Component 2 focuses on investments in low-emission and climate resilient value chains for agri-MSMEs.</li> </ul>
<a href="#">Strengthening Agro-climatic Monitoring &amp; Information System (SAMIS)</a> (2016-2020) Financed by GEF, with FAO as the lead implementing agency	USD 22 million	<ul style="list-style-type: none"> <li>Aims to enhance monitoring, analysis, communication and use of agrometeorological data and information for decision making in relation to agriculture and food security at national and provincial levels.</li> <li>SAMIS developed key tools that are referenced within Activity 1.2.2.</li> </ul>

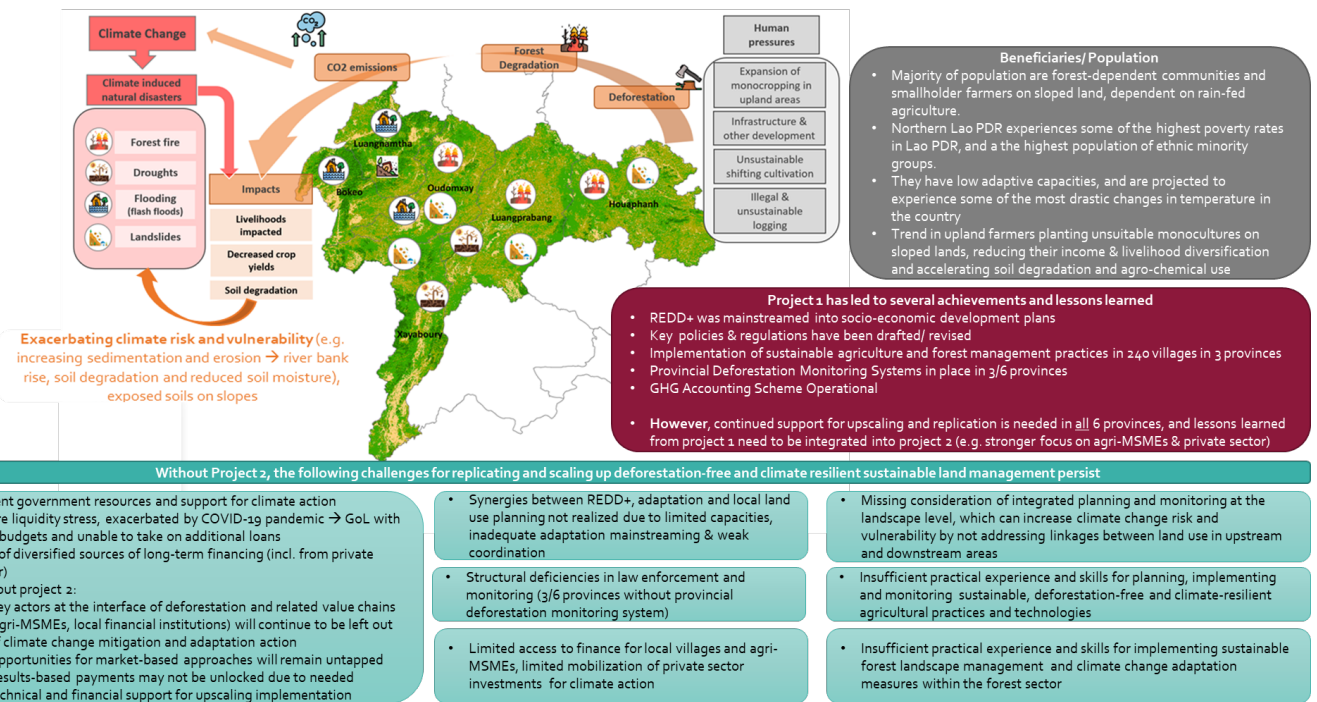
\*Detailed summaries are provided in the Feasibility Study (Annex 2a)

## B.2 (a). Theory of change narrative and diagram (max. 1500 words, approximately 3 pages plus diagram)

### B.2.1 Need for Project 2

43. The ambitious objective of the overarching programme is to support the Government and people of Lao PDR in further changing the present-day use of forests and landscapes and to ensure a transition to sustainable and climate resilient management at scale. This will reduce approx. 11.7 million tCO<sub>2</sub>eq over the duration of 7 years of Project 1 and 2 and directly increase the resilience of more than 273.000 villagers.
44. Project 1 developed a foundation for the transformational change in the project area (as described in B.1.1). However, to fully reach the paradigm shift towards low-emission and climate resilient forest and land use practices, additional support is needed – as outlined in the programmatic approach within FP117 (see the scenario without Project 2 presented in
- 45.
46. **Figure 9** below).
47. Project 2 is complementary and additional to Project 1. Together both projects will facilitate a paradigm shift in the forestry and land use sector in Lao PDR that will be sustained by unlocking additional sources of results-based payments, as well as public and private finance managed through national funds and institutions with strengthened capacities for mobilizing and channelling climate finance (see D.2 for more detailed information). It has been designed to address the barriers described below in Chapter B.2.2 and builds on the progress and best practices from Project 1.

Figure 9: Scenario without Project 2



**B.2.2 Barriers for REDD+ and strengthening the resilience of ecosystems and local livelihoods<sup>114</sup>**

48. While the GoL is fully committed to implementing the policies and strategies mentioned under Chapter B.1 (and further elaborated in Chapter D.5), and moving towards low-emission and climate resilient development pathways, the following barriers need to be addressed with GCF support to ensure the success of the already initiated transformational change of the forestry and land use sector in the Lao PDR.

- **Barrier 1. Insufficient government resources and support for climate change adaptation and mitigation:** The NDC (2021) continues to highlight the need for external support to enable the country to meet its conditional climate change targets.<sup>115</sup> It specifically mentions the need to design “*innovative financial mechanisms that can blend public and private capital as a means of mitigating risks and unlocking private sector investment in climate projects*”. There is a need to develop targeted incentives to mobilize private sector funding and enable them to invest in low-emission and climate resilient land management practices. Project 2, thus, needs to continue scale up efforts to mobilize and channel climate public and private climate finance.
- **Barrier 2. Synergies between REDD+, adaptation and local land use planning not realized due to limited capacities and weak coordination:** REDD+ in Lao PDR has predominantly focused on mitigation, although there is substantial potential to improve adaptation outcomes and strengthen cross-cutting efforts for adaptation and mitigation within the context of REDD+. The updated NDC (2021) highlights the need to strengthen the linkages between climate change mitigation and adaptation in forest ecosystems, including improving the integration of adaptation considerations in forest planning and management. It further highlights the need for improved integrated land use planning, to ensure the dynamics between land management, climate change mitigation and climate resilience are considered. Such challenges in the public sector are accelerated due to weak cross-sectoral and vertical coordination among sectors and government levels and limited human resources to coherently implement and enforce regulations and programs.<sup>116</sup> Project 1 was a mitigation only project, and thus Project 2 needs to strengthen cross-cutting synergies within project design related to measures in the agriculture and forestry sectors, and ensure adaptation is mainstreamed across outputs and activities.
- **Barrier 3. Structural deficiencies in law enforcement:** There continues to be weak policy coherence and cross-sectoral coordination: policies continue to place emphasis on land use activities that support economic growth (e.g. cash crop cultivation, energy, etc.), while policies to safeguard forests and strengthen resilience to climate change are not given the same prominence and are not widely enforced. Law enforcement agencies such

<sup>114</sup> Annex 2c includes a summary table comparing Project 1 and 2. It highlights progress made with the implementation of Project 1, lessons learned and recommendations for project 2, and provides insight on the main adjustments/ changes under Project 2.

<sup>115</sup> Lao PDR 2021. The focus in the updated NDC is on conditional mitigation targets, however it notes that more detailed assessment of adaptation financing needs will be included within the sectoral adaptation strategies.

<sup>116</sup> Lao PDR 2021. Updated NDC.



as the forest inspectorate are under-staffed and under-equipped, lacking up-to-date maps and GPS equipment, for example, and even lacking vehicles and budgets to travel to the field. Project 1 developed standard operational procedures and established Provincial Deforestation Monitoring Systems (PDMS) in 3 out of 6 provinces. Nonetheless, there is a need for continued support with capacity building for the operationalization of these systems, harmonizing local approaches for law enforcement, and scaling up PDMS and capacity building efforts to the additional 3 provinces covered under Project 2.

- **Barrier 4. Missing consideration of integrated planning within landscapes, which can increase climate change risk and vulnerability by not addressing linkages between land use in upstream and downstream areas:** The absence of a clear classification and zoning of land uses and consequently a lack of tenure security in many villages is a major underlying cause for deforestation from shifting cultivation and expansion of unsustainable land use activities (e.g. expansion of annual monocropping activities). Uncertainty regarding land uses and border demarcation often leads to unclear rules and gradual encroachment into forests. Village-level participatory land-use plans need to be climate-informed, harmonized into larger scale village cluster (*kumban*) plans, considering watershed protection and biological corridors, and integrated into spatial planning exercises at district level in order to equilibrate upstream and downstream impacts, dynamics and interactions. This is particularly important for building resilience to climate change. Project 1 developed a comprehensive Participatory Land Use Planning process (PLUP 2.0), based on lessons learned from other land use planning processes piloted in Lao PDR, and is implementing this approach in 240 villages in 3 provinces. Additional support is needed to continue to replicate and scale this effective approach throughout the project area (all six provinces).<sup>117</sup>
- **Barrier 5. Insufficient practical experience and skills for implementing sustainable, deforestation free and climate resilient agricultural practices and technologies:** Land use practices commonly applied in the project area are characterised by low productivity and cannot typically be considered 'good agricultural practices'. Increased competition for commercial agricultural lands is shifting subsistence agriculture (upland rice etc.) and certain cash crops (e.g. maize, Job's tears and cassava) to less suitable forested upland areas. Crop rotations and fallow periods for soil regeneration are reduced leading to loss of soil fertility and weed infestation. Consequently, producers seeking out more productive land turn to forest areas for the expansion of agricultural production, which is leading to further deforestation and forest degradation. Poor access to irrigation exacerbates the low productivity of agricultural production, as does the limited availability of government agricultural extension services. In addition, a reliance on few cash crops also increases farmers' vulnerability to climate change (i.e. higher dependency on few crops, where their livelihoods can be greatly impacted by changes in climatic conditions and climate-related natural hazards). Rural farmers further lack access to agricultural extension services, and knowledge on climate change, sustainable practices, production alternatives as well as access to formal financial services to invest and improve land use. Consequently, poverty levels are high, and adaptive capacities are low (see also Chapter D.4). Project 1 developed an approach to facilitate the Promotion of Sustainable Agricultural Production (PSAP), which is being implemented in 240 villages in 3 provinces. Further support is needed to strengthen agricultural extension and capacities on climate change (related risks) and best practices for deforestation free and climate resilient agricultural practices, and ultimately scale up the PSAP approach throughout the entire project area.
- **Barrier 6. Limited incentives for local villagers and agri-Micro, Small and Medium enterprises (MSMEs) to adopt and invest in more sustainable, climate resilient and deforestation free practices and support value chain development:** Poverty and lack of alternative livelihood opportunities (e.g. off-farm employment) have resulted in a high dependence on land and forests for household income in the project area. Most of the rural population practice a mix of subsistence agriculture with marketing of selected cash crops to local traders and agri-MSMEs. These small private sector companies either market unprocessed commodities (e.g. maize, cassava, rubber, cardamom) to markets in China, Vietnam and Thailand depending on demand, or are involved in some kind of value addition. The current focus on low value raw products and the promotion of monocropping systems without sufficient quality management over the final products is indirectly fostering the expansion of unsustainable agricultural activities into forest zones. It further makes farmers particularly vulnerable to climate shocks, as they are dependent on non-diversified value chains with limited practices to strengthen their resilience against climate change. Value adding in terms of sorting, processing, packaging and general quality improvement by the local agri-MSMEs remains an exception. There is a notable absence of incentives (including financing opportunities) for villagers and for micro, small and medium-sized enterprises to invest in sustainable forestry, agro-forestry, and climate resilient agriculture activities, due to the various factors, including (among others):
  - Many financial institutions in Lao PDR have limited penetration in rural areas, making it physically difficult for remotely located individuals and businesses MSMEs to reach bank branches,
  - Some banks are highly reluctant to lend to MSMEs in general

<sup>117</sup> The approach was validated by GIZ and stakeholders from Project 1. For more information refer to the Feasibility Study (Annex 2a), and the stakeholder engagement plan (Annex 7).

- Agri-MSMEs often do not even have bank accounts and many do not maintain reliable financial statements, which makes it very difficult for banks to understand the firm’s profitability, cash flows, and ability to meet loan repayments
- Agri-MSMEs lack proper business and financial planning.
- Micro enterprises tend to lack the financial literacy required to understand the types of lending products that are available, how to develop a business plan, and how to go through the process of applying for a loan.
- Agri-MSMEs are also discouraged from applying for a bank loan if they are uncertain about their future revenue stream, or if they perceive that financial institutions do not cater to their type of business, or are unable or unwilling to comply with the Lao PDR’s high collateral requirements (typically land and buildings).

Project 1 did not include a targeted activity to support agri-MSMEs on agricultural land, but instead focused on village-based agroforestry activities in production forest areas. Under Project 2 targeted support for engaging agri-MSMEs within broader agricultural value chains is needed to incentivize the adoption of more sustainable practices that enable this critical actor to support the development of climate resilient and deforestation free value chains.

- **Barrier 7. Insufficient practical experience and skills for implementing sustainable forest landscape management:** Weak policy coherence and limited coordination between competing policy priorities is a key barrier to the sustainable management of Lao PDR’s forest resources, as is the illegal clearing and degradation of forested lands driven by inappropriate agricultural practices, insufficient land use planning and weak law enforcement (see above barriers). The new forest law includes provisions for villagers to economically benefit from the sustainable management of their forests, including through the sale of sustainably harvested forest products. While seen as a major advancement for local villagers and as an additional incentive for the sustainable management of village forests, there are often low timber stocks and limited experiences in supporting VFM groups with this commercial element (e.g. including mainstreaming this into VFM plans and ensuring adequate implementation and monitoring). Project 1 mainstreamed FLR into VFM guidelines, and supported the implementation of sustainable village forest management in village forests and within national protected areas in 3 provinces. Continued support is required under Project 2 to scale up the development and implementation of robust VFM plans and village forest conservation agreements, resulting in SFM and FLR, in all six provinces.

### B.2.3 Project 2 goal statement, outcomes, outputs and co-benefits

49. **Project 2 goal statement:** If the capacities of government institutions and respective staff are strengthened to train, steer and effectively monitor forest and agricultural land management, village communities are capacitated and incentivized to implement (village) forest management plans and villagers and agri-MSMEs are trained in sustainable, climate informed and deforestation free agricultural value chains, then the resilience to climate change of forest and agroecosystems and the vulnerable village communities who depend on them will be increased because local communities will manage forests and agricultural land sustainably and benefit from improved, climate resilient agricultural production and sustainable forest management.
50. Specifically, Project 2 is anticipated to result in emission reductions of approximately 4.6 million tCO<sub>2</sub>eq over its duration of 4 years, and strengthen the resilience of 273,700 direct beneficiaries and 2,100,000 ha of ecosystems.<sup>118</sup>
51. **Outcomes and outputs:** The project builds on Project 1 and has been designed to address the aforementioned barriers to achieve its goal as well as the overarching programme objective. Project 2 is comprised of the following three outcomes and associated outputs and activities:<sup>119</sup>

**Table 3: Overview of Project 2’s outcomes, outputs and activities and their link to barriers addressed**

Outcome/ Output	Activities	Barriers addressed
<b>Outcome 1: Governance and the implementation of low-emission and climate informed planning is strengthened, and sustainable financing sources are accessed</b>		
Output 1.1 Organizational structure and capacities of domestic (financial) institutions are strengthened to access, mobilize, manage, and monitor the use of climate finance from diverse public and private sources	Activity 1.1.1 Climate change funding window and sustainable finance	1, 2
Output 1.2 Participatory Village Land Use Plans are developed and are climate informed and integrate measures to strengthen climate resilience	Activity 1.2.1 Law enforcement and monitoring	1, 2, 3
	Activity 1.2.2 Land-use planning and improved tenure security	1, 2, 4

<sup>118</sup> For more detailed information on projects mitigation and adaptation benefits, refer to Chapters D.1 and E.

<sup>119</sup> Detailed project activities associated with each of the project outputs are presented in the Theory of Change in Chapter B.2, and are described in detail within Chapter B.3. Activities build on best practices in Lao PDR and Southeast Asia, and further reflect lessons learned from Project 1 and other related projects/ initiatives (as further described in the Feasibility Study Chapter 6.6 in Annex 2a).



	Activity 1.2.3 Knowledge management, FPIC, safeguards and gender	All
<b>Outcome 2: Vulnerabilities of villagers are reduced and their livelihoods are improved by being able to engage in climate resilient, deforestation free value chains and access to markets</b>		
Output 2.1 Villagers are trained by capacitated government staff and enabled to produce sustainable, climate resilient and deforestation free agricultural and agroforestry products, strengthening their access to sustainability-oriented markets	Activity 2.1.1 Promotion of sustainable, climate informed and deforestation free agricultural practices and technologies	1, 2, 5, 6
	Activity 2.1.2 Investments in sustainable climate informed and deforestation free agricultural practices and agroforestry	1, 2, 5, 6
	Activity 2.1.3 Sustainable rural infrastructure watershed management	1, 2, 4, 5, 6
	Activity 2.1.4 Implementation of benefit sharing plan for sustainable, climate-informed and deforestation free agriculture	1, 2, 5, 6
Output 2.2 Agri-micro, small and medium enterprises (MSMEs) are capacitated, and have improved incentives and access to finance to invest in marketing and processing for locally sourced deforestation free and climate resilient agricultural products	Activity 2.2.1 Catalysing private sector investments in sustainable climate-informed and deforestation free value chains	1, 2, 5, 6
<b>Outcome 3: Sustainable management, protection and rehabilitation of forest ecosystems is improved</b>		
Output 3.1 Village Communities are trained by capacitated government staff and have the financial resources to implement sustainable (village) forest management plans that contribute to REDD+ and strengthen the resilience of forest ecosystems and the livelihoods that depend on them	Activity 3.1.1 Village forest management	1, 2, 3, 4, 6, 7
	Activity 3.1.2 Implementation of benefit sharing plan for sustainable forest management (SFM) and forest landscape restoration (FLR)	1-7
Output 3.2 National Protected Area (NPA) management plans are revised and communities are enabled and actively engaged in implementing village forest conservation agreements in NPAs that enable sustainable forest management and forest conservation	Activity 3.2.1 National protected area (NPA) management	1-7

52. In comparison, to Project 1 there have been some adjustments in the project design, including reflecting:

- Progress made under Project 1, where some activities were successfully completed, including policy mainstreaming and improvements to the regulatory framework. These achievements will also lead to efficiency gains in the context of Project 2, where targeted efforts have strengthened capacities and the overall enabling environment (e.g. updated guidelines, built capacities, training modules, etc.).
- The Government of Lao PDR's updated NDC (2021), which highlights the need to create and strengthen clear links between adaptation co-benefits and climate change mitigation in the agriculture and forestry sectors.<sup>120</sup> As such, the project has been re-positioned as a cross-cutting project, and the design adjusted to ensure adaptation is cross-cutting throughout the project's activities. Attention is paid to strengthening the adaptive capacities of villagers through ensuring climate-informed land use planning and investing in climate-resilient and deforestation-free agriculture and sustainable forest management. Adaptation and considerations for resilience building have been mainstreamed across all activities, and additional support provided to update guidance and build capacities on understanding and factoring in climate risk and building the resilience of ecosystems and the local livelihoods who depend on them.
- EPF's nomination by the NDC in Lao PDR to start the GCF accreditation process, where Project 2 will provide support as they undergo the accreditation process.
- Lessons learned from Project 1 and other ongoing projects and initiatives, as well as stakeholder feedback. One example is the increased focus on agri-MSMEs and private sector, which was developed based on extensive consultations with private sector actors and other stakeholders.<sup>121</sup>

<sup>120</sup> Due to these adjustments, Project 2's implementation process at village level has been slightly adjusted in terms of terminology and the additional role of EPF in channelling matching grants to agri-MSMEs. Chapters B.3 and B.4 provide more detailed information.

<sup>121</sup> Progress with the implementation of Project 1 and adjustments to the design of Project 2 are presented in tables throughout Section B.3 under each activity, and an overview of the main changes can be found under Annex 2c. The project's Stakeholder Engagement Plan provides further information on how stakeholder feedback has been integrated into the project (Annex 7).

53. **Project 2 co-benefits:** Project 2 aims to generate two main co-benefits, namely: 1) improved food security, and 2) enhanced conservation of biodiversity.<sup>122</sup> Food security will be improved through improved participatory land use planning, and targeted support under Component 2 to promote climate resilient and deforestation free agricultural practices, while consciously strengthening farmers' adaptive capacities and enhancing co-benefits related to food security and nutrition. Biodiversity will be strengthened through the project again through integrated PLUP, and through interventions in Component 2 and Component 3 that reduce deforestation and forest degradation and implement FLR in biodiversity hotspots, including National Protected Areas (NPAs) and national parks that provide important habitats for diverse species including the black gibbon, among others. Investments in NPs and NPAs will also strengthen the resilience of forest ecosystems to better withstand climate-related hazards and changing climatic conditions, and enhance the protective function of these ecosystems. It will further strengthen the resilience of forest dependent communities, who will benefit from the enhanced provision of vital forest ecosystem services.
54. Gender equality and social inclusion are also at the core of the project's approach, and have been mainstreamed throughout all project activities, which are described in detail within Chapter B.3, D.3, G.1 and G.2.

#### **B.2.4 Assumptions and risks:**

55. The project design is based on the following assumptions:
- National and sub-national government officers are committed to improve planning processes in a participatory manner with local communities, guide the implementation of forest management plans, support villagers in engaging in improved agricultural production, and enforce rules and regulations.
  - Agri- MSMEs are willing to develop sustainable, climate resilient and deforestation free agricultural value chains, and collaborate with villagers in a fair and equal manner.
  - Vulnerable local communities are willing to implement jointly developed (village) forest management plans and engage with agri-MSMEs to shift current land and forest management practices.
56. These assumptions are considered to be well founded, as they have been informed through detailed feasibility and market assessments (Annex 2a+j), a cooperative project development process together with the Government of Lao PDR and other project partners, as well as extensive stakeholder consultations conducted for the ER-Programme development, the development of the overarching programmatic approach under Project 1, and more recently during the Project 2 development process (see the Stakeholder Engagement Plan in Annex 7).
57. Project risks related to technical and operational, credit, governance and legal risks, among others, are described in detail in Chapter F, and environmental and social risks are described within Chapter G.1.

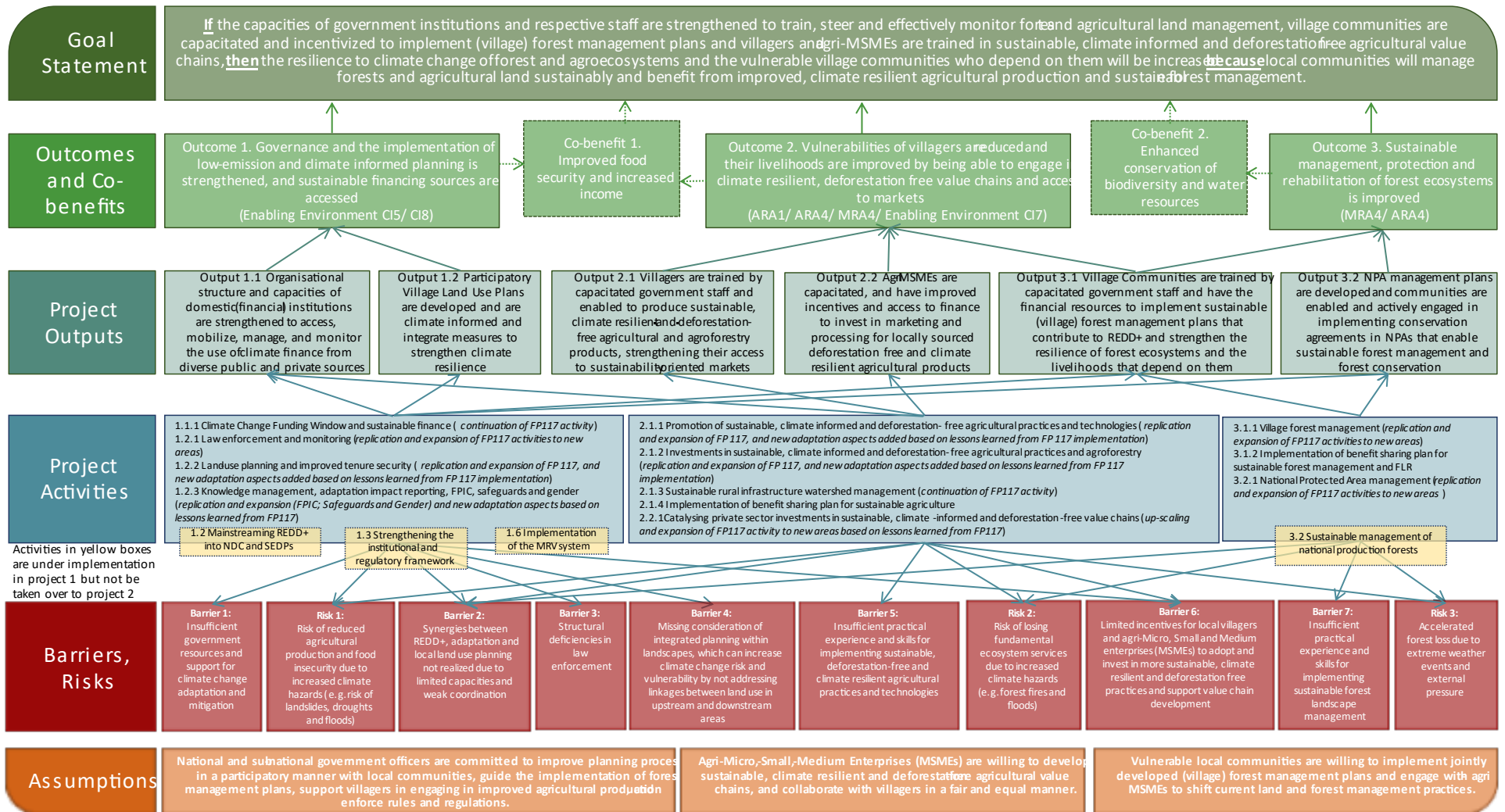
#### **B.2.5 Theory of change diagram**

58. The following Figure depicts the **project's** theory of change, integrating the elements from Chapters B.2.2-B.2.4 above. Project activities are described in detail within Chapter B.3.

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<sup>122</sup> Additional SDG benefits associated with the project are described in Chapter D.3.

Figure 10: Project 2 theory of change



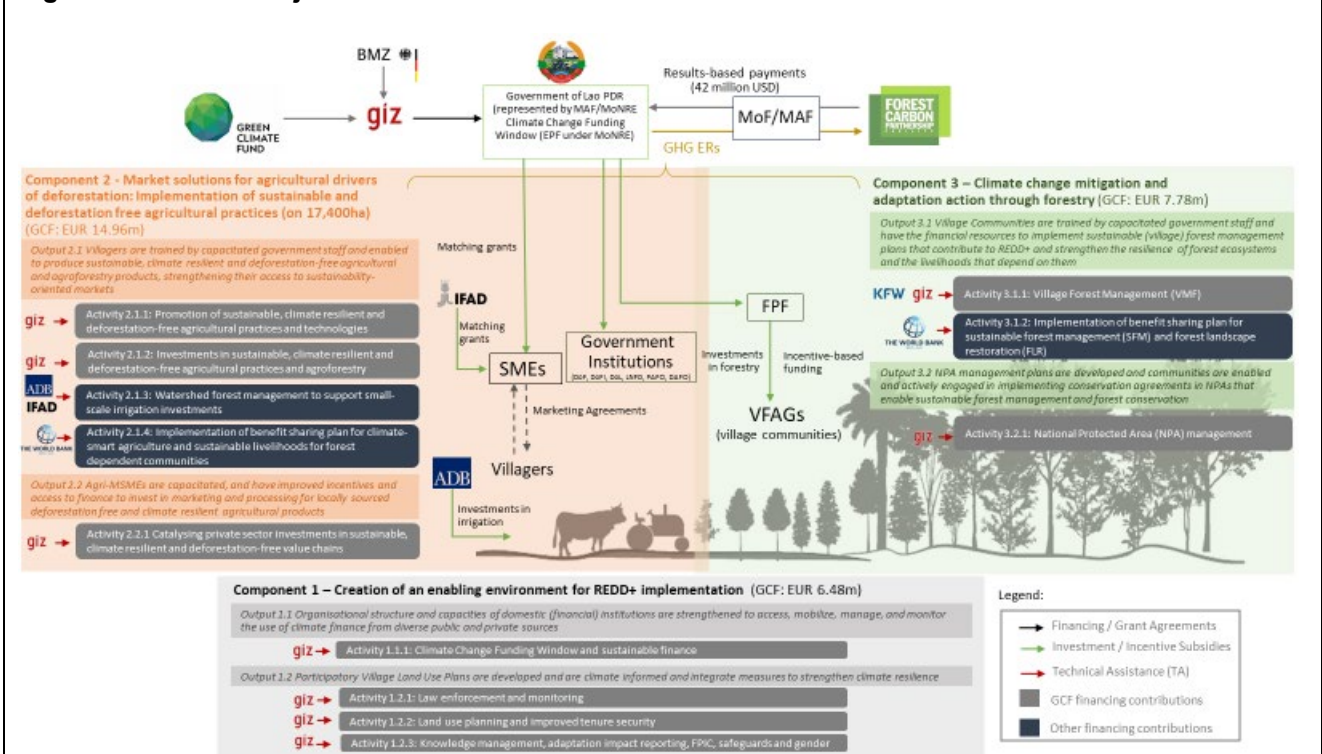
**B.2 (b). Outcome mapping to GCF results areas and co-benefit categorization**

Outcome number	GCF Mitigation Results Area (MRA 1-4)				GCF Adaptation Results Area (ARA 1-4)			
	MRA 1 Energy generation and access	MRA 2 Low-emission transport	MRA 3 Building, cities, industries, appliances	MRA 4 Forestry and land use	ARA 1 Most vulnerable people and communities	ARA 2 Health, well-being, food and water security	ARA 3 Infrastructure and built environment	ARA 4 Ecosystems and ecosystem services
Outcome 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Outcome 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Outcome 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Co-benefit number	Co-benefit					
	Environmental	Social	Economic	Gender	Adaptation	Mitigation
Co-benefit 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Co-benefit 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**B.3. Project/programme description (max. 2500 words, approximately 5 pages)**

Project 2 consists of three components,<sup>123</sup> as depicted in the following Figure 11.<sup>124</sup>  
**Figure 11. Overall Project Overview**



59. In comparison to Project 1 there have been some changes in the project design, due to various reasons. Some activities were completed under Project 1, including policy mainstreaming, and improvements to the regulatory framework. These achievements will also lead to efficiency gains in the context of Project 2, where targeted efforts have strengthened capacities and the overall enabling environment (e.g. updated

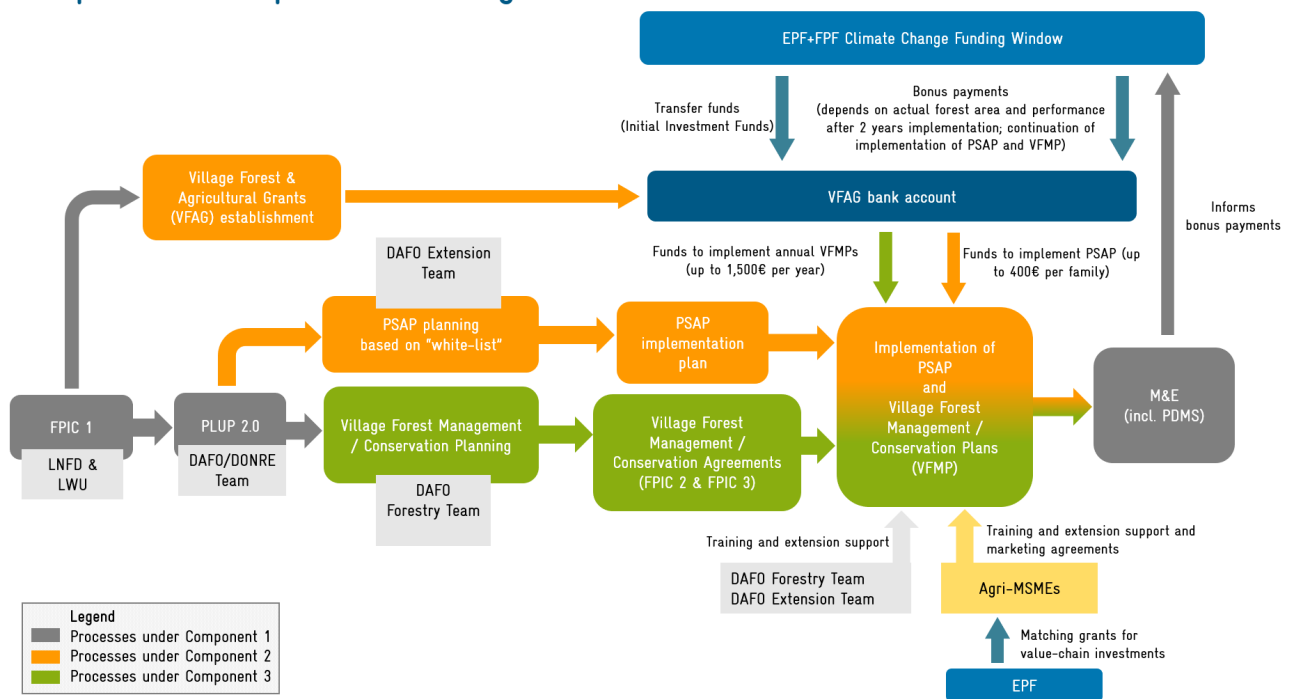
<sup>123</sup> Note: The GCF's Integrated Results Management Framework (IRMF) was developed after Project 1 was developed, and thus for Project 2 there have been adjustments in the theory of change, logframe, numbering of activities, and some of the terminology (e.g. actions à sub-activities). Hence, project 1 Output equals Component under project 2.  
<sup>124</sup> Chapter 6.6 of the Feasibility Study (FP Annex 2a) includes detailed Activity Sheets, with detailed information for each activity.



guidelines, built capacities, training modules, etc.). Other adjustments have been made to the project design to strengthen the role of private sector actors, and reflect lessons learned from project implementation. Progress with the implementation of Project 1 and adjustments to the design of Project 2 are reflected throughout Section B.2 under each activity, while an overview of the progress under Project 1, lessons learned and main adjustments made to project design under Project 2 can be found under Annex 2c. In addition, adjustments have been made to reflect the Government of Lao PDR's updated NDC, which highlights the need to create and strengthen clear links between adaptation co-benefits and climate change mitigation in the agriculture and forestry sectors.

60. Due to these reasons, Project 2's implementation process at village level has been slightly adjusted in terms of terminology and the role of EPF who will channel matching grants to agri-MSMEs, as shown in the following Figure 12. It should be further noted that Free, Prior and Informed Consent (FPIC) is at the core of the project's approach, and is fully integrated into the project design within all three Components.<sup>125</sup>

**Figure 12: Project implementation process at village level**  
Implementation process at village level



### B.1. Component 1: Creation of an enabling environment for REDD+ implementation<sup>126</sup>

61. Component 1 addresses barriers at the national and sub-national levels, including measures that aim to scale-up and ensure access to sustainable financing for the forest and land use sector (Activity 1.1.1), improve forest law enforcement and monitoring (Activity 1.2.1), scale-up climate-informed participatory land use planning and strengthen land tenure security (Activity 1.2.2). It further facilitates the implementation of cross-cutting measures related to knowledge management, FPIC, safeguards and gender throughout the entire project.
62. Policy mainstreaming support, and support for revising the regulatory framework have been completed under Project 1 and are not continued under Project 2. These achievements under Project 1 nonetheless help to create efficiency gains and facilitate replication and upscaling under Project 2.

**Output 1.1<sup>127</sup> Organisational structure and capacities of domestic (financial) institutions are strengthened to access, mobilize, manage, and monitor the use of climate finance from diverse public and private sources**

<sup>125</sup> Detailed FPIC procedure is provided in Annex 6d within the Ethnic Group Development Plan.

<sup>126</sup> Notable changes from FP117 include the removal of activities on mainstreaming REDD+ into the NDC and socio-economic development plans, and strengthening the regulatory framework – as both of these activities were completed under FP 117. Activity 1.6 under FP 117 (implementation of MRV system) is still supported by JICA, however outside of Project 2.

<sup>127</sup> Outputs under GCF's IRMF are "Changes delivered as a result of project/programme activities that contribute to the achievement of outcomes." – GCF. 2022. Guidance Note to support the completion of the IRMF elements of the revised funding proposal template for PAP and SAP, p. ii.

**Activity 1.1.1 - Climate Change Funding Window and sustainable finance:**

63. As described under Project 1, Lao PDR's potential to raise substantial, long-term climate finance remains partly still untapped. While both, Project 1 and Project 2 are designed to support Lao PDR to unlock REDD+ results-based payments from the FCPF, Project 1 already established the Climate Change Funding Window hosted by the Environment Protection Fund (EPF).
64. This activity under Project 2 will focus on continuing to support the strengthening of the enabling environment to facilitate the shift from business as usual agricultural and forest land management towards low-emission, deforestation free and climate resilient practices. It will support the GoL to further explore additional sources of public and private finance for both climate change adaptation and mitigation investments, in line with the country's NDC (2021). Additional sources of finance may include (among others): alternative REDD+ results-based payments (e.g. under the UNFCCC) and markets, including the participation in voluntary market mechanisms or market mechanisms under Article 6 of the Paris Agreement, domestic government revenues (fees, royalties, fines and taxes) and international impact investment attracted by the combination of climate and social benefits that the Lao forestry and agriculture sectors offer.
65. Under this activity the capacities of the two existing Lao funds - the Forest Protection Fund<sup>128</sup> and the EPF – to mobilize, channel and monitor sustainable climate finance will be further strengthened. This will contribute to ensuring the sustainable management and disbursement of existing climate finance sources as well as of potentially new ones (e.g. Climate Change Funding Window, REDD+ results-based payments under the FCPF, GCF, Adaptation Fund and other sources). For EPF, specific capacity development will also focus on the matching grant allocation and monitoring as well as in overall support for its accreditation process to the GCF.
66. Together these activities will address the barriers related to insufficient government resources and support for climate change adaptation and mitigation. It will do so by developing the capacities of the two national funds to be able mobilize and manage climate finance for adaptation and mitigation and by supporting the NDA to identify suitable sources of long-term climate finance to meet the conditional targets of the country's NDC.
67. **Sub-activity 1.1.1.1: Enhancing the capacities of EPF & FPF to manage and monitor climate finance, including results-based payments (EE: GIZ and GoL / GoL and BMZ co-finance):** Under this sub-activity the capacities of the two existing Lao funds - FPF and the EPF, to mobilize, channel and monitor sustainable climate finance will be further strengthened. Specifically:
  - a. **FPF** – Hosted under the Ministry of Agricultural and Forestry (MAF). The Decree on the Forest and Forest Resource Development Fund (No. 38/PM, 2005)<sup>112</sup> “*determines principles, regulations on the establishment, management and monitoring of the Forest and Forest Resource Development Fund [since renamed FPF], 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 FPF, renamed from Forest and Forest Resource Development Fund (FFRDF), has a legal mandate to collect and disburse forest sector financing to the district and village levels. It funds forestry activities, including conservation and protection of watersheds and protected areas, tree planting, wildlife conservation and training. The FPF was originally (2019) the proposed Benefit Sharing Mechanism in the World Bank Project (FCPF Readiness Grant), however, the Government of Lao decided to disburse money through an alternative mechanism (National treasury) pending a due diligence assessment (see section F). During Project 1 development it was also explored channelling finance through the FPF, however it was determined FPF had insufficient capacities and systems in place to meet international fiduciary standards. As such, funds were channelled through EPF under Project 1. To be able to manage international climate finance, FPF requires significant support to strengthen fiduciary and managerial standards. The following activities can be conducted to strengthen the overall capacity with a view to strengthen the fund to be able to access and manage climate finance:
    68. Strengthen the operating model of the fund through leadership training for the FPF board (vision, mission, and operating model)
    69. Review of existing procedures to obtain fund staff and discussing with the Ministry how knowledgeable and competent staff can be hired directly in order to secure international funds from donors

<sup>128</sup> Renamed from Forest and Forest Resource Development Fund

70. A multi-year vision document including budgeting, size of funds and budget tracking tools must be created and implemented
71. FPF had no proper IT system implemented as of 12/2021. Current operations are using Excel. There is a strong need to support the fund so that it can track expenses, disbursements, financial flows, and develop reports.
- a. **EPF** – Established in 2005, the EPF serves as a financially autonomous organization to strengthen environmental protection, sustainable natural resource 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. Project 1 has supported the EPF in establishing the Climate Change Funding Window to channel funds from GCF and other climate finance. In addition, Project 1 is operating via the EPF, where EPF is responsible for the financial management and disbursement of grants to other beneficiaries under the Government of Laos (represented by MAF and MoNRE). EPF is undergoing the GCF accreditation process, and aims to become a Direct Access Entity (DAE). Thus, the project will also provide EPF with valuable experiences to strengthen their capacities and prepare them to develop, implement and monitor their own GCF projects in the future. EPF will also be exposed to an additional matching grant mechanism under Project 2, and this Activity will support them to build their capacities and facilitate them to operate and monitor a matching grant mechanism working with a larger number of private sector actors and focused on sustainable value chain development. Technical support for EPF will focus on:
- Management and monitoring of matching grants (linked with Activity 2.2.1) in particular: the overall process flow for contracting, overall procurement, and financial process and monitoring of matching grant use.
  - Climate change adaptation – including the development of a climate policy, tools for climate risk screening, categorization, identification good operational practices for managing climate risks, and monitoring of adaptation impacts.
  - Overall support to better adhere to GCF fiduciary standards during the implementation of Village Forest and Agriculture Grants (VFAG) and matching grants in preparation for its accreditation as a direct access entity
72. A combination of GCF grants, and co-finance from BMZ and GoL will finance this sub-activity. GCF grants will help finance trainings for FPF on the aforementioned topics, and will further cover IT equipment for FPF and EPF (including computers, monitors and office supplies), staff costs for on-the-job training, local consultants to support with trainings, and related travel costs for advisors.
73. **Sub-activity 1.1.1.2: Options assessment and action plan for securing long-term financing for NDC implementation in the AFOLU sector (EE: GIZ / GoL co-finance):** This sub-activity will support the Lao PDR government to identify suitable new long-term climate finance from multiple sources. It will also support the government to assess the readiness actions necessary to be able to gain access to market-based approaches that emerge in the context of Article 6 of the Paris Agreement – including support on decisions related to the eligibility of programs, projects, and units under the country’s NDC; adherence to relevant integrity principles; capacities to meet potential requirements related to an enhanced transparency framework and addressing issues related to corresponding adjustments. Additionally, under this sub-activity, the gaps and pathway to conformance with the requirements of the standards required by REDD+ voluntary initiatives will be assessed alongside options to allow Lao PDR to access results-based finance for ERs generated in excess of the FCPF Carbon Fund contract volume. This will include emerging market and non-market-based approaches (such as the Lowering Emissions by Accelerating Forest Finance Coalition or broader voluntary carbon markets). Finally, support will be provided to Lao PDR in exploring, identifying, and fundraising from funding sources (e.g. Adaptation Fund) that support the Lao PDR government with financial backing for meeting the conditional NDC implementation targets and adaptation investment needs. The NDA and DCC (Department of Climate Change) will be supported to mobilize and channel climate finance to enable the Lao PDR to fulfil its ambitious NDC.
74. GCF grants and GoL co-finance will cover this sub-activity. GCF grants will be utilized to hire national and international experts to conduct the options assessment and develop the action plan, in addition to covering travel costs for experts.

**Output 1.2 Participatory Village Land Use Plans are developed and are climate informed and integrate measures to strengthen climate resilience**

**Activity 1.2.1 – Law enforcement and monitoring:**

75. Strengthened law enforcement is a key measure needed to support Lao PDR's commitment to REDD+, as well as other high-level initiatives including PMO 15 and the FLEGT-VPA. As mentioned in B.2, illegal logging and unauthorized clearing of forest land still exist and are a challenge for provincial and district authorities to address due to limited budgets and technical capacities as well as understaffing.
76. Project 1 supported the revision of standard operating procedures, the strengthening of systems, and provided trainings on Provincial Deforestation Monitoring Systems (PDMS), while supporting the implementation of PDMS in 3 provinces (Houaphan, Sayabouri, Luang Prabang). It further strengthened the regulatory framework, supporting revisions in the Decree on Protected Areas (ongoing), Forestry Strategy 2021-2035 the National REDD+ Strategy (April 2021), technical guidelines for village forest management planning (June 2021), among others, which have created a stronger basis for reducing deforestation and forest degradation – including forest law enforcement and monitoring. Project 1 implementation has shown the current approach to strengthen law enforcement and monitoring is effective and well-tailored to the local context. However, despite the advancements under Project 1, continued support is needed to address outstanding barriers related to forest law enforcement and monitoring.
77. Project 2 will build on the aforementioned achievements under Project 1, and will continue to train relevant monitoring and law enforcement staff, especially the Department of Forest Inspection and its sub-national line agencies, in all six provinces (Sub-Activity 1.2.1), scale PDMS to the three other provinces within the ER-Programme area (Sub-Activity 1.2.2), and support the harmonization of local approaches and improve knowledge management for strengthened law enforcement (Sub-Activity 1.2.1.3).
78. **Sub-activity 1.2.1.1: Training to facilitate implementation of enhanced law enforcement (EE: GIZ and GoL / GoL and BMZ co-finance):** Relevant government staff, including Department of Forest Inspection staff and their respective sub-national line agencies among others will be trained using detailed and consistent information on PDMS and best practices for forest monitoring and law enforcement. Trainings will focus on members of rapid response teams, including staff within DAFO, PAFO, PONRE, DONRE, DOFI staff and their respective sub-national line agencies in all six provinces trained on SOPs, PDMS and best practices for forest monitoring and law enforcement. Training modules and information will be developed by the project and used for training and knowledge exchange, including educating new staff. It will train staff on standard operating procedures and best practices, building on current advancements under Project 1, ensuring a consistent standard for law enforcement is applied across the ER-Programme area.<sup>129</sup>
79. Both GCF grants and co-finance from BMZ and GoL will finance this sub-activity. GCF grants will be used to finance equipment for ICT and monitoring technology for each province's PDMS (GPS, communication devices, computers for remote sensing), and will cover costs for workshops and meetings between government agencies at the provincial and district level on enhanced law enforcement, PDMS and SOPs, as well as awareness raising campaigns on updated forestry laws and regulations.
80. **Sub-activity 1.2.1.2: Operationalization of provincial deforestation monitoring system (PDMS) (EE: GIZ and GoL / GoL and BMZ co-finance):** This sub-activity will support the development and operationalization of the PDMS in the 3 additional provinces covered under Project 2 (Bokeo, Luang Namtha and Oudomxay), and the continued operationalization of PDMS's in Project 1 provinces as it expands to cover additional villages (Sub-Activity 1.2.1).<sup>130</sup> This will involve on-the-job training and technical support for Provincial Deforestation Monitoring Teams, who will be set up in each Province.
81. PDMS involves near real-time deforestation monitoring.<sup>131</sup> It is a remote-sensing based tool combined with field verification to monitor land use and forest change within village forest boundaries using Sentinel 2 Satellite imagery. It has been designed considering the local context, and involves a user friendly approach with minimal equipment.<sup>132</sup> It involves the following main steps:

<sup>129</sup> 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.

<sup>130</sup> PDMS have been set up in Project 1 in Houaphan, Luang Prabang and Sayabouri. They have not yet been set up in Bokeo, Luang Namtha and Oudomxay. Capacities in Lao PDR remain low, and additional support is necessary to support Government staff working on law enforcement and forest monitoring to operationalize PDMS.

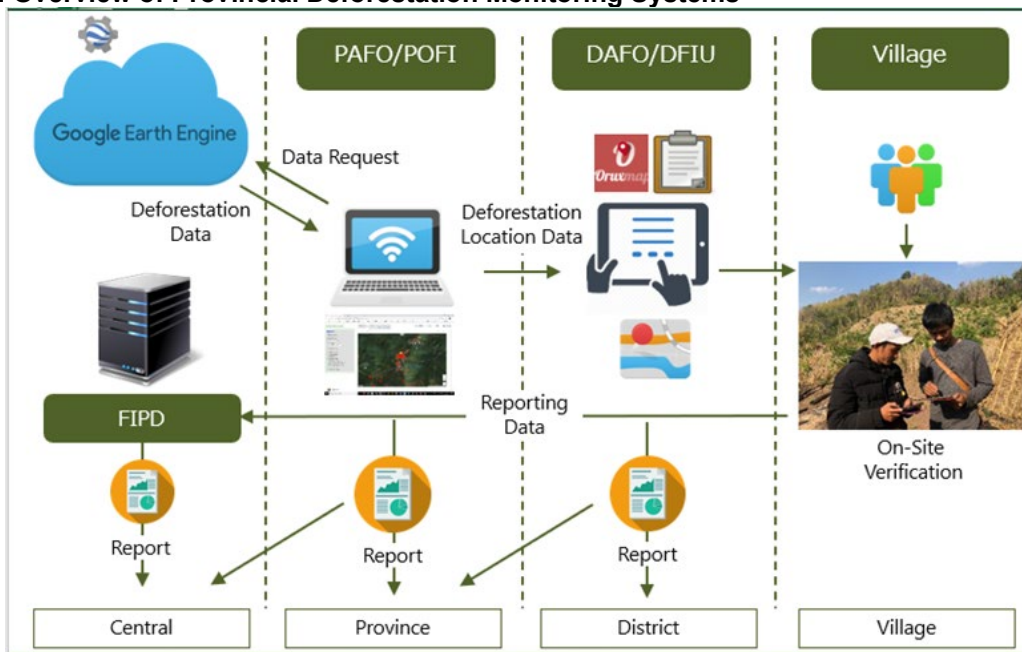
<sup>131</sup> The PDMS approach was developed by JICA under their F-REDD programme. Project 1 found the approach to be suitable.

<sup>132</sup> Necessary Equipment requirements are 1 laptop PC with internet environment for Province and a tablet for field investigation per District. Need Basic computer and mobile device skill (it does not require technical knowledge and skills on GIS and satellite image analysis).



82. **Extraction and display of deforestation areas:** Provides a weekly deforestation monitoring using Google Earth Engine (GEE) Script in Web Application online within PDMS (take 1 – 2 Days). The result are REFERENCE (before) and TARGET (after) satellite images, where the Forest Loss Area can be semi-automatically displayed on Web-application running on a computer. Based on this information, POFI/PAFO staff select the site for field investigation based on the Forest Loss Area from GEE and register the site polygons and send it to the tablet for the onsite verification.
83. **On-site verification/ administrative guidance:** Based on the deforestation area displayed on the tablet, DFIU/DAFO staff investigate the area where deforestation occurred in the field together with villagers. They will record the information on deforestation area in the tablet. Following send the information from ODK to Sever in the Forest Inventory and Planning Division (FIPD).
84. **Reporting and information management:** The input data on the tablet is semi-automatically transferred to the National Forest Monitoring Systems (NFMS) server, which then creates the reporting and statistical information for each level.
85. Procedures, tools and best practices for the PDMS and forest law enforcement will be applied based on advancements of Project 1,<sup>133</sup> ensuring operational PDMS follow a clear standard for monitoring and law enforcement.

**Figure 13: Overview of Provincial Deforestation Monitoring Systems**



86. A combination of GCF grants and co-finance from BMZ and GoL will finance this sub-activity. GCF grants will cover on-the-job training (subsidiary agreement for training POFI and DFIU on GIS/ mapping and the operationalization of PDMS.), the development and dissemination of materials (e.g. regulations, guidelines for DOFI, POFI and DFIU), meeting/ training costs and related travel costs for POFI, DOFI and law enforcement teams to execute monitoring of forest law enforcement in the target provinces.
87. **Sub-activity 1.2.1.3 Harmonization of approaches and improvement of knowledge management for strengthened law enforcement (EE: GIZ and GoL / BMZ co-finance):** This sub-activity facilitates the harmonization of approaches for local law enforcement across the project area.<sup>134</sup> Specifically, it will support knowledge exchange workshops and finance ongoing knowledge management measures to ensure approaches are harmonized and lessons learned are fed back into training, guidance materials and PDMS design and management.
88. GCF grant finance and co-finance from BMZ will be utilized to implement this sub-activity. GCF grants will cover annual national and provincial workshops for harmonization of approaches and knowledge sharing.

**Activity 1.2.2: Land use planning and improved tenure security:**

<sup>133</sup> E.g. Standard operating procedures (SOPs), improved investigative procedures, whistle-blower systems and improved anti-corruption safeguards established under Project 1.

<sup>134</sup> Feedback from Project 1 highlighted there was a need for improved harmonization of approaches and sharing of best practices, lessons learned and experiences from across the six provinces.

89. Participatory Land Use Planning (PLUP) is an essential prerequisite and forms the base for Village Forest Management Plans (VFMPs), FLR, watershed protection activities (with a focus on EbA) and the Promotion of climate resilient, sustainable and deforestation free agricultural practices (PSAP). The leading agencies for the land use planning activities at national level are the Department of Forestry (DoF), the Department of Agricultural Land Management (DALaM), both under Ministry of Agriculture and Forestry (MAF) and the Department of Land (DoL) under Ministry of Natural Resources and Environment (MoNRE). At provincial and district level, the supervision, coordination and implementation of land use planning is shared between PAFO and PoNRE or DAFO and DoNRE respectively.
90. Project 1 supported the development of an improved PLUP process (i.e. PLUP 2.0), which clarifies village boundaries, categorizes and separates agricultural land use from forest zones, defines future land use changes taking into consideration traditional knowledge, strengthens village forest and land management and leads to clearly defined village land use regulations.<sup>135</sup> All PLUP 2.0 documents need approval by the majority of villagers and are officially approved by the District Governor. This activity under Project 2 will support the development of a “climate change adaptation supplement” to the PLUP 2.0 guideline and related capacity building efforts, building on the updated guidance developed under Project 1 while strengthening the use of climate information and climate change adaptation measures within PLUPs. It will further ensure the scaling up of this strengthened PLUP 2.0 process in all six provinces (240 villages in Bokeo, Oudomxay and Luang Namtha, and 50 villages in Houaphan, Sayabouri and Luang Prabang). In addition, PLUP 2.0 will also lead to broader discussions within adjacent villages and village clusters, focusing on land use compatibility (including upstream and downstream dynamics), ecosystem-based adaptation to strengthen resilience to flooding (e.g. riverbank stabilization, riparian buffer zone restoration), forest and landscape restoration, and the design and designation of eco-corridors.
91. **Sub-Activity 1.2.2.1: Mainstreaming climate change adaptation into land use planning manuals and guidelines, and training provincial core PLUP trainers on climate risk and vulnerability and suitable interventions to strengthen climate resilience (EE: GIZ and GoL – KfW co-finance (implemented by GoL) GoL and BMZ co-finance):** This sub-activity will focus on mainstreaming climate change adaptation within the PLUP 2.0 process, through the development of an “adaptation supplement”, which can be integrated within the PLUP 2.0 process and guideline building on the critical advancements made under Project 1, including capacity building efforts of provincial and district PLUP teams. Adaptation considerations, including from the results of the project’s climate risk and vulnerability assessment (see Feasibility Study for summary of results) will be mainstreamed into both the training materials, informative materials for villagers, as well as in monitoring processes.
92. This sub-activity will be covered by GCF grants and co-finance from GoL and KfW. GCF funds will cover planning and coordination workshops for PPMUs and DPMUs to implement the activity, ICT equipment to support PLUP implementation and knowledge management (laptop, monitor, office supplies), the development and dissemination of informational and training materials, and training costs for PLUP teams.
93. **Sub-Activity 1.2.2.2: PLUP in target project districts (linked with Activity 1.2.1 and Components 2 and 3) in hotspot areas (EE: GIZ and GoL / GoL and BMZ co-finance):** Under this sub-activity PLUP will be implemented in 290 villages to improve planning to increase the efficiency, resilience and productivity of land use, while also promoting the sustainable management of forest areas. The PLUP approach will follow the PLUP 2.0 guideline (initially developed under Project 1), and adaptation supplement (developed under Sub-Activity 1.2.2.1). This sub-activity will focus on the implementation of PLUP in target districts, while sub-activity 1.2.2.3 will focus on the monitoring and enforcement of these plans (a summary of the PLUP process can be accessed in the activity sheet in the Feasibility Study).
94. PLUP is comprised of the following steps (described in detail in FS Chapter 6.6): i) preparation ii) village orientation meetings, iii) socio-economic, land and forest data collection, iv) current land use and forest cover mapping, v) future land use management zones, vi) village regulations, vii) final meetings, documentation, approval and data storage, viii) link to subsequent activities (PSAP and VFM), ix) monitoring and evaluation (covered under Sub-Activity 1.2.2.3 below).
95. Dedicated and fixed PLUP Teams will be set up in every target district, composed of trained DAFO and DoNRE technicians. District PLUP Teams will be trained by provincial level core trainers and GIZ experts in all six provinces on the PLUP 2.0 process and climate change adaptation supplement. The team of

<sup>135</sup> 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. The detailed PLUP guideline, developed under Project 1 (included as FP Annex 2h, p. 4), provides an overview of how lessons learned from other land use planning processes has been integrated into the current guideline. In addition, the guideline incorporates the “Common Principles as a Guiding Framework for Land Use Planning at Village Level” that were published by the Lao National Agriculture and Forestry Research Institute (NAFRI) in June 2017. More detailed information on the PLUP process is included in Chapter 6.6 of the Feasibility Study.

provincial supervisors will report directly on PLUP activity progress to the PPMU and NPMU, will be directly responsible for an initial quality control of PLUP reports and will coordinate all monitoring activities. Additional quality control will be conducted by GIZ experts.

96. This sub-activity will be implemented using GCF grants and co-finance from BMZ and GoL. GCF grants will finance a service provider to conduct PLUP implementation and train village land use and forest management committees, travel costs for DAFO and DONRE to conduct PLUP, equipment for conducting PLUP (materials for boundary demarcation – sign boards, metal signs, ropes, GPS, soil testing kits - for 12 districts), and equipment maintenance and fuel costs.
97. **Sub-Activity 1.2.2.3: Monitoring and enforcement of land use plans (EE: GIZ and GoL / GoL and BMZ co-finance):** Once land use plans are established (under Sub-Activity 1.2.2.2) and under implementation, they need to 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. This sub-activity will support ongoing monitoring (forest-related enforcement linked with Activity 1.2.1), supported by technical assistance, capacity building and equipment procurement, closely aligned with the implementation of activities under Components 2 and 3.
98. GCF grants and co-finance from BMZ and GoL will be used for the implementation of this sub-activity. GCF grants will cover travel costs for the execution of monitoring and evaluation in the target villages and 29 districts.

**Activity 1.2.3: Knowledge management, FPIC, safeguards and gender:**

99. This activity will facilitate comprehensive communication and exchange of information about topics of relevance for land users, policymakers and the broader public to understand the purpose and benefits of REDD+, climate risks and best practices for climate risk reduction in the agriculture and forestry sectors, and the need for behavioural change of business-as-usual land use. This activity will further ensure compliance with FPIC and safeguards through supporting the implementation of the Environmental and Social Management Plan (ESMP, Annex 6b) and Gender Action Plan (GAP, Annex 8a). Implementation shows the current approach under Project 1 effective and well-tailored to the local context in the project area. As such, Project 2 will follow the same approach as project 1, and no substantial changes are envisaged.
100. **Sub-Activity 1.2.3.1: Knowledge management and communication (EE: GoL):** Under this sub-activity lessons learned will be captured and information sharing will be conducted at the political level to inform national stakeholders and policymakers on Project 2 progress and to share key lessons that can support the effective implementation of REDD+ at the national level. Relevant education materials will also be produced for a wide array of stakeholders on REDD+, climate resilient agriculture, and sustainable land management. In addition, 3 campaigns on awareness-raising of laws and the regulatory framework pertaining to the forestry and agricultural sectors (closely linked to the strengthened regulatory framework supported under project 1), on REDD+ awareness will be carried out targeting local media (local newspapers in all target districts in the 3 additional provinces included under Project 2).<sup>136</sup>
101. This sub-activity will be financed through GCF grants, and will cover service providers for information dissemination and IT services (e.g. website services), awareness raising campaigns on climate change risk and adaptation and mitigation, REDD+, revisions to the regulatory framework, and gender equality and social inclusion (GESI), among other topics. Subsidiary agreements will also be established to support monitoring of field activities in close cooperation with NPMU and PPMU.
102. **Sub-activity 1.2.3.2: Implementation of the Environmental and Social Management Plan (ESMP) and Gender Action Plan (GAP), and ensuring compliance with FPIC and safeguards (EE: GIZ and GoL / GoL co-finance):** The ESMP is provided in Annex 6b; the Gender Assessment is provided in Annex 8a; the GAP is provided in Annex 8b.
103. This sub-activity will be financed through GCF grants and GoL co-finance. GCF grants will cover subsidiary agreements to implement the ESMP and GAP, support FPIC, continued stakeholder consultations and awareness raising events, as well as staff costs.

<sup>136</sup> e.g. Bokeo, Luang Namtha, and Oudomxay

**B.3.2. Component 2: Market solutions for agricultural drivers of deforestation: Implementation of sustainable and deforestation free agricultural practices (on 17,400 ha)<sup>137</sup>**

104. Component 2 addresses key drivers of deforestation and forest degradation and contributes to delivering emission reductions through reducing the expansion of agricultural activities into forested landscapes. It addresses deforestation and forest degradation through the Promotion of Sustainable Agricultural Practices (PSAP) and the definition of 31 sustainable farming models in a “White List”. These farming models also include aspects of adaptation to climate change through selection of robust crop varieties, the promotion of intercropping, mixed cropping and agroforestry systems, and the adoption of low-emission processing methods applied by farmers. By promoting various farming models, the project also aims to support agricultural diversification, which will build the resilience of smallholder farmers – who are often dependent on one or two climate-sensitive crops (e.g., upland maize). Project 2 will see a continuation of the implementation of the PSAP approach and the associated “White List”, with funding from the VFAGs developed under Project 1. PSAP activities will simply be scaled up to an additional 290 villages (240 in Luang Namtha, Bokeo and Oudomxay and 50 additional villages in Houaphan, Sayabouri and Luang Prabang).
105. In contrast to the initial conceptualization under Project 1<sup>138</sup>, Component 2 now includes a stronger focus on agricultural value chains, private sector actors, and market-solutions for agricultural drivers of deforestation. It builds on recent in-country experiences and studies that note the relevance of engaging with and strengthening the capacities of agri-MSMEs to invest in the development of climate resilient, deforestation-free and low-emission agricultural value chains. Only if the private sector further develops its potentials in processing and marketing of relevant and sustainably produced commodities, can access available sources of finance, and enters into long-term marketing relationships with the local producers, will the sustainability of these investments be achieved. To foster private sector involvement, a select number of companies will be accompanied in terms of business management and planning, access to finance for investments in processing, packaging, and marketing capacities. Matching grants by Project 2 channelled through EPF will aim facilitate access to finance for agri-MSMEs and increase overall investments in the development of sustainable deforestation free, low-emission and climate resilient value chains.

***Output 2.1 Villagers are trained by capacitated government staff and enabled to produce sustainable, climate resilient and deforestation-free agricultural and agroforestry products, strengthening their access to sustainability-oriented markets***

**Activity 2.1.1: Promotion of sustainable, climate resilient and deforestation free agricultural practices and technologies:**

106. This activity will scale up the Promotion of Sustainable and deforestation free agricultural Practices and Value Chains (PSAP) approach to 12 districts in Bokeo, Luang Namtha, and Oudomxay with a total of 240 selected target villages and expanding the programme reach to 50 additional villages in Houaphan, Sayabouri and Luang Prabang. It will do so by developing capacities of DAFO and PAFO on sustainable, climate resilient and deforestation free agricultural practices and technologies (Sub-Activity 2.1.1.1), replicating the PSAP planning approach in 290 villages (sub-activity 2.1.1.2), and supporting the implementation of the PSAP agricultural activity and investment plan (Sub-Activity 2.1.1.3).
107. The technical approach for this Activity, focused on PSAP approach,<sup>139</sup> has been tested and refined in

<sup>137</sup> This was calculated considering the following assumptions: the average landholding of upland dependent families is of 1.2 hectares. The project will be able to support PSAP implementation on an average of 50 upland dependent families per village in 290 villages through the VFAG initial payment and the bonus payment (this would come to a total of 14,500 families with approximately 17,400 hectares in total). The VFAG initial payment will be on average of EUR 10,800 and can reach at least 27 families with EUR 400 for PSAP implementation (under project 1 there have been 29-30 families accessing PSAP funding under VFAGs). It is assumed that villages will receive a bonus performance-based payment averaging EUR 10,000 and that 65% of that bonus payment will be channelled to PSAP activities and support an additional 20 upland dependent families.

<sup>138</sup> In the original design of Project 1, Output 2 focused on the promotion of Good Agricultural Practices according to FAO’s approach. Intensive training of farmers on the Good Agricultural Practices methodologies was to be undertaken with funding for the promotion of Good Agricultural Practices activities to be provided under the existing Village Development Fund (VDF) System. However, early assessments and reviews of in-country experiences showed that this originally intended approach was no longer feasible and required further adaptation to achieve the project’s objectives. The initial envisaged approach focusing on good agricultural practices, while still relevant for many crops cultivated in Lao PDR, needed to be complemented by a specific definition of deforestation free agricultural practices which the project would directly support. Furthermore, the real target groups for Output 2 needed to be better defined (upland farmers, mostly practicing rotational shifting cultivation). Consequently, a more specific approach to promote sustainable agricultural practices (PSAP), and a White List defining all technical deforestation free models to be promoted by the project were developed under Project 1. The PSAP Guidelines were drafted with all 6 target provinces in mind, and the White List combines deforestation free agricultural models applicable throughout Northern Lao PDR (thus applicable for both projects 1 and 2).

<sup>139</sup> PSAP activities will be planned and budgeted in one plan/whole project and approved by the district governor. PSAP activities may be implemented in a certain period only, in which the registered households need the grant during the same period.



Project 1. Sustainable, climate resilient, and deforestation free practices are promoted among target beneficiaries (mostly swidden upland farmers) through the use of a “White List”, which defines suitable deforestation free farming models. Some adjustments have been made based on the lessons learned from Project 1 specifically focused on strengthening climate change adaptation within the approach (building on improved climate-informed planning under Activity 1.2.2). It is also closely linked to activity 2.1.2. The funding for the implementation of the PSAP investment plans developed and implemented under this activity will be channelled through the VFAGs established under activity 2.1.2.

108. **Sub-Activity 2.1.1.1 Capacity building and knowledge management for sustainable, climate resilient and deforestation free agricultural practices and technologies (EE: GIZ, GoL – IFAD co-finance (implemented by GoL) / GoL and BMZ co-finance):** This sub-activity will mainstream adaptation considerations into PSAP training materials through the development of an adaptation supplement. It will also provide training to PSAP teams (comprised of PAFO and DAFO staff) in the 12 new districts of the 3 Project 2 provinces (Bokeo, Luang Namtha, and Oudomxay) focused on sustainable, climate resilient and deforestation free agriculture to facilitate the implementation of the PSAP planning (Activity 2.1.1.2) and implementation (2.1.1.3) processes while ensuring implemented practices are among the most suitable for the given climatic and environmental conditions, and household priorities (building the resilience of local livelihoods and agro-ecosystems).<sup>140</sup>
109. GCF grants and co-finance from BMZ, IFAD and GoL will be used for the implementation of this sub-activity. GCF grants will cover the development of information materials for training trainers, travel costs for training trainers within the project provinces and districts on climate-resilient and deforestation-free agriculture.
110. **Sub-Activity 2.1.1.2 Scaling of PSAP planning approach to 290 villages (EE: GIZ and GoL / BMZ co-finance):** After villages have been identified and have undertaken the PLUP 2.0 process (Activity 1.2.2),<sup>141</sup> trained PSAP teams (Sub-Activity 2.1.1.1) will start the PSAP planning process village by village. Under Project 2, this process will be conducted in 290 target villages. As in Project 1, the approach aims specifically at replacing deforestation-prone practices, such as pioneering and rotational shifting cultivation<sup>142</sup>, with more diversified and climate resilient agricultural production on selected plots where customary land use rights are established. The primary impact pathway is to break the cycle of shortening regenerative fallows and resulting soil fertility degradation, leading to lower yields and ultimately the need to compensate for these by opening up new cultivation areas. Based on the PSAP Guidelines developed under Project 1, farmers, prioritizing women-led and young families, will be offered suitable choices from the “White List”) and will be supported in finding the option that best fits their circumstances (for a detailed description of the step-by-step PSAP planning process see the activity sheet in the Feasibility Study).
111. This sub-activity will be covered by GCF grants and co-finance from BMZ. GCF funds will support preparation, printing and dissemination of training and informational materials for farmers, and will fund PSAP planning at the village level (including travel costs for DAFO staff members to visit the villages with 5-6 days per village).
112. **Sub-Activity 2.1.1.3 Implementation of PSAP Agricultural Activity and Investment Plan (EE: GIZ and GoL / GoL and BMZ co-finance):** The implementation of the PSAP plans will ultimately depend on the farmers who have registered with the PSAP team. PSAP teams will provide support to farmers, mainly consisting in the provision of information (see Sub-Activity 2.1.1.2) and ongoing extension and technical support during the implementation of the agricultural activity and investment plan (see Table 4 for a subset of and “White List” farming models and their adaptation and mitigation benefits; the full list of models is included in the Feasibility Study). Farmer commitment during implementation (see Activity 2.1.2) will incentivized through performance-based bonus payments (hereby referred to as *bonus* payments) and a second funding cycle and facilitated via extension support. This will consist in regular follow-up visits to support villagers with potential difficulties in the implementation of White Listed farming models.<sup>143</sup>

<sup>140</sup> More detailed information on the specific capacity building needs and measures is available in the Feasibility Study (Annex 2a).

<sup>141</sup> Following the project’s FPIC approach, outlined in greater detail in ESMP Annex 6b.

<sup>142</sup> The terms *shifting cultivation*, *swidden*, and *rotational agriculture* are all used to refer to a *farming* system in which relatively short periods of cultivation are followed by relatively long periods of fallow. Where population density and agricultural/economic activity has not changed, such systems have often been stable for centuries. When changes occur, however, expansion into thitherto uncultivated natural areas takes place (pioneering shifting cultivation), often in conjunction with shortened rotational cycles. In consequence, not only does this lead to increased deforestation, but the fertility of existing plots also diminishes over time, requiring further opening-up of new agricultural areas. This can lead to a destructive spiral of large-scale deforestation. From: Carl Folke, Johan Colding, (2001). Traditional Conservation Practices. (ed. Simon Asher Levin). Encyclopaedia of Biodiversity, Elsevier, Pages 681-694.

<sup>143</sup> Funds to procure whitelist products (materials and seeds) will be coordinated with PSAP and VFAG district teams (staff) to ensure that all products are procured and report correctly to EPF. This will be closely monitored by project staff and EPF.

**Table 4: Selection of “White List” farming models and their adaptation and mitigation benefits**

	Threat / Climate Risk	Climate Change (CC) impacts and proposed interventions	Adaptation benefits <sup>144</sup>	Mitigation benefits
Coffee	<p>Intensification and increase of extreme events (floods, droughts, storm)</p> <p>Increasing temperatures and increasingly dry conditions (especially in the dry season)</p> <p>Changing production zones due to increasing temperatures (vertical shifts in ecosystems)<sup>145</sup></p>	<p><b>CC Impacts:</b> Arabica coffee needs to be planted above 800-900 m.a.s.l. In Northern Lao PDR some plantations can be found as low as 600, m.a.s.l. With increases in annual mean temperature<sup>146</sup> the climatic suitability decreases gradually. There is high confidence about intensification of heatwaves in frequency and duration<sup>147</sup> leading to decreased yield and increasing the potential for pest infestation.<sup>2</sup>The alternation of precipitation patterns due to changing climatic conditions, leads to water yield deficiency.<sup>148</sup></p> <p><b>Interventions:</b> Coffee plantation under shade trees as a multi-storey agroforestry system, diversification resulting in lower fertilizer input Improved planning and watershed management at a landscape or basin level and increasing irrigation efficiency, increased soil fertility due to diversification of crops.</p>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Soil protection, stabilization and erosion control (reducing sedimentation, losses of water, soil material, organic matter and nutrients)</li> <li>Arabica coffee variety planted &gt;800m is adapted to increasing rainfall and temperatures.,</li> <li>Increased efficiency of innovation<sup>149</sup></li> <li>Micro-climate buffering</li> <li>Income diversification, reduces risk of total crop failure</li> </ul>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Higher GHG sequestration.</li> <li>Increases in soil organic carbon</li> <li>Mitigation of GHG emissions from lower quantities of fertilizer use.</li> </ul>
Rubber	<p>Intensification and increase of extreme events (droughts, storm)</p> <p>Intensification of pest infestation</p>	<p><b>CC Impacts:</b> Studies suggest that the changing bioclimatic suitability for Rubber until 2050 is positive, resulting in a wider range for rubber plantations<sup>150</sup>. Nevertheless, it is worth noting, that with increasing temperatures and intensification of droughts<sup>151</sup> the vulnerability to pest infestation is likely to increase<sup>152</sup>,</p>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Soil protection, stabilization and erosion control (reducing sedimentation, losses of water, soil material, organic</li> </ul>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Multi-storey cover with higher GHG sequestration</li> <li>Increases soil organic carbon</li> </ul>

<sup>144</sup> Detailed information interventions can be found in the Technical Extension Sheet for each PSAP Practice. Overall, the integration of climate information in the land use planning process and within PSAP investment plans will further enable improved agricultural land use planning that ensures selected production systems are suitable for the local climate and context. In addition, implementation of PSAP practices will benefit from landscape level planning and interventions under Component 3 that facilitate the restoration and sustainable management of forest lands, enabling the implementation of ecosystem-based adaptation practices that strengthen the overall resilience of forest ecosystems (providing key protective functions that also help safeguard agricultural lands, and reduce impacts such as flooding or sedimentation risks).

<sup>145</sup> Johnston, R. (2010). Rethinking agriculture in the Greater Mekong Subregion: how to sustainably meet food needs, enhance ecosystem services and cope with climate change. IWMI.

<sup>146</sup> Maniphousay, V. (2022). Climate Change Adaptation in Lao PDR. In Climate Change Adaptation in Southeast Asia (pp. 77-102). Springer, Singapore.

<sup>147</sup> IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press.

<sup>148</sup> Trisurat, Y., Aekakkararungroj, A., Ma, H. O., & Johnston, J. M. (2018). Basin-wide impacts of climate change on ecosystem services in the Lower Mekong Basin. Ecological research, 33(1), 73-86.

<sup>149</sup> EcoLao (2012). Scoping Assessment of Climate Change Adaptation Priorities in the Lao PDR. Regional Climate Change Adaptation Knowledge Platform for Asia, Partner Report Series No. 6. Stockholm Environment Institute, Bangkok. Available online at [www.asiapacificadapt.net](http://www.asiapacificadapt.net) or [www.weADAPT.org](http://www.weADAPT.org).

<sup>150</sup> Lefroy, R., Collet, L., & Grovermann, C. (2010). Study on potential impacts of climate change on land use in the Lao PDR.

<sup>151</sup> IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press.

<sup>152</sup> Johnston, R. (2010). Rethinking agriculture in the Greater Mekong Subregion: how to sustainably meet food needs, enhance ecosystem services and cope with climate change. IWMI.

	<p>Increase and intensification of wildfires</p> <p>Increasing temperatures and increasingly dry conditions (especially in the dry season)</p>	<p>having impacts on the productivity of rubber plantations.</p> <p><b>Interventions:</b> Agroforestry system of intercropping annual and perennial plants between rows of rubber trees</p>	<p>matter and nutrients)</p> <ul style="list-style-type: none"> <li>Micro-climate buffering</li> <li>Income diversification</li> </ul>	
Fruit trees	<p>Increase and intensification of extreme events (floods, droughts, storm)/low yields and irrigation supply problems</p> <p>Decreased vegetation photosynthetic activity (i.e., browning) of wildfires</p>	<p><b>CC Impact:</b> With the intensification of extreme weather events<sup>17</sup>, such as storms, droughts and floods the establishment of fruit tree plantations will be challenged. The increasing temperatures and consequently the increasing evapotranspiration will likely lead to water deficiency.<sup>153</sup> With increased flood intensity soil erosion will also become more prominent.<sup>18</sup></p> <p><b>Interventions:</b> Horticulture, including fruit tree plantations mixed with vegetables.</p>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Soil protection, stabilization and erosion control (reducing sedimentation, losses of water, soil material, organic matter and nutrients)</li> <li>Micro-climate buffering</li> <li>Income diversification</li> <li>Selection of suitable climate resilient fruit tree species based on site-species matching</li> </ul>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Carbon sequestration through planting trees and through increases in soil carbon.</li> </ul>
Cardamom	<p>Intensification of extreme events (floods, droughts, storm)/low yields and irrigation supply problems</p> <p>Decreased vegetation photosynthetic activity (i.e., browning)</p> <p>Intensification of wildfires due to increasing temperatures and increasingly dry conditions (especially in the dry season).</p>	<p><b>CC Impact:</b> <i>Amomum sp.</i> is a forest plant and requires shade and constant moisture levels<sup>154</sup>. With increasing temperature and the intensification of evapotranspiration<sup>24</sup> the water availability is likely to decrease affecting the productivity of Cardamom.<sup>23</sup> With the increased frequency of extreme weather events, especially in the wet season, soil erosion is increasing and therefore decreasing the availability of soil organic matter<sup>23</sup>. Furthermore, the reduction of fallow length is leading to a gradual change from suitable areas for Cardamom to suitable areas for Broom Grass and/or peuk meuak.<sup>155</sup></p> <p><b>Intervention:</b> Native cardamom plants under forest cover (maintaining multi-story cover)</p>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Soil protection, stabilization and erosion control (reducing sedimentation, losses of water, soil material, organic matter and nutrients)</li> <li>Micro-climate buffering</li> <li>Income diversification</li> <li>Selection of suitable climate resilient fruit tree species based on site-species matching</li> <li>Biodiversity and habitat conservation</li> </ul>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Higher GHG sequestration</li> </ul>
Maize	<p>Intensification and increase in of extreme events (floods, droughts, storm)</p>	<p><b>CC Impact:</b> The bioclimatic suitability in future climate scenario up to 2050 is likely to decrease for Maize especially in the north of Lao PDR<sup>156</sup>. This is the result of changing climatic</p>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Income diversification</li> <li>Improved soil cover and climate resilience compared to current</li> </ul>	<p><b>Benefits:</b> Improve soil-nitrogen fixation</p>

<sup>153</sup> Trisurat, Y., Aekakkarunroj, A., Ma, H. O., & Johnston, J. M. (2018). Basin-wide impacts of climate change on ecosystem services in the Lower Mekong Basin. Ecological research, 33(1), 73-86.

<sup>154</sup> Aubertin, C. (2004). Cardamom (*Amomum spp.*) in Lao PDR: the hazardous future of an agroforest system product. Forest products, livelihoods and conservation. Case studies of non-timber forest product systems, 1, 43-60.

<sup>155</sup> Castella, J. C., Lestrelin, G., Hett, C., Bourgoin, J., Fitriana, Y. R., Heinimann, A., & Pfund, J. L. (2013). Effects of landscape segregation on livelihood vulnerability: Moving from extensive shifting cultivation to rotational agriculture and natural forests in northern Laos. Human Ecology, 41(1), 63-76.

<sup>156</sup> Lefroy, R., Collet, L., & Grovermann, C. (2010). Study on potential impacts of climate change on land use in the Lao PDR.

	Increasing temperatures and increasingly dry conditions (especially in the dry season)	conditions <sup>157</sup> intensifying the ineligibility of Maize in the future.  <b>Interventions:</b> Mixed cropping of maize and various beans/ legumes. <sup>20</sup>	monocropping of maize	
Paddy Rice	Intensification and increase in of extreme events (floods, droughts, storm)  Increasing temperatures and increasingly dry conditions (especially in the dry season)	<b>CC Impacts:</b> The increasing mean annual temperatures lead to prolonged drought periods happening more frequently. Furthermore, with the intensification of precipitation patterns in the wet season <sup>158</sup> the vulnerability to floods is likely to increase having a direct impact on paddy fields.  <b>Interventions:</b> Creation of new paddy fields (irrigated or rainfed) on suitable, flat land or rehabilitation and enlargement of existing paddy field, flood/drought resistant rice seeds	<b>Benefits:</b> <ul style="list-style-type: none"> <li>▪ Improves access to water throughout the dry season</li> <li>▪ Enhanced incomes and food security in the dry season</li> </ul>	

113. GCF grants and co-finance from BMZ and GoL will finance this sub-activity. GCF grants will be used for enabling monitoring by PSAP teams (training and travel costs), developing climate-informed training modules and training trainers, providing gender-responsive extension support at the village level (including travel and training costs for extensions services), and conducting knowledge exchange meetings and workshops at the village cluster and district level.

**Activity 2.1.2: Investments in sustainable, climate resilient and deforestation free agricultural practices and agroforestry:**

114. To support shifting cultivation and upland farmers in their transformation of land use towards sustainable and resilient agricultural practices appropriate funding mechanisms have to be applied. The project's investments in innovative, sustainable, and deforestation free production systems require grant support to absorb investment risks and low return rates, both characteristics to be expected in the project context. To fund selected activities from the "White List" and annual village forest management activities, a Village Forest and Agricultural Grant (VFAG) fund will be established in each of the 290 target villages.

115. VFAGs are managed by a committee of 3 selected village representatives who get endorsed by the district governor – at least one member of the village committee must be female. A bank account is opened for each VFAG at the nearest commercial hub, following the VFAG Guidelines (see activity sheet in the Feasibility Study for a detailed description of the VFAG guidelines). The initial contribution of 10,800 EUR will be transferred through the Climate Change Funding Window to the account. Transferred funds will be used among other things to provide grants of up to 400 EUR to PSAP registered families who have passed the eligibility criteria (e.g. dependency on shifting cultivation or upland monocropping, women-headed families, poor, young, etc., as specified in the PSAP Guidelines). The grants will not be handed to receivers directly but will be used to pay for approved items needed to establish and implement the chosen activity from the "White List" and technical extension sheets (Sub-activity 2.1.1.2). The established VFAG system will be also used for channelling bonus payments of up to 10.000 EUR (the amount depends on the size of the village forest area and the performance) to the target villages for successful forest protection after a monitoring period of 2 years. Funds from the bonus payments will be used in the same way for further expansion of "White List" activities and village forest management activities.

116. **Sub-activity 2.1.2.1 Scaling up the VFAG approach to 290 villages (EE: GIZ, GoL - IFAD co-finance (implemented by GoL)):** Through this sub-activity the project will establish operational VFAG funds in the 290 target villages of the project.

117. GCF grants and co-finance from IFAD will cover this sub-activity. GCF grant finance will be used to train

<sup>157</sup> IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press.

<sup>158</sup> IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press.



the VFAG team in DAFO on best practices for VFAG establishment and management (including best practices for gender equality and social inclusion - GESI), facilitate the formation and training of VFAG committees, including providing trainings on financial management and GESI, and provide upfront payments to VFAGs to finance the PSAP investment plans as well as bonus payments to VFAGs after 2 years of successful implementation.

118. **Sub-activity 2.1.2.2 Capacity building of new VFAG committees (EE: GIZ):** This sub-activity will support capacity development of VFAG committees to be able to effectively manage the VFAG fund. The committee has the overall task of organizing VFAG related activities and administrating VFAG funds. VFAGs are managed by a committee of 3 elected village representatives who get endorsed by the district governor – at least one member of the village committee must be female:
- The VFAG President assumes the leadership of the Committee and the VFAG. They are chairing VFAG assembly meetings and is also representing the VFAG externally.
  - The VFAG Cashier is in charge with effectuating and recording all money transactions within the VFAG. He/she is also responsible for safekeeping VFAG cash stocks.
  - The VFAG Accountant has the task to record and document all income and expenditures within the VFAG in a timely, complete, and correct manner. They keep a cash book, collect bank statements and ensure that all expenditures are documented by invoices according to project accounting standards. They prepare quarterly reports, which are submitted from the VFAG committee to EPF, as stipulated in the VFAG bylaw.
119. For the newly elected committee to perform these tasks appropriately, each member must be familiarized with the rules and standards that have been defined in the VFAG Guidelines and govern the entire process. Committee members will receive training both the specific processes relevant to their role, as well as more general capacity building on financial management.
120. GCF grants will cover trainers, equipment, and office supply to ensure VFAG committees are able to manage the VFAG funds.
121. **Sub-activity 2.1.2.3 Monitoring of VFAGs (EE: GIZ and GoL):** Under this sub-activity the necessary actions to ensure that VFAG Committees adhere to VFAG rules will be carried out and that corrective actions are taken by the project in case of non-compliance with the VFAG guidelines (actions are described in detail in the activity sheet in the Feasibility Study).
122. This sub activity will be entirely financed by GCF, and will cover equipment to support VFAG monitoring (computers) and other monitoring costs (e.g. travel costs to visit villages).

**Activity 2.1.3: Watershed forest management to support small-scale irrigation investments (EE: GoL, ABD and IFAD co-finance (implemented by GoL)):**

123. Activity 2.1.3 builds on the ongoing ADB initiative, “Sustainable Rural Infrastructure and Watershed Management Sector (SRIWSM)” project and the “Partnerships for Irrigation and Commercialization of Smallholder Agriculture” (PICSA) funded by IFAD. The ADB project in combination with the IFAD project seek to address sustainable rural economic growth and watershed management in the provinces of Luang Prabang, Xiengkhouang, Sayabouri and Houaphan. However, it should be noted that co-financing for the GCF programme only focuses on actions implemented in Luang Prabang, Sayabouri and Houaphan in a total of 58 target villages across 8 districts.
124. The Activity aims to support sustainable market-oriented agriculture production and sustainable natural resources management in selected watersheds. Specifically, the activity is ensuring 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). The SRIWSM and PICSA projects support market-oriented agricultural product value chain development specifically for high value crops grown on irrigated land plots in 11 schemes which will be rehabilitated and modernized by SRIWSM. PICSA will focus on the provision of improved extension systems for the development of intensified agriculture, capacity building for Water User Groups (WUGs) and provision of farmer group investment facilities. Value chains of high value crops that the SRIWSM/PICSA projects have identified and assessed will be promoted and first market assessments have been conducted (Sub-Activity 2.1.3.1). A total of 11 irrigation schemes in Houaphan, Sayabouri and Luang Prabang will be rehabilitated or newly constructed (Sub-Activity 2.3.2). Finally, nutrition-sensitive agriculture is implemented in all target villages of SRIWSM/PICSA (sub-activity 2.1.3.3).

125. This activity is financed exclusively by ADB, IFAD, and the Government of Lao PDR (i.e., without requiring GCF financial support).
126. **Sub-Activity 2.1.3.1 Market oriented production<sup>159</sup>**: The sub-activity is applying a value chain / market linkage strategy to reduce the market and business risk faced by dry-season irrigators. Farmers located and operating on the 13 subprojects (11 irrigation schemes) have been consulted while making market assessments of the various representative subprojects (RSPs). With the assistance and information of the producers and other actors of the high value crop (HVC) value chains, the prices, and margins at the various levels of the value chains of HVCs have been identified and analysed for highest returns and market access. These completed assessments are currently being reviewed. Based on these assessments, SRIWSM will then develop agribusiness and marketing strategies, including HVC cropping plans for the dry season following the completion of the RSPs, identifying the targeted markets (wholesale, retail, or export) for the high value crops, and bringing together the key market actors in the HVCs' value chains to discuss investment needs from the SRIWSM/PICSA grant programme.
127. **Sub-activity 2.1.3.2 Watershed ecological services protected**: The SRIWSM Project will contract private contracting firms to carry out the construction or rehabilitation of all 13 representative subprojects. The construction is slated to begin in May 2022. The SRIWSM Project has carried out the engineering design and the requisite surveys of the Subprojects in Houaphan, Sayabouri, and Luang Prabang provinces (see detailed description in the corresponding activity sheet in the Feasibility Study).
128. **Sub-activity 2.1.3.3 Improved nutritional status<sup>160</sup>**: PICSA and SRIWSM were designed as nutrition sensitive projects. The AIF grant (ADB-administered EU grant) is being used exclusively to support improvement of nutrition awareness and Nutrition Sensitive Agriculture (NSA) (activities of the SRIWMSP Project). The nutrition interventions include increased dietary intake and improved quality of diet for nutritionally vulnerable groups and school-based nutrition activities in all target provinces. District Nutrition Committees have been established in selected districts, received technical training, and have developed nutrition intervention packages. Future priorities will be on strengthening the coordinating function between district line agencies by the District Nutrition Committees, provision of technical trainings and strategic guidance on nutrition sensitive interventions.
129. The NSA is being strengthened within the framework of the existing multi-sectoral nutrition coordination mechanism in Lao PDR by promoting behaviour change in sanitation, women's workloads, and dietary habits in prioritized villages in project districts. The improved nutritional status is complementing all other outputs of the SRIWMSP Project by providing increased local availability and markets for diverse and nutritious foods products originating both from the irrigation schemes and from improved use of the catchment areas.

**Activity 2.1.4 Implementation of benefit sharing plan for climate-smart agriculture and sustainable livelihoods for forest dependent communities (EE: GoL, World Bank co-finance (implemented by GoL)):**

130. GCF Projects 1 and 2 are the main investment projects contributing to the Lao PDR GFLP programme, which further provides the framework for the implementation of the Lao Emission Reduction Programme. As such, the GCF-financed Project 1 and Project 2 and the implementation of the Benefit Sharing Plan (BSP) in the context of the FCPF- Emission Reduction Payment Agreement (ERPA) and are closely aligned. Through World Bank co-financing, this activity will sustain the implementation and results of activities under Component 2 promoting sustainable, deforestation free, and climate resilient agriculture beyond the lifespan of GCF Project 2, with specific linkages to activities, 2.1.1 and 2.1.2. The activity will be implemented at the provincial, district, and village level. It will address the negative impacts of unsustainable agricultural practices and support farmers transition to CSA practices and technologies with higher levels of productivity. During implementation, the principles of CSA and those of Responsible Agricultural Investment<sup>161</sup> will be followed to ensure that, in addition to climate-related criteria, considerations related to social, environmental, gender, and economic safeguards are also effectively integrated.

<sup>159</sup> 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".

<sup>160</sup> 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.

<sup>161</sup> The Principles for Responsible Agricultural Investment can be accessed here: [https://www.fao.org/fileadmin/templates/cfs/Docs1314/rai/CFS\\_Principles\\_Oct\\_2014\\_EN.pdf](https://www.fao.org/fileadmin/templates/cfs/Docs1314/rai/CFS_Principles_Oct_2014_EN.pdf)

131. This activity is exclusively financed using World Bank co-finance. No GCF funds are required for the implementation of this activity.

132. **Sub-activity 2.1.4.1 Operationalization of benefit sharing plan for climate-smart agriculture and sustainable livelihoods for forest dependent communities:** This sub-activity will support the establishment of an enabling environment to promote sustainable and deforestation free CSA approaches. It will also sustain the implementation of these models while helping to address issues related to market demand, low productivity, limited availability of productive alternatives for farmers, and land and soil degradation. As part of the operationalization of the BSP direct investments will be undertaken in support of scalable models implemented with local communities and ethnic groups in a sustainable manner.<sup>162</sup> Investments will also support alternative livelihood options. These models include crop diversification, agroforestry techniques such as terracing, and intercropping and are all aligned to CSA principles and will bring direct benefits in terms of soil conservation.

**Output 2.2 Agri-MSMEs are capacitated, and have improved incentives and access to finance to invest in marketing and processing for locally sourced deforestation free and climate resilient agricultural products**

**Activity 2.2.1: Catalyzing private sector investments in sustainable, climate resilient, and deforestation free value chains:**

133. In Project 1 it became clear that the cooperation with local agribusinesses needed to be further defined and that a more comprehensive approach was needed towards establishing sustainable deforestation free, low-emission and climate resilient value chains for the main commodities under the “White List”. This activity now includes the provision of clearly defined incentives, matching-grants, for agribusiness to support the project activities.

134. This activity will support the development of sustainable, climate resilient, and deforestation free value chains in support of the models and investments based on the “White List” that will be implemented by upland farmers in target villages (Activities 2.1.1 and 2.1.2). The focus of the activity is on value chain development and marketing through private sector enterprises and specifically agricultural Micro, Small and Medium-Enterprises (agri-MSMEs). This engagement with agri-MSMEs aims to support ensuring that there is predictable and increasing demand for the commodities produced under activities 2.1.1 and 2.1.2 in the target villages. A categorization of the most relevant agri-MSMEs for contributing to the results of the project was developed as part of the private sector assessments carried out under Project 1. This categorization will be followed during Project 2.

**Table 5: Agri-MSME description and categorization by turnover<sup>163</sup>**

Category	Description
<b>Category A</b>	Companies involved in the entire supply chain, from production to trading and processing, either specialized on a single commodity (e.g., rubber or coffee) or 2-3 commodities. Staff numbers are generally above 15 people, and they have an annual turnover higher than LAK 10,000,000,000 (USD 1,100,000). It is estimated that approximately 30% of the agri-MSMEs belong to this category. They can be considered as medium-sized companies and could play an important role as a catalyst for good practices along the supply chain by making investments in deforestation free, low-emission and climate resilient processing, serving higher value markets.
<b>Category B</b>	Companies involved in at least 2 areas along the supply chain. Staff numbers are from 5 to 10 people, and they have an annual turnover in the range of LAK 2,000,000,000 to LAK 10,000,000,000 (USD 220,000 to USD 1,100,000). It is estimated that 50% of the companies would be classified as Category B. Most of them are family businesses. These can be considered as small companies and could receive targeted support in terms of securing sustainable production levels through direct cooperation with farmers on a larger geographic scale, widening the scope of products and value adding activities. These companies would certainly represent the core of the target companies for project collaboration and would provide good impact opportunities.
<b>Category C</b>	Companies involved in only one area of the supply chain and currently focusing on trading of raw products. With an average of 1 to 5 staff, they have an annual turnover in the range of LAK 80,000,000 to LAK 2,000,000,000 LAK (USD 9,000 to USD 220,000). Approximately 20% of agri-MSMEs will fall into this category. All of them are family businesses. Category C companies would be considered as micro companies. Their strength is their direct connection and working

<sup>162</sup> The ER Programme will not disburse any cash payments to communities. It will establish institutional mechanisms and workplans to deliver benefits to communities.

<sup>163</sup> This categorization is based on the project view and does not represent the official categorization of Lao MSMEs according to the Lao National Chamber of Commerce.

experience with farmers. Many of them are interested in widening their business model by strengthening value addition and improving market access.

135. Local agri-MSMEs in Lao PDR face a number of challenges in their business operations that include: unreliable and strongly fluctuating supply chains in terms of quality, quantity; processing techniques are obsolete and environmentally unsustainable; and access to finance is limited. To address these barriers and support a transition towards more sustainable business models that can contribute to the development of climate resilient and deforestation free value chains, this activity aims to establish strong and reliable connections between the cooperating agri-MSMEs and target farmers; through joint value chain and business model assessments (Sub-Activity 2.2.1.1) and the provision of matching grants to screened and selected agri-MSMEs for processing and marketing sustainable products (Sub-Activity 2.2.1.1).

136. **Sub-Activity 2.2.1.1: Climate resilient and deforestation free value chain development (EE: GIZ):** This sub-activity will directly assist a selected number of agri-MSMEs through value chain and business model assessments, with the aim of contributing to the adoption of low-emission and climate resilient processing methods, coordinated transportation and marketing of sustainably produced finished products. The Lao National Chamber of Commerce and Industry (LNCCI) has been identified as a key potential partner for supporting the work under this sub-activity aimed at strengthening the operations of agri-MSMEs. In the context of the project, LNCCI will assist the project in the process of identifying suitable agri-MSMEs for close cooperation with the project. Indicative criteria to identify relevant agri-MSMEs include:<sup>164</sup>

- Company must be active in the marketing of at least one or preferably several commodities comprised in the “White List”,
- Company should be active in more than one district or show a strong interest to expand their geographic coverage,
- Company should practice at least some kind of value adding and processing or/and have an interest or plans to invest in sustainable processing techniques,
- Company must have an understanding and keen interest in sustainable production methods, deforestation free agriculture, and environmental aspects as well as social responsibility,
- Company should have potentials for future business development in terms of staff, assets, marketing capacities, and access to finance,
- Company should have expressed a key interest to closely cooperate with the GCF projects,
- Companies should be selected to represent diverse value chains with no more than 2-3 companies involved in the same products.
- Agri-MSME should be able to provide 50% co-finance contribution, either in-kind or in-cash depending on investment plan.
- Female-led and ethnic minority-led agri-MSMEs will be specifically targeted.

137. All selected companies will receive technical support in the areas of business management including financial management, technical innovations towards low emission value chains, simple market analyses and planning (Further description of technical assistance support to be provided is included in the corresponding activity sheet of in the Feasibility Study).

138. GCF grants will cover the implementation of this sub-activity. It will cover a technical assistance service provision contract, where TA will be provided to screen companies, and provide targeted technical assistance related to business development and ensuring business plans adequately reflect climate-resilient and low-emission practices, aligned with the White List.

139. **Sub-Activity 2.2.1.2: Matching grants to support agri-MSMEs develop climate resilient and deforestation free value chains (EE:GIZ and GoL):** To promote deforestation free and climate-informed value chains and the marketing of sustainably produced commodities in accordance with the “White List”, the project will provide matching grant funds on investments by a sub-set of the agri-MSMEs identified

<sup>164</sup> The project operations manual (Annex 21) includes more detailed information on the indicative screening criteria, eligibility criteria and operational procedures.



under 2.2.1.2 that will be further screened<sup>165</sup> and selected to improve their processing<sup>166</sup> and marketing capacities (a step by step description of the matching grant allocation process is included in the activity sheet in the Feasibility Study) .

140. Matching grants are defined as partial contribution for investments to support sustainable value chain development for White Listed activities, where:

- 50% of the total investment amount comes as a grant channelled through EPF, and
- 50% of the total amount comes from an equity contribution of the agri-MSME or as a loan from a local financial institution in Lao PDR.

141. After a selection process of suitable companies<sup>167</sup> and the necessary contractual agreements, the project would provide a 50% matching grant (up to EUR 50,000) for company investments in climate change adaptation and GHG-saving technologies based on a new business plan supported by the project under Sub-Activity 2.2.1.1. The following Table 6 outlines the maximum matching grant amount according to the agri-MSMEs category:

**Table 6: Maximum matching grant amount according to agri-MSME categorization**

Category	Maximum amount	Indicative number of grants
Category A	EUR 50,000	20
Category B	EUR 25,000	24
Category C	EUR 10,000	20

142. The funds for the financial contributions to the investments by the selected agri-MSMEs will be channelled through the EPF. Disbursements of any grant contributions will be based on approved investment plans (according to predefined eligibility criteria and positive list for investments in low-emission and climate resilient value chains). A set of indicative eligibility criteria is included in the Table 7 below.

**Table 7: Eligibility criteria for consideration of the matching grant mechanism**

Eligibility Criteria	Specification
Sector / Value Chain	Agri-MSME Focus on processing or marketing at least 1 commodity within the subset of the "White List". <sup>168</sup>
Company types/ ownerships	Sole ownership, partnerships, and joint ventures.
Business purpose of the applicant's company / eligible investment areas	<ul style="list-style-type: none"> <li>• Machinery</li> <li>• Auxiliary infrastructure investment (e.g. storage facility etc.) (max 50% of grant)</li> <li>• Renewable energy</li> <li>• Certifications</li> <li>• Merchandising</li> </ul>
Company Age	Company must be in operations for at least 2 years.
Company Size	Category A, B, and C – agri-MSMEs
Company registration	Must be officially registered with DoIC in Lao PDR.
Company operations/ location	Must have operations in one of the 6 target provinces (at the province, district, or village level). <sup>169</sup>
Financial mgmt. & accounting requirements	Must have a bank account at the point of matching grant application; must show financial statements for at least one year.
Matching contribution	The agri-MSME must match the 50% matching grant with a contribution of its own <sup>170</sup>

<sup>165</sup> The screening process will look at various technical, financial, and institutional factors, as well as environmental and social safeguards and gender.

<sup>166</sup> Climate-sensitive processing investments will include solar energy supply and solar dryers, water-saving technologies, environmentally friendly packaging, transport management and higher value end products for alternative markets.

<sup>167</sup> The way in which the selection process will be conducted i.e. call for proposal vs. direct award etc., will still be clarified.

<sup>168</sup> A company that has no active participation to the agribusiness value chain (e.g., pure logistic company) would not be eligible.

<sup>169</sup> Plans to expand operations into the Project villages will be considered as an integral part of the selection process to enter into agreements with agri-MSMEs and thus already considered as part of the eligibility criteria.

<sup>170</sup> The contribution from the agri-MSME will be verified by the EE

143. The matching grant mechanism will target a sub-set of the commodities in the “White List”. These have been prioritized based on their market and value-added potential.

**Table 8: Commodities and value adding steps linked to the White List**

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

144. The use of funding from matching grants will be constrained first by an exclusion list<sup>171</sup> (that follows the IFC Performance Standards) and second by a positive list of categories and uses. An indicative positive list is shown below. It will be validated with the technical assistance provider at the beginning of the project.

**Table 9: Indicative positive list of investment categories**

Category	Potential uses – a link to sustainability will have to be clearly demonstrated in the business and investment plan that will be submitted for consideration for accessing a matching grant
Machinery	<p>Processing equipment such as:</p> <ul style="list-style-type: none"> <li>• driers, ovens</li> <li>• choppers, mills, cutters, threshers, shredders, crushers, presses</li> <li>• washers, cleaners</li> <li>• sorters, separators, centrifuges etc.</li> <li>• mixers</li> <li>• pelleting machines</li> <li>• roasters, cookers, smokers</li> </ul>

<sup>171</sup> GIZ “ESG toolkit”: [https://www.giz.de/de/downloads/ESG\\_toolkit.xlsx](https://www.giz.de/de/downloads/ESG_toolkit.xlsx)

	<ul style="list-style-type: none"> <li>• <i>bottling and canning machines</i></li> <li>• <i>pasteurizers</i></li> <li>• <i>cold-chain equipment (e.g., fridges, freezers etc.)</i></li> <li>• <i>fermentation vats</i></li> <li>• <i>packing machines, balers, wrappers etc.</i></li> </ul>
Structures as support for a proposed investment (max 50% of grant)	<ul style="list-style-type: none"> <li>• <i>Warehouses, storage facilities</i></li> <li>• <i>Covered/uncovered drying yards</i></li> <li>• <i>Extension of processing space (excluding the purchase of land)</i></li> </ul>
Energy	<ul style="list-style-type: none"> <li>• <i>Solar cells, wind turbine, water turbine,</i></li> <li>• <i>Batteries and other items required for the functioning of such systems</i></li> </ul>
Certification	<ul style="list-style-type: none"> <li>• <i>Acquisition of sustainability and climate compatibility certifications</i></li> <li>• <i>Getting GMP or HACCP certification</i></li> <li>• <i>Getting quality or food safety certification</i></li> </ul>
Merchandising	<ul style="list-style-type: none"> <li>• <i>Investment in branding, technology, for marketing and commercialization of climate-friendly products</i></li> <li>• <i>Integration into existing online market platforms for sustainably produced products</i></li> </ul>

145. Finally, monitoring of the use of funds and implementation of the agreed and financed investment plans will be ensured through the ongoing support and coaching by the technical assistance provider.

146. GCF grants will be used for the matching grants, where screened and approved agri-MSMEs will provide a 50% share of the funds.

### B.3.3. Component 3. Climate change mitigation and adaptation through forestry<sup>172</sup>

147. Component 3 will build upon Component 1 (enabling environment) and Component 2 (VFAG establishment and operationalization),<sup>173</sup> and aims to strengthen the resilience of forest ecosystems and the livelihoods of forest-dependent villages, while reducing emissions through sustainable forest landscape management and the promotion of FLR. The Component supports measure throughout the following forest categories in Lao PDR:<sup>174</sup>

- *Production forests* are natural and planted forests classified for the purpose of timber and NTFP production that are managed by the State in accordance with the Forestry Law (although PMO 31 has imposed a ban on such harvesting since 2013).
- *Protection forests* are forests classified for the function of protecting water resources, riverbanks, roadsides, preventing soil erosion, protecting soil quality, strategic areas for national defence, protection from natural disasters and environmental protection. In protection forests, individuals and villages have certain rights with respect to the harvesting of timber and forest products for their own consumption. They are managed by the Department of Forestry.<sup>175</sup>
- *Conservation forests* (also referred to as National Protected Areas, NPAs) are forests classified for the purposes of conserving nature, preserving plant and animal species, forest ecosystems and other sites of natural, historical, cultural, tourism, environmental, educational and scientific value. Within conservation forest, individuals and villages have certain rights with respect to the harvesting of timber and forest products for their own consumption. They are managed by the Department of Forestry.

<sup>172</sup> Notable changes from FP117 include the mainstreaming of adaptation throughout each activity, including strengthening the consideration of climate information and integration of climate change adaptation measures within the VFM and NPA management plans, and facilitating the implementation of cross-cutting mitigation and adaptation measures through the implementation of these plans. An additional activity has been included to facilitate the re-investment of results-based payments into the project area through the implementation of the approved ER-Programme's Benefit Sharing Plan (Activity 3.1.2).

<sup>173</sup> Specifically, Activities under Component 3 that are subject to Component 1 deliverables are:

For Activity 3.1.1: VFAGs have to be in place after Village Forest Management Planning is concluded, to provide funds for the implementation of annual plans; Land use planning and improved tenure security – Land Use Plans have to be in place as a precondition for VFM; Knowledge management, FPIC, safeguards and gender – FPIC has to be completed as a precondition.

For Activity 3.2.1: Identification of existing and/or establishment of new VFAGs to channel climate finance to target villages – VFAGs have to be in place after National Protected Area (NPA) management planning is concluded, to provide funds for the implementation of annual plans; Knowledge management, FPIC, safeguards and gender – FPIC has to be completed as a precondition.

<sup>174</sup> Village use forests are forests located within a village area, which the government has allocated to the village to manage, preserve use in a sustainable manner in accordance with the legal and regulatory framework. Village forests may be characterised as production, protection and conservation forest (see below).

<sup>175</sup> Smith, H. and Alounsayath, O. (2015), Forest Legality Compendium, Department of Forestry Inspection and Department of Forestry, Lao PDR, p.242.

148. Project 1's phased and gradual approach to scaling up local forest management (such as village forest management, sustainable forest management activities within NPAs), was found to be suitable and necessary to gradually build up the capacities of government staff, and local forest-dependent men and women, addressing key barriers identified in B.2. As such, guidelines developed under Project 1 will be used to replicate and scale up village forest management (Activity 3.1.1), NPA management and Village Forest Conservation Agreements (ViFoCA) in all six provinces (Activity 3.2.1). Activities under Component 3 build on past experiences in Lao PDR, and not only supports the development of climate-informed and sustainable management plans (based on thorough participatory land use planning), but also provides hands-on capacity building and finance to implement the annual operational plans. The anticipated bonus payments (i.e. performance-based payments)<sup>176</sup> will bridge the phase until forests can be commercially used as outlined under article 120 of the revised forest law. In addition, with the approved Benefit Sharing Plan under the ER-Programme sub-national agencies will receive finance to provide their services and village communities will receive finance to further implement their management plans (Activity 3.1.2).

**Output 3.1 Village Communities are trained by capacitated government staff and have the financial resources to implement sustainable (village) forest management plans that contribute to REDD+ and strengthen the resilience of forest ecosystems and the livelihoods that depend on them**

**Activity 3.1.1: Village Forest Management (VFM):**

149. Activity 3.1.1 will support the development, implementation and monitoring of *climate-informed village forest management plans (VFMPs)*. Each VFMP establishes the geographical demarcation of village forestry, the allowable cut, where villagers can harvest, allowable practices and prohibited practices. The baseline in each case varies from village to village. Based on the climate-informed land use plans developed under activity 1.2.2, VFMPs will be designed using a combination of spatial planning and participatory land use planning with villagers as a precondition to support the sustainable management of village forests. The VFMP guidelines already under implementation in Project 1 (CliPAD/GIZ 2016) provide the following examples of permitted activities<sup>177</sup>: 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 provide water for firefighting and water for watering planted tree seedlings; reforestation to promote river bank stabilization and ecosystem-based adaptation; 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; and NTFP management and development.<sup>178</sup>

150. As with the development of the VFMPs, the implementation of the VFMPs will follow the best practices outlined in the VFM Guidelines. Financial resources will be transferred to VFAGs using mechanisms established under GCF Project 1. On average each village community will receive EUR 1,500 per year (at least twice during the project implementation period) to incentivize the implementation of the VFMP. In summary, the EPF will receive budget requests (annual work plans) from village communities and will check them against set criteria. More details on transfer modalities are available in the Climate Change Window Operations Manual (OM) (Annex 21).

**151. Sub-activity 3.1.1.1: Mainstreaming of climate change adaptation in VFMPs and training DAFO and PAFO on climate change adaptation within village forestry (EE: GIZ and GoL / BMZ co-finance):**  
This sub-activity will strengthen climate change adaptation within VFM planning, implementation and monitoring. The VFMP process will be developed considering the climate-informed LUPs developed under

<sup>176</sup> Bonus payments are ex post payments issued by the Climate Change Funding Window to support defined activities that have been achieved according to a pre-defined performance metric (i.e. based on results). Investment payments are ex ante payments issued to VFAG committees to support activities listed in a White-List. For more information refer to Activity 2.1.2 in Chapter B.3, Chapter B.4.3, and the Project Operations Manual (Annex 21).

<sup>177</sup> Each VFMP establishes the geographical demarcation of village forestry, the allowable cut, where villagers can harvest, allowable practices and prohibited practices. The baseline in each case varies from village to village.

<sup>178</sup> For more information on currently permitted activities, refer to the VFMP Guidelines: <https://www.giz.de/en/downloads/Village-Forest-Management-Planning-Guideline.pdf>. It should be noted that Activity 1.3 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.



activity 1.2.2, however further guidance is needed within the context of VFM to strengthen the resilience of forest ecosystems and local livelihoods. This sub-activity will provide the following support:<sup>179</sup>

- Revision of the VFM planning guideline<sup>180</sup> to ensure climate change adaptation is intentionally and systematically considered throughout the process (from planning to implementation and monitoring). This will ensure VFMPs developed, implemented and monitored by the project are climate-informed, and identify suitable measures to strengthen the adoption of ecosystem-based adaptation measures within VFM. Some measures are already often included within VFMPs, e.g. restoration and revegetation of degraded riparian areas, however support from Project 2 will ensure climate change adaptation is intentional and mainstreamed in a systematic manner. It will raise further awareness of PAFO and DAFO officers and villagers on climate change, risks and suitable risk reduction measures.
- Development of training materials for training provincial VFM trainers and training materials for district VFM teams on the revised guideline, and climate change adaptation within VFM.
- Trainings for provincial VFM trainers and district VFM teams on the VFM process and revised guidelines, and best practices for climate resilient and sustainable village forest management.
- Elaboration of informative materials, including materials on climate change (including climate-related risks and risk-reduction practices via VFM and sustainable land management) to support VFMP development processes, and eventually implementation.

152. GCF grants and BMZ co-finance will be used for the implementation of this sub-activity. GCF finance will cover international and national experts to revise the VFM planning guideline, develop training materials and conduct trainings, as well as training costs, and costs for developing, printing and disseminating related materials for capacity building and awareness raising.

153. **Sub-activity 3.1.1.2: Development of VFMPs (EE: GIZ and GoL / GoL and BMZ co-finance):** Based on the climate-informed PLUPs developed under activity 1.2.2, 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. Among others, tools developed by FAO for planning Forest and Landscape Restoration (FLR) will be used in this respect.<sup>181</sup> VFMP development will follow the following key stages as per the aforementioned guideline:<sup>182</sup>

- Stage 1: Demarcation of forest areas and preparation of detailed village forest map
- Stage 2: Participatory Forest Resources Assessment (PFRA) and basic forest inventory
- Stage 3: Preparation of five-year village forest management plan (VFMP)<sup>183</sup>
- Stage 4: Preparation of annual forestry operation plan
- Stage 5: Village forest management agreement

154. GCF grants in combination with co-finance from BMZ and GoL will be used for the implementation of this sub-activity. GCF grants will cover revision of training materials and modules (national and international experts), costs associated with printing and disseminating informational and training materials, conducting trainings on climate-informed village forest management planning for PAFO and DAFO, and trainings for village forest and NTFP management division, PAFO and DAFO on best practices for VFM plan development, investments in equipment to facilitate VFM planning (GPS, camera, IT equipment,

<sup>179</sup> International and national consultants will be hired to support adaptation mainstreaming, the revision of the VFM guideline, and related supporting materials and trainings. Budget will also be provided to print informative materials to support the VFM process (for district VFM teams and villagers), and for training provincial core VFM trainers from PAFO on climate change adaptation, including the revised guideline and best practices to support VFM planning, implementation and monitoring.

<sup>180</sup> Since substantial capacities have been built on the VFMP guideline and considering the project will be implemented in a period of 3.5 years, it is recommended to mainstream climate change adaptation into the guideline, while keeping the overall approach/ stages, which are anyways aligned with a systematic forest planning approach.

<sup>181</sup> GIZ. 2015 Village Forest Management Planning Guideline

<sup>182</sup> For more detailed information on the various stages, refer to the Feasibility Study (Annex 2a).

<sup>183</sup> 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.

relascopes, measuring tapes), and travel costs for government staff to visit villages and support them with the VFM planning process (incl. VFMP development and annual management plans).

155. **Sub-activity 3.1.1.3: Implementation and monitoring of VFMPs (EE: GIZ and GoL - KfW co-finance (implemented by GoL) / GoL and BMZ co-finance):** 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:

- 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.
- Stage 7: Monitoring and evaluation
- Monitoring and evaluation will be linked with the PDMS established and operated under sub-activity 1.2.1.<sup>184</sup>

156. Resources will be transferred to VFAGs, following the same procedures and approach as Project 1. VFAGs will be established under activity 2.1.2, where their set up and operation follows the “Guidelines for the Setup and Operation of Village Forest and Agriculture Grants (VFAGs) under the Implementation of the Governance Forest Landscape and Livelihood (I-GFLL) Programme”. The EPF will receive budget requests from VFAGs and check them against set criteria.<sup>185</sup> More detail on transfer modalities is available in Chapter B.4 and the Climate Change Funding Window Operations Manual (Annex 21).

157. This sub-activity will be financed using GCF grants and co-finance from BMZ (channelled through GIZ and KfW) GoL. GCF grants will cover trainings for PAFO and DAFO staff on best practices for village forest management to support VFMP implementation, travel costs for government staff and trainers to support on the ground trainings, training-related costs for VFM groups on best practices for SFM and support them to implement their VFMPs, and provincial exchange and knowledge dissemination events on best practices for VFM,

158. GCF finance will also provide direct investments in village forests for the implementation of their VFMPs, and will further cover monitoring costs (travel costs for government staff to visit villages and facilitate on-the-ground monitoring and site checks).

**Activity 3.1.2: Implementation of benefit sharing plan for Sustainable Forest Management (SFM) and Forest Landscape Restoration (FLR) (EE: GoL, World Bank co-finance (implemented by GoL):**

159. GCF Projects 1 and 2 are the main investment projects contributing to the GoL's GFLL programme, which further provides the framework for the implementation of the Lao Emission Reduction Programme. As such, the GCF-financed Project 1 and Project 2 and the implementation of the ERPA and benefit sharing plan are closely aligned (see institutions involved below).

160. Activity 3.1.2 builds on the Lao ER-Programme (GFLL), and the FCPF-Emission Reduction Payment Agreement (ERPA), including the implementation of the associated approved benefit sharing plan (BSP). Specifically, through implementation at the sub-national level, and with the consideration of lessons learnt from other projects, including CliPAD and ICBF, this activity will seek to apply a landscape approach that will aim to maximize land use potential and ecosystem services.

161. The Programme targets implementing and scaling up forest landscape restoration and management on at least 70,000 hectares, through assisted natural forest regeneration, plantation development and agroforestry systems to enhance forest carbon stocks.

162. The beneficiaries under the benefit sharing plan (BSP) include:

- Government agencies (at all levels).
- Rural forest-dependent communities, hereinafter named as communities.
- Actors in pilot initiatives, which will include the private sector, non-profit associations, and research and education institutions.

<sup>184</sup> The following monitoring and reporting processes will be guaranteed: i) Quarterly monitoring of progress made in implementation, distributing GCF grants (based on annually approved village forest plans) through the REDD+ Funding Window to VFAGs for the implementation of village forest management activities, reporting illegal activity and reporting conflicts; ii) Annual monitoring of the overall achievement in implementing the annual plan of operation, and preparation of new annual plan of operation; iii) Every 2 years, conduct monitoring of forest condition and forest cover by using PFRA techniques and transect walks; iv) After 5 years, conduct monitoring of the overall achievement of the VFMP, and prepare a new VFMP and new VFM agreement. For more detailed information refer to the Feasibility Study in Annex 2a.

<sup>185</sup> KfW 2017.

163. Through World Bank co-financing, this activity will sustain the implementation and results of activities under component 3 of GCF Project 2, with specific linkages to activities 1.2.1 on land use planning and 3.1.1 on the development and implementation of Village Forest Management Plans. No GCF funds are required for the implementation of this activity.

164. **Sub-activity 3.1.2.1: Operationalization of benefit sharing plan for SFM and FLR:** This sub-activity will focus on operationalizing the approved benefit sharing plan. Specifically, it will strengthen enabling environment for scaling the implementation of SFM and FLR; support the implementation of village forest management; and supporting forest landscape models and sustainable forest plantations. Special focus will be placed on FLR and SFM, including with the objective of restoring degraded forests. The sub-activity should leverage and sustain the village forest management planning process and seek to establish relationships with private sector actors including for the development of commercial forestry activities.

165. The sub-activity will also focus on the development of capacities and training of government staff at sub-national level and of communities. Emphasis and focus will be placed on the development of capacities of vulnerable groups. The sub-activity additionally seeks to strengthen tenure security of village land and forest resources, by supporting and scaling up VFM.<sup>186</sup>

**Output 3.2 NPA management plans are developed and communities are enabled and actively engaged in implementing conservation agreements in NPAs that enable sustainable forest management and forest conservation**

**Activity 3.2.1: National Protected Area (NPA) management:**

166. 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.<sup>187</sup> 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

167. Based on the successful approach from ICBF,<sup>188</sup> applied under GCF project 1, and the experiences and lessons learned from the World Bank LENS II project, among others,<sup>189</sup> activity 3.2.1 will continue to support NPAs and national parks (NPs) supported under Project 1, as well as three additional NPAs:

168. Project 1, specifically, focused on supporting 2 NPAs and 1 National Park: Nam Sam NPA and Nam Et Phou Louey National Park in Houaphan province and Nam Pouy NPA in Sayaboury province. They span 12 districts, all of which have been supported under project 1. These NPAs cover 672,200 ha, of which approximately 96% of this protected area is classified as forest.

169. Project 2 area contains 3 National Protected Areas (NPAs) – Nam Ha in Luang Namtha, Nam Kan in Bokeo province and Phou Hi Phi in Oudomxay province. They span 12 districts, which have all deliberately been selected for GCF project implementation. In total, these 3 NPAs cover an area of 367,150 ha.

170. In particular, activity 3.2.1 will support adaptation mainstreaming within NPA planning and management (Sub-Activity 3.2.1.1), the revision of management plans for NPAs, scaling up participatory and cooperative processes for law enforcement and governance of NPAs (including community-based enforcement and monitoring facilitate through law enforcement action plans, Sub-Activity 3.2.1.2), identification and mapping of villages within and adjacent to NPAs, and the participatory development and implementation of village forest conservation agreements (ViFoCA) in 'guardian villages' (Sub-activities 3.2.1.3 and 3.2.1.4). Such sub-activities and related processes will build on the harmonized implementation approaches developed under project 1, considering lessons learned and best practices from the aforementioned projects. Together, these efforts will reduce deforestation and forest degradation, strengthen the resilience of forest ecosystems against climate change, provide additional incentives for conservation, and strengthen local livelihoods of forest dependent men and women living in and adjacent to NPAs.

<sup>186</sup> This will be additional to the villages supported under Project 2 Activity 3.1.1.

<sup>187</sup> Government of Lao PDR. 2018. Emissions Reduction Programme Document (ER-PD). Available online: [https://www.forestcarbonpartnership.org/system/files/documents/LaoPDR\\_ERPD\\_FinalDraftMay2018-Clean.pdf](https://www.forestcarbonpartnership.org/system/files/documents/LaoPDR_ERPD_FinalDraftMay2018-Clean.pdf); IUCN. 2011. NBSAP Assessment: An assessment of Lao PDR's National Biodiversity Strategy to 2020 and Action Plan to 2010. Gland, Switzerland: IUCN. 46pp.

<sup>188</sup> 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, D. (2015), Integrated Conservation of Forests and Biodiversity ICBF – Introduction, KfW and MoNRE, Lao PDR. Prior to its implementation, extensive Pre-Feasibility and Feasibility Studies were conducted (2012-2015, implementation until 2022), which informed the design of the overall GCF Programme as well as Project 2. The ICBF team has been consulted during the development of Project 1 and 2, and lessons learned have been reflected in the project design (for more information refer to Funding Proposal Chapter B.2 and the Feasibility Study (Annex 2a).

<sup>189</sup> The project further builds on initiatives related to NPA management in Houaphan province (e.g. Wildlife Conservation Society, World Bank supported measures in Nam et Phou Louey NPA, and USAID, SNV and WB supported work in Nam Xam NPA).

171. Financing for this activity will be provided from the Climate Change Funding Window to government entities and to villages. Government entities will be supported by the Province, District and National Management Units (PPMUs, DPMUs and NPMUs) in their annual work planning and budgeting. Work plans and budgets will be submitted to the EPF, and approved funds will then be disbursed in accordance with the Climate Change Funding Window Operations Manual (OM).
172. **Sub-activity 3.2.1.1: Capacity building on climate change adaptation and NPA management (EE: GIZ and GoL):** This sub-activity will support climate change adaptation mainstreaming within NPA management approaches in Lao PDR. It will include the development of supporting materials and revised guidelines to facilitate the integration of climate-information and best practices for strengthening the resilience of forest ecosystems into NPA management plans and ViFoCA (building on PLUP under Activity 1.2.2), and training provincial and district staff on revised guidance, climate-informed NPA planning, and best practices for strengthening resilience through the implementation of SFM and FLR.
173. GCF grant finance will cover the implementation of this sub-activity, and will finance training and capacity building for government staff, national and international experts to support adaptation mainstreaming, and community-focused information material on regulations, livelihood opportunities and training-related information.
174. **Sub-activity 3.2.1.2: Improvement of management and law enforcement in NPA conservation landscape (EE: GIZ and GoL // GoL co-finance):** The 6 NPAs in the project area have NPA Management Plans that are valid until 2025. The project will support the revision of these plans for the next 5-year planning period. The revision of these management plans will build on the climate-informed land use plans developed under Activity 1.2.2, and will ensure adaptation is mainstreamed throughout the plan (building on guidance and capacity building provided under Sub-Activity 3.2.1.1).<sup>190</sup>
175. In addition, this sub-activity will strengthen law enforcement in NPAs and National Parks. Specifically, it will include:
- Investments in law enforcement tools, including patrolling equipment, in line with the needs identified in the LEAPs.
  - Development and implementation of Law Enforcement Action Plans (LEAPs) for 5 NPAs,<sup>191</sup> supporting regular monitoring and enforcement of management plans, where high-risk areas will be targeted by PAFO staff.<sup>192</sup>
  - Development and implementation of a biodiversity monitoring strategy aimed at evaluating the effectiveness of NPA management actions.
  - Implementation of 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, support for strengthening inter-agency cooperation, and provision of equipment to support improved monitoring and enforcement.
  - Village engagement by PPMUs and DAFO staff within guardian villages.
176. GCF grants and GoL co-finance will be used for the implementation of this sub-activity. GCF finance will cover service provision contracts to revise NPA management plans, investments in equipment for NPA management (e.g. GPS, relascope, IT equipment, cameras, sign board and billboards for boundary demarcation), stakeholder consultation and information dissemination events (including travel costs for government staff to visit villages within and in areas adjacent to NPAs).

<sup>190</sup> The revision of NPA management plans will consider, among others: i) assessment of climate risks and vulnerability for the NPA, and development of recommendations to strengthen the resilience of local ecosystems and forest-dependent communities within to climate change. Such assessments will take into consideration upstream and downstream land use dynamics, and potential nature-based solutions to strengthen ecosystem services such as riparian zone protection and stabilization (e.g. reforestation degraded riparian zones, gully control, riverbank stabilization, among others); Assessment of key forest areas and the quantification of current and potential threats as a key component to develop NPA management plans; Zonation: Identification of suitable land use categories and climate-informed PLUP; Assessment and identification of alternative deforestation free and climate resilient livelihood opportunities for which villages will be eligible to receive village-level livelihood grants through village conservation contracts (linking NPA management to the ViFoCA process).

<sup>191</sup> Nam et Phou Louey National Park (Houaphan, Luang Prabang, Xiengkhouang) already has a LEAP that is operational. Lessons learned and best practices from the development and implementation of this LEAP will be considered when developing the plans in the other 5 NPAs in the project area.

<sup>192</sup> Under Project 1 it was noted that each NPA has their own approach, thus Project 2 will also focus efforts to reflect on lessons learned from each NPA, and develop a harmonized approach.



177. **Sub-activity 3.2.1.3: Development of new and amendment of existing village forest conservation agreements (ViFoCA) (EE: GIZ and GoL):** This sub-activity will support the development of new and amendment of existing ViFoCA for villages within or adjacent to NPAs. These agreements will enable villages to access village-based grants for a set of eligible agricultural and forestry activities that support villages' livelihoods and forest protection. The ViFoCA development process will follow guidelines developed by the ICBF project, which are based on a participatory process applying FPIC, and will be coherent with approved NPA management plans. ViFoCA development will also involve awareness raising on climate change and related risks and considerations for resilience building, linked with best practices for reducing deforestation and promoting sustainable land management to strengthen resilience and enhance livelihoods.
178. GCF funds will cover the implementation of this sub-activity, and will cover costs of DAFO and PAFO to update and/or the development of ViFoCA.
179. **Sub-activity 3.2.1.4: Implementation of ViFoCA (sustainable land use, forest conservation and management) (EE: GIZ and GoL/ GoL co-finance):** This sub-activity will facilitate the implementation of ViFoCA developed under the previous sub-activity. Technical and financial support will be provided to implement sustainable land use activities that are aligned with the ViFoCA and NPA management plans. Guidelines developed by the ICBF project will be followed, which permit activities such as the following:<sup>193</sup>
- Natural and enhanced forest restoration.
  - Improved forest use through bamboo management for income generation.
  - Agroforestry for food security and income generation.
  - Non-timber forest products for income generation.
  - Aquatic conservation zones for livelihood benefits.
180. Grants used for the implementation of ViFoCA will reduce the pressure on deforestation and reliance of unsustainable forest use, and will improve household incomes. The application process is described in the Climate Change Funding Window Operations Manual (Annex 21).
181. This sub-activity will be financed through GCF grants and co-finance from GoL. GCF finance will cover equipment operation and maintenance costs, travel costs for government staff to visit villages to support with SFM trainings and ViFoCA monitoring, and will provide village conservation grants for NPA adjacent communities with approved ViFoCA to support them to implement their agreements while strengthening their livelihoods.

#### B.4. Implementation arrangements (max. 1500 words, approximately 3 pages plus diagrams)

182. Since Project 2 will build upon Project 1 and expand the area being covered to the initial six provinces, the institutional arrangements already in place will only change slightly (see Figure 14 below).<sup>194</sup> This is informed through the ongoing implementation of FP117, which validated the suitability of the implemented approach.

##### B.4.1 Project steering structure

183. The National Project Steering Committee (NPSC) provides administrative oversight of the project, ensuring coordination across ministries – initially for Project 1 and upon approval also for Project 2. The NPSC provides strategic implementation guidance to the National Project Management Unit (NPMU) and Provincial Project Steering Committees (PPSCs, the Provincial REDD+ Task Forces), whilst ensuring compliance with the NDC, the National REDD+ Strategy and national socio-economic development objectives. The structure of the NPSC builds upon the existing institutional structure for REDD+ in Lao PDR. Thus, the REDD+ Task Force, as the responsible government entity for REDD+, serves as the NPSC. GIZ, as the Accredited Entity (AE) and one of two Executing Entities (EEs), will maintain observer status on the NPSC in order to provide strategic guidance and ensure that GCF-related guidance and compliance is provided to the national actors. The National Project Steering Committee will meet twice per year throughout the project implementation period, as well as on an ad hoc basis as and when required.

<sup>193</sup> KfW (2017), Village Fund Disbursement and Management Guideline.

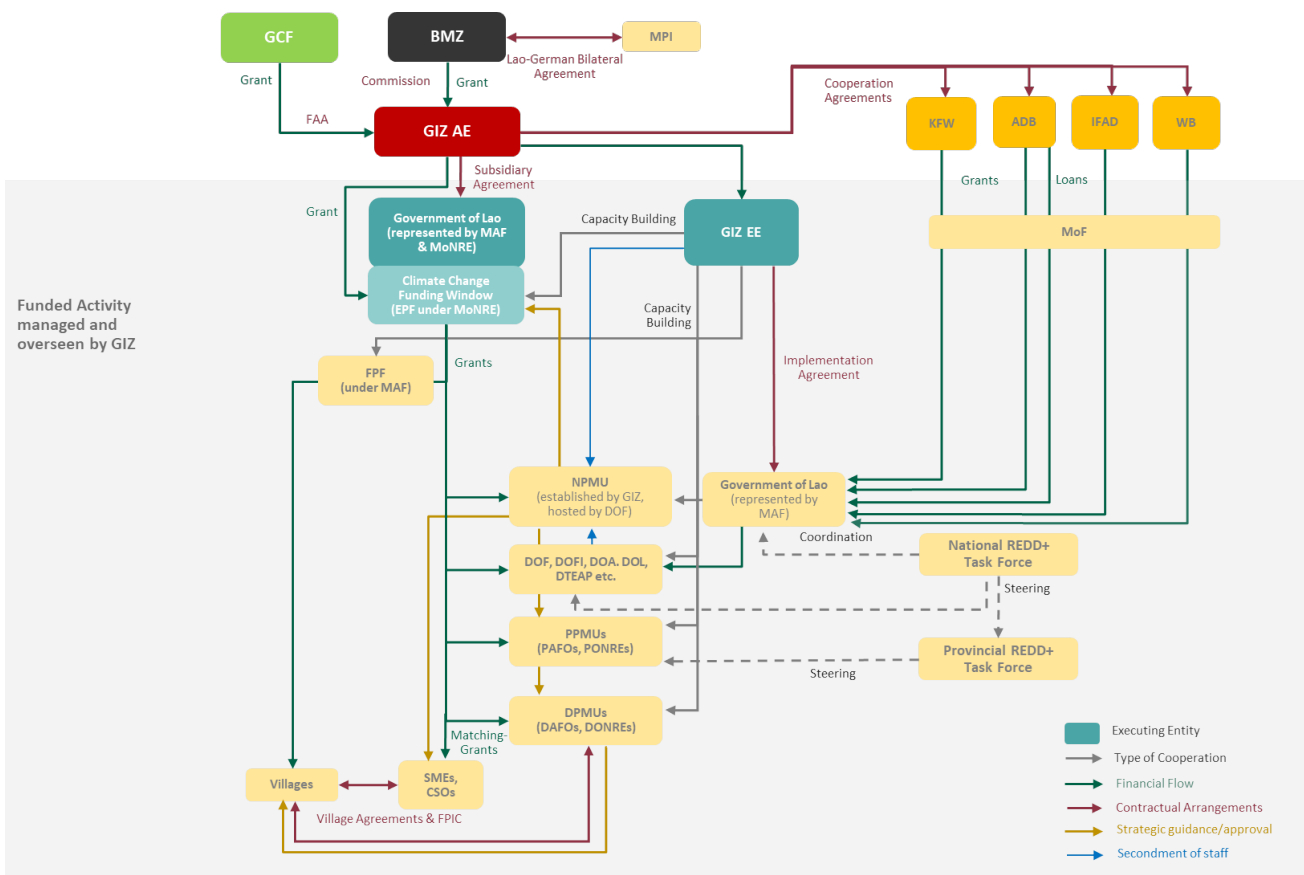
<sup>194</sup> One change is the addition of World Bank as co-financier, where GoL will lead the implementation of Activities 2.1.4 and 3.1.2 with FCPF up-front and results-based payment (mid-term), which are new in comparison to Project 1. JICA, who previously was a cooperation partner under Project 1, will not be formally involved as an implementation partner under Project 2.

184. At the provincial level, the Provincial Project Steering Committees (PPSCs, one for each participating province) will be led by the provincial REDD+ Task Force in each province, which are already in place under the broader ER-Programme. At the provincial level, the PPSCs will meet 4 times per year and review project implementation progress and provide support to address potential bottlenecks related to implementation.

**B.4.2 Project management, implementation and execution structure**

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

**Figure 14: Cooperation and contractual arrangements**



**Role of GIZ as AE**

186. As the AE, GIZ will assume oversight responsibility for Project 2, as defined in the Accreditation Master Agreement between GCF and GIZ (AE). As AE, GIZ will administer project funds on behalf of the GCF and will provide oversight guidance and quality assurance of the EPF as EE through its relevant head office units.

187. In order to implement Project 2, GIZ will need to establish legal arrangements with a new partner (World Bank), and amend legal arrangements with the remaining partners of Project 1 (i.e. IFAD, ADB and KfW - see Figure 15 below):

- The German Federal Ministry for Cooperation and Development (BMZ) will amend the commissioning to GIZ with the implementation of Project 2 (amended commissioning agreement). The GCF will transfer funds based on the Funded Activity Agreement (FAA) to the Accredited Entity GIZ.
- As a new FAA will be signed for Project 2, the Government of Lao PDR (represented by MAF and MoNRE), as the Executing Entity (EE) will sign a new grant agreement (i.e. subsidiary agreement) with

GIZ (AE) for Project 2, based on GIZ standard operating procedures for grant agreements. This subsidiary agreement establishes the legal basis on which GIZ makes the GCF Proceeds available to the Environmental Protection Fund (EPF), as under Project 1, to enable the EPF to continue managing and operating grants disbursement through the Climate Change Funding Window, in accordance with the AMA and FAA.

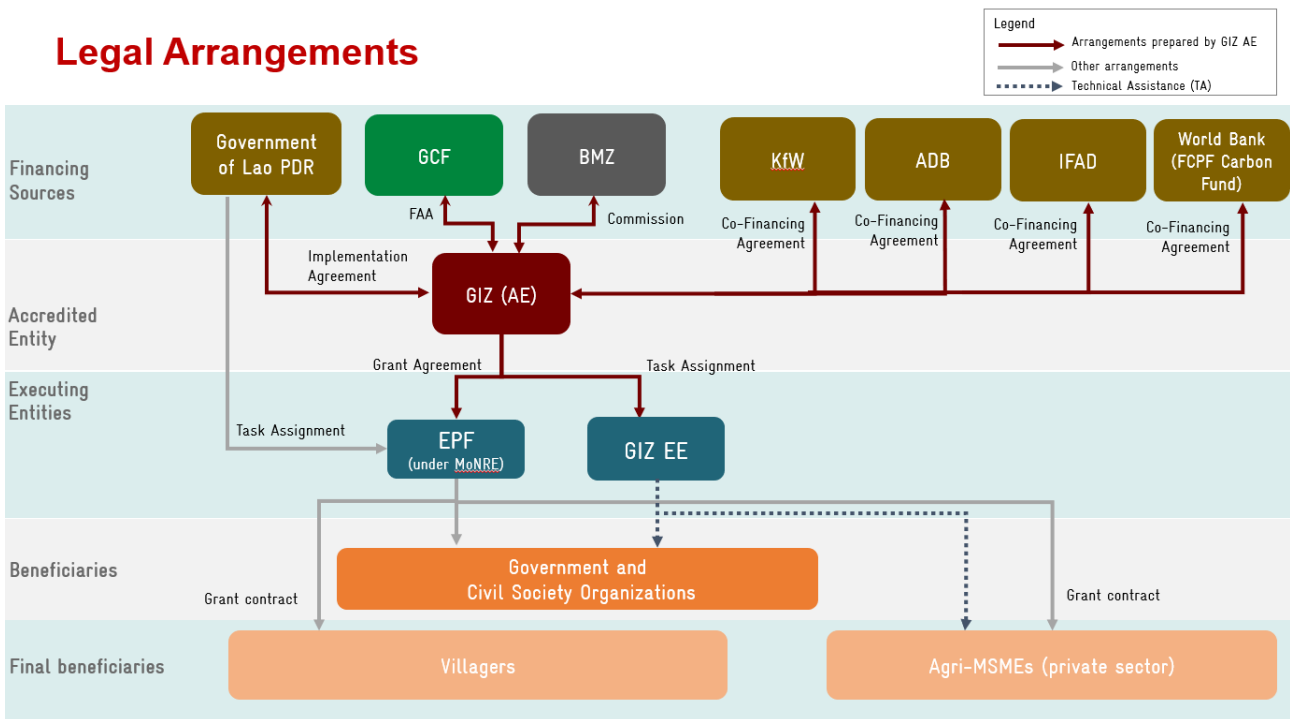
- Finally, GIZ (AE) will amend the existing implementation agreement signed under Project 1 with the Government of Laos (related to the BMZ commission and signed between GIZ and MAF) to cover project 2.

Government of Lao PDR represented by MAF and MoNRE as the main political partners

188. The Government of Lao PDR, represented by the Ministry of Agriculture and Forestry (MAF) and the Ministry of Natural Resources and Environment (MoNRE), will serve as the main political partners. The government’s role in this respect is driven by the following considerations:

- The mandates and functions of the two ministries, notably their sectoral relevance and the fact that MoNRE is the GCF National Designated Authority (NDA) of Lao PDR and is responsible for the EPF; and that MAF serves as the Chair of the REDD+ Task Force and is (together with the Ministry of Finance) the contract signing party with the FCPF Carbon Fund to sell GHG emission reductions and receive results-based payments. MAF is further responsible for the FPF, which will have two roles as: a) a beneficiary receiving capacity building support; b) once its capacities are satisfactorily built to potentially channel funds to beneficiaries.

**Figure 15: Legal implementation and cooperation arrangements**



GIZ as Executing Entity (EE)

189. GIZ has been operating in Lao PDR since 1993 and currently employs approximately 250 staff members, most of them Lao nationals. GIZ technical assistance in the Lao forestry sector amounts to Euro 21 million, with Lao PDR ranking among the top 15 recipient countries of forestry-related German development assistance worldwide.

190. In its capacity as an EE, **GIZ** will lead, and provide overall management of, the Technical Assistance (TA) to Project 2 at national and sub-national levels. It will be responsible for:

- Managing the project budget of GIZ (EE)
- Liaising with the GIZ Regional Office based in Vietnam regarding budget and finances, monitoring and reporting, staff and appraiser contract

- Reporting to the German Embassy and BMZ regarding their financial contributions to the project, as well as the overall progress of project implementation
- Coordinating project implementation with the co-financing development partners and their projects and counterparts, as well as other donors and projects operating in the same technical and/or geographical area.
- Liaising with, and reporting to, the NPSC and PPSCs
- Coordinating with, and reporting to, line ministries involved in the project (MAF, MoNRE), as well as MPI and the GCF NDA in Lao PDR (Department of Planning and Finance within MoNRE)
- Supporting establishment and management of the NPMU, as well as the management of Provincial Project Management Units (PPMUs) in each of the 6 project provinces and District Project Management Units (DPMUs) in each of the project's target districts.

191. GIZ as an EE will be responsible for a GCF budget for Project 2 of EUR 14.14 million.

The Government of Lao PDR as an EE through the Environment Protection Fund

192. The Government of Lao PDR (represented by the MAF and MoNRE) possesses the legal personality to sign a subsidiary agreement with GIZ (AE) regarding the role that the **EPF** will play in operating the Climate Change Funding Window (see below). While the legal agreement with GIZ (AE) will be signed with the Government, the GCF funding will flow from GIZ (AE) direct to the EPF, which will be responsible for (see Climate Change Funding Window Operations Manual and Grant Agreement for more detailed information):

- Securing fiduciary standards regarding all financial management, approvals and disbursements
- Disbursement of grants to 'project owners'<sup>195</sup>
- Responsible for financial management at the project level, following the respective financial guidelines in the Climate Change Funding Window Operations Manual
- Annually submit project level reports to GIZ, as outlined in the Grant Agreement
- Write final programme level report to GIZ
- Submission of final financial statement to GIZ (AE)

193. EPF is also undergoing the process to apply for GCF Accreditation, and this project will further support them to build their capacities (under Activity 1.1.1), and gain valuable experience in implementing a GCF project.

NPMU, PPMUs and DPMUs

194. Project management units will be established at the national, provincial and district level, following the structure applied under Project 1.

195. The **National Project Management Unit (NPMU)**, established within the Department of Forestry (DoF) of MAF under Project 1, will remain in place to manage Project 2. The NPMU's physical location in DoF will continue to foster local ownership of the project, build institutional capacity and to ensure continuous linkage with Government policy-making and implementation of other initiatives.

196. NPMU will continue to closely coordinate with the responsible government agencies on relevant activities and will provide technical and financial management support.

197. In relation to the operationalisation of the Climate Change Funding Window the NPMU will have following responsibilities<sup>196</sup>:

- Revision, consolidation and approval of the Annual Work Plan (AWP)
- Supporting the preparation of quarterly plans at the national, provincial and district level
- Provision of technical assistance to national government entities, PPMUs, DPMUs and civil society organizations (CSOs)<sup>197</sup>
- Assigning a NPMU team to supervise the implementation of national government entity and CSO quarterly plans
- Appraisal, approval and monitoring of all quarterly plans (following criteria outlined in the Operations Manual in Annex 21)
- Final approval of "VFAG Fund Requests" from VFAG-Cs

<sup>195</sup> Referred to as project owners in the operations manual, referring to entities who directly receive funding from EPF to implement actions and receiving funds under the Quarterly Plans, i.e. national government entities (DOF, DOFI, DOL), provincial government entities (PAFOs), district government entities (DAFOs), VFAGs and CSOs. Each Project Owner has a bank account specific to I-GFLL implementation.

<sup>196</sup> Coordination between the EPF with GIZ (EE) and DOF – will be ensured through their participation during NPMU quarterly meetings. Furthermore, GIZ as EE will steer capacity building measures for the EPF and will provide technical support to the EPF as described under Activity 1.1.1.

<sup>197</sup> In order to ensure capacities remain at DoF after project completion, capacities are being built to enable a transformational change and enable income generation from sustainable climate resilient and deforestation free agriculture and land use during the course of the project. See Chapter B.6 for more detailed information.



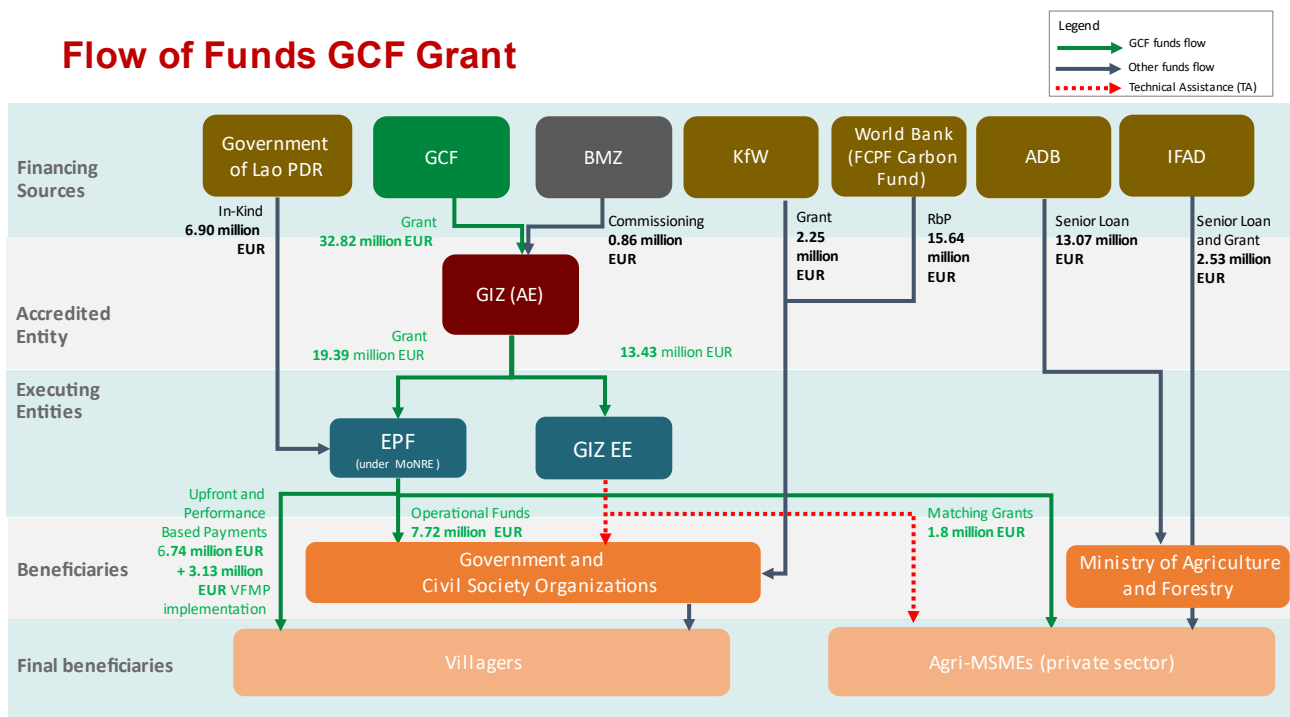
- Jointly review and approval of applications of Agri-MSEMs Matching Grants together with the EPF and GIZ during NPMU quarterly meetings
- Monitoring of the Agri-MSEMs Matching Grants investments
- Support the preparation and final approval of monthly implementation reports
- Give recommendations to PPMU and DPMUs based on implementation monitoring
- Supporting risk management processes as outlined in the Project Operations Manual
- Oversee project implementation

198. PPMUs and DPMUs, under the instruction of the NPMU, will assist the NPMU team in executing the above responsibilities. In addition to mirroring national-level responsibilities at the local level, PPMUs and DPMUs will have an additional responsibility at the provincial and district levels. In the event that project beneficiaries (e.g. VFAGs) are not able to independently prepare adequate annual operational plans and budgets, PPMUs and DPMUs will assist beneficiaries to complete appropriate plans. Detailed responsibilities and processes are described in the Climate Change Funding Window Operations Manual.<sup>198</sup>

### B.4.3 Flow of Funds

199. The following Figure 16 depicts the overall flow of funds for Project 2. Funds from GCF will be transferred to GIZ as AE, who will then transfer funds through the EPF Climate Change Funding Window to the beneficiaries and directly to GIZ Lao PDR (in its role as EE). KfW, World Bank, ADB and IFAD provide co-financing through the Government of Laos.

Figure 16: Fund flow structure



### Climate change funding window project cycle and fund disbursement process

200. As described above, GIZ will make GCF Proceeds available to the environment Protection Fund, who will then channel funds to beneficiaries through the Climate Change Funding Window, developed and utilized under Project 1. Detailed procedures are outlined in the Climate Change Funding Window Operations Manual (Annex 21).<sup>199</sup>

201. The EPF, as described in the Operations Manual (Annex 21), is responsible for the administration and transfer of project funds to beneficiaries, including all related financial monitoring and auditing and ensuring

<sup>198</sup> See Figures 2 and 3, and Table 2 in Annex 21 for more detailed information.

<sup>199</sup> Currently the Operations Manual developed under Project 1 only cover four out of five payment types including operational funds, investment payments, upfront payments and bonus payments. Matching grants as the fifth type of payment will be included in an updated version of the Operations Manual.

- compliance with the GCF ESS and Gender requirements. Detailed responsibilities and the role of the NPMU and EPF are stated under chapter 1.4 Processes and Responsibilities in the Operations Manual.
202. Grant payments channelled through the Climate Change Funding Window are of five types: operational funds, investment payments, upfront payments, bonus payments and matching grants. Operational payments ensure the implementation of planned activities (for instance, capacity development measures, equipment procurement, etc.). Upfront payments are ex ante payments issued to beneficiaries to support defined activities (outlined in a written budget request submitted by the beneficiary to the NPMU). Bonus payments are ex post payments issued by the Climate Change Funding Window to support defined activities that have been achieved according to a pre-defined performance metric. Investment payments are ex ante payments issued to VFAG-Cs to support activities listed in a white-list (for Good Agriculture Practices). Matching grants are payments issued in form of business contracts for agri-MSMEs to support (linked to Activity 2.2.1), and were redesigned under Project 2.
203. The choice of payment modality for particular project elements has been made primarily on the basis of beneficiaries' capabilities and incentives (i.e. a realistic assessment of their ability to implement activities using pre-existing skills and financial resources). Note, however, that in some respects the distinction between upfront payments and performance-based payments is somewhat artificial. Upfront payments will be issued on an annual basis. This means that, if continued funding is required, the beneficiary will be required to submit a new funding request. This provides an opportunity for the NPMU technical team to assess beneficiary performance to date and, if needed, to stipulate corrective actions or to withhold subsequent payments. Thus, even for upfront payments there is a performance-based element.
204. Grant payments to beneficiaries through the Climate Change Funding Window will range between approximately Euro 10,000 to Euro 50,000. The value of each grant payment will be determined by the amount requested by the beneficiary for specific activities (in the form of an ex ante written funding request), the amount subsequently agreed with the NPMU technical team and the beneficiary on the basis of the beneficiary's initial request, and – if there is an ex-post performance element – on the verified performance of the implemented activities. The basis for all payments besides matching grants is detailed annual workplans for national, provincial and district (including village) levels. Workplans will be developed during joint planning meetings and through the participation/involvement of all concerned stakeholders (government, CSOs, private sector, etc.). Within those plans, the timelines, budgets, concerned organizations, implementing agencies, performance metrics (if relevant), etc. will be noted and agreed on.
205. Through the Climate Change Funding Window, the EPF will channel Euro 19.39 million of the GCF grant to Project 2 beneficiaries (Table 10 below).

**Table 10: Beneficiary eligibility criteria for the Climate Change Funding Window**

Beneficiary Category	Activities supported through the Climate Change Funding Window	Eligibility Criteria to receive Funding through the Climate Change Funding Window
Government agencies (at national, provincial and district levels)	Law enforcement; land use planning; agriculture and forestry; MRV; safeguards implementation	<ul style="list-style-type: none"> <li>▪ Approval of budget requests submitted to the NPMU</li> </ul>
VFAG	PSAP investment plans, VFAG-related management and monitoring	<ul style="list-style-type: none"> <li>▪ Eligible VFAGs must be in the target villages. VFAG guidelines outline various conditions and criteria that VFAGs must comply with. This includes (among others): Approval of budget requests submitted to the NPMU; establishment of a VFAG committee in beneficiary villages; activities seeking funding conform with a White List of eligible activities (PSAP).</li> <li>▪ For more information please refer to the VFAG guidelines (Annex 2f).</li> </ul>
Micro, Small and Medium agri-Enterprises (MSMEs)	Matching grants (up to 50%) to support climate resilient and	<ul style="list-style-type: none"> <li>• Agri-MSME</li> <li>• Focus on processing or marketing at least 1 commodity within the subset of the “White List”</li> <li>• Eligible investment areas (see table Indicative positive list of investment categories)</li> </ul>

	deforestation free value chain development	<ul style="list-style-type: none"> <li>• Must be officially registered with DoC in Lao PDR</li> <li>• Company must be in operations for at least 2 years.</li> <li>• Must have operations in one of the 6 target provinces (at the province, district, or village level)</li> <li>• Must have a bank account at the point of matching grant application; must show financial statements for at least one year.</li> <li>• Must be able to provide up to 50% of co-financing</li> </ul>
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**Table 11. Climate Change Funding Window Grant Allocations**

Climate Change Funding Window Sub-Window	Total Operational Funds (Euro)	Total Upfront Payments (Euro)	Total VFMP/ViFoCA Implementation	Total Performance-based Payments (Euro)	Total Payments (Euro)
Government and CSOs <sup>200</sup>	7.72 million				7.72 million
VFAGs		3.84 million	3.13 million	2.9 million	9.87 million
Agri-MSMEs		1.8 million			1.8 million
Total	7.72 million	5.64 million	3.13	2.9 million	19.39 million

#### **B.4.4 Regulation, taxation and insurance**

##### Privileges, immunities and taxation

206. 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 and programmes of technical cooperation, including exemptions for taxes, customs, duties and fees. GIZ will endeavour to reach arrangements to have these privileges and immunities also applied to Project 2, including GCF proceeds. However, formal agreements will only be entered into after the project has been approved.

##### Approvals, permits, licenses and land

207. At the time of submitting this Funding Proposal, GIZ is not aware of the project requiring specific approvals, permits, licences or land to allow for the implementation of planned activities.

##### Currency

208. The local currency in Laos is the Lao KIP (code: LAK). The project's local transactions will use LAK. The AE will manage GCF proceeds in Euro. GIZ will apply its standard rates for the conversion of currency.

##### Insurance

209. GIZ, as the AE, will ensure that project 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 policies provide insurance cover for GIZ staff. At the time of submitting the Funding Proposal, GIZ does not anticipate additional insurance to cover special risks in this project.

#### **B.5. Justification for GCF funding request (max. 1000 words, approximately 2 pages)**

210. After decades of losing tropical forest, Lao PDR is actively seeking to implement an ambitious REDD+ emission reductions programme. Laos has committed substantial domestic resources, and has worked closely with bilateral and multilateral donors, to reach its current level of REDD+ readiness and ability to

<sup>200</sup> The Government and CSOs sub-windows are presented in combined form here because they closely complement each other (as merged in the Operational Manual).

transform its forest sector. But capacity and funding gaps remain. No developing country has ever managed to achieve sustainable management of its forests and landscapes alone anywhere in the world. The degree and complexity of the necessary change is high. The need for financial and technical assistance is high. The updated NDC (2020) explicitly highlights the need for external support in achieving the 70% forest cover and the conditional target for emission reductions.

211. At the same time, Northern Lao PDR is among the most vulnerable regions in the country to climate change, which poses substantial risks to the local population who is highly dependent on the particularly exposed agricultural sector for their livelihoods and wellbeing. Climate change poses a risk to human wellbeing, food security, and ecosystem health. The updated NDC notes the forestry and agriculture sector are among prioritized sectors in terms of climate change adaptation, and specifically highlights the need to strengthen cross-cutting measures with clear climate change mitigation and adaptation benefits. The AFOLU sector has substantial potential to strengthen cross-cutting measures, and Project 2 has been designed to strengthen the role of adaptation through building capacities, strengthening the use of climate information in planning and decision making, mobilizing finance for both mitigation and adaptation in the AFOLU sector, and scaling up cross-cutting investments with clear adaptation and mitigation benefits. Building on, and coordinating with, complementary initiatives, Lao PDR will deploy GCF support to remove investment barriers to unlock future results-based payments, domestic taxes and fees, and to create a sustainable environment for scaling-up REDD+ and climate resilient land use activities (see also Sections B. 6 and D.2 below). The transformation envisioned by the programme requires the active participation of private sector actors in the forestry and agriculture sectors. However, sustainability focused markets are severely underdeveloped and those focused on deforestation free products are almost non-existent. The development of these markets necessitates that significant technical support and targeted financial support is also provided to the private sector.
212. Lao PDR needs GCF support in the form of a patient long-term commitment, which goes beyond the potential of Laos's existing development partners and other potential financing alternatives:
- **Alternative 1 – More public financing:** The Government of Lao PDR is committed and contributes a substantial amount of co-finance (Euro 11.8 million) to Project 1 and anticipates a co-financing contribution of EUR 6.9 million to Project 2.
  - **Alternative 2 – More grants from other development partners:** All of Lao PDR's main development partners in the forest sector already support the GCF project. Germany and Japan have both committed grant financing to Project 1, and ADB and IFAD have committed loan packages for the implementation of improved agricultural practices and to reduce the pressure on expansion into forested landscapes. The World Bank (FCPF Carbon Fund) is offering Lao PDR REDD+ results-based payments. Additionally, the FCPF has worked closely with GIZ and the government to support the development of the GCF Programme by scheduling the ESMF and gender work streams to match the project's needs. The FCPF has also provided key data for the development of the project. With this support, there are still gaps to meet the country's ambitious climate targets.
  - **Alternative 3 – Additional loans for the Government of Lao PDR:** According to the IMF's 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 develop a comprehensive medium-term debt management strategy.*" Despite these constraints, the government borrowed Euro 24.1 million from ADB and Euro 11.35 million from IFAD to complement both GCF projects. Since the development of Project 1, Lao PDR's economy has been hit hard by the COVID-19 pandemic. UNICEF released a series of reports in 2021 that note the country's economy could contract by 1.8-3.3%, and there are substantial urgent investments needed to support the country's pandemic response (e.g. health care, nutrition and food security, among others).<sup>201</sup> In August 2020, Moody's downgraded Lao PDR's issuer rating to Caa2 from B3 noting a negative outlook and highlighting that "*Laos is facing severe liquidity stress, given sizeable debt servicing payments due this year and persisting until 2025, and constrained financing options. Heightened liquidity risk is exacerbated by weak external and fiscal buffers and poor governance, and points to a material probability of default in the near term.*"<sup>202</sup> Thus, there is limited ability for Lao PDR, a LLDC, to take on additional loans for climate change in this particularly challenging context, although support for a climate action and a green recovery to the COVID-19 pandemic is urgently needed.
  - **Alternative 4 – Loans for households and agri-MSMEs:** The beneficiary groups – village subsistence farmers – are among the poorest population groups in Lao PDR, with a high dependence

<sup>201</sup> UNICEF Lao PDR. 2021. [Impact of COVID-19 on Lao PDR.](#)

<sup>202</sup> Moody's Investors Service Inc. 2020. [Rating Action: Moody's downgrades Laos's rating to Caa2, outlook changed to negative.](#)



on natural resources and poor access to markets and financial services, and they have insufficient assets for the repayment of loans. Approximately 28% of inhabitants in the Project 1 area live below the poverty line, higher than the national average of 23%. The possibility of working with local financial institutions was scoped during the project formulation process. During the development of this FP, five local financial institutions were consulted to assess their potential support to the project and specifically for managing the matching grants for agri-MSMEs and developing tailored products. The consultations revealed that this would not be feasible amongst other reasons due to the inability of institutions consulted for managing international grant finance and their operational footprint in target areas (see Annex 2a for more details). Thus grant financing combined with technical assistance has been determined to be the most 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. Support for agri-MSME's will require matching grants, to ensure their ownership and commitment to the project, while the provision of business plan development and investment support will enable them to implement and scale up more sustainable investments in the future, after the GCF project provides initial support to get their investments in sustainable and deforestation free value chains off the ground.

213. As such, in the absence of viable alternatives, the Government requests GCF grant financing, which will enable the project to:

- Help overcome the government's constraints to source public funding or assume additional debt to invest in measures needed to reduce deforestation and forest degradation and strengthen climate resilience.
- Demonstrate and scale-up investments in deforestation free, and climate resilient agriculture, and forest landscape restoration and related value chains.
- Strengthen the use of climate-data in land use planning, and ensure integrated planning at the watershed level (through scaling up the implementation of the revised PLUP 2.0 process, and related capacity development).
- Build the capacities of forest-dependent persons to understand climate-risks, and suitable risk reduction practices in the AFOLU sector, while supporting the capacity development of institutional structures (VFAGs) that may facilitate access to additional funds for climate change mitigation and adaptation in the future.
- Build national capacities to mobilize, channel and monitor climate finance, from both domestic and international sources.
- Strengthen an enabling environment for REDD+, climate resilient agriculture and ecosystem-based adaptation in Lao PDR, including strengthened law enforcement and monitoring, and climate-informed land use planning.
- Strengthen the often-overlooked interlinkages between REDD+ and climate change adaptation, and support the mobilization of funds for cross-cutting measures in the agriculture and forestry sectors.
- Implement Lao PDR's updated NDC, including adaptation measures in the agriculture and forestry sector, and helping the country to meet conditional emission reduction targets.
- Facilitate the engagement of the private sector, and specifically agri-MSMEs through the use of matching grants, in the development of sustainable, climate resilient and deforestation free value chains that remain after project implementation. This would not happen in the absence of concessional finance due to the barriers faced by these actors to access finance in general and finance for sustainability-oriented investments in particular.

214. To ensure efficiency, effectiveness and sustainability in the use of grants, the project applies the following principles:

- The AE and EPF will disburse GCF grants in tranches, with the second and consecutive tranches conditional on financial accounting.
- Grant finance channelled by EPF will benefit from efficiency gains from the processes developed, and experiences generated, under Project 1. It will also help the fund acquire capacities related to climate finance and prepare them to develop, implement, manage and monitor their own GCF or climate finance projects in the future
- The GoL will make available unlocked financing (results-based payments, tax, fees) to finance sustainable deforestation free and climate resilient investments in AFOLU, replacing GCF grants and closing the funding gap to transform the forest sector.
- Concessionally to the private sector will be minimal and processes will be in place to ensure that matching grants are specifically targeted at closing the viability gaps faced by agri-MSME for

investments that support the development of climate resilient and deforestation free value chains and the predictability of demand for sustainably produced agricultural products at village level.

215. In addition, lessons learned from Project 1 have been reflected in the design of the Project 2, where activities have been adjusted to strengthen climate change adaptation and ensure the efficient and effective use of grant resources (highlighted in throughout Section B.3, and further discussed within Annex 2c). A clear financial exit strategy has been developed, which shows how project activities will contribute to a sustained paradigm shift, and continue to mobilize additional public and private financial resources in the future that will enable continued scaling up of sustainable land use practices and investments (see Sections B.6 and D.2 below).

### B.6. Exit strategy (max. 500 words, approximately 1 page)

216. The entire project approach is designed around a distinct exit strategy: GCF grant financing will enable the GoL to: (i) initially and temporarily close the structural funding gap for transforming the forest sector through the provision of GCF grant finance, and (ii) permanently close the structural funding gap by unlocking and increasing additional financing streams for the sector. The key elements of the exit strategy are:

- **Enable access to REDD+ results-based payments to facilitate the upscaling of cross-cutting measures for sustainable land management:** Project 2 will build on the advances from Project 1, and continue to scale up necessary activities that build up an enabling environment for REDD+ and sustainable land management (e.g. climate-informed, participatory and integrated land use planning, strengthened law enforcement and monitoring), while scaling investments in deforestation free and climate resilient agriculture practices, sustainable forest management and forest landscape restoration. These measures will continue to help deliver emission reductions that enable Lao PDR to access REDD+ RBP – initially, and most concretely, through the FCPF Carbon Fund and later through other potential (e.g. UNFCCC) channels.<sup>203</sup> The project's focus on strengthening adaptation will also help channel mobilized funds for REDD+ into activities and investments with clear adaptation benefits.
- **Attract increased private sector investment:** The project is designed to facilitate greater (and more sustainability-oriented) private sector investment in the forestry and agriculture sectors. Project 2 activities specifically devoted to private sector development (Component 2) will mobilise new and additional investment and provide targeted investment support for agri-MSMEs – an often overlooked actor with substantial potential to facilitate a transformational change in the target sectors. By developing and deploying tailored matching grants for agri-SMES, the project will mobilize at least EUR 1.8 million for supporting the development of climate resilient and deforestation free value chains increasing the predictability of demand for producers adopting PSAP promoted farming models. The enabling environment for facilitating additional private sector investment be further strengthened by improved capacities on sustainable forest and agricultural land management, as well as advancements in law enforcement and monitoring that will create an improved investment climate by strengthening the implementation of the revised regulatory framework (supported under Project 1) and ensuring transparency and accountability for sustainable land-based investments.
- **Mobilise national and international sustainable finance for sustainable and climate resilient land management and REDD+:** With GCF support, the structural funding gap will be closed by unlocking and increasing additional national and international financing streams for the forest and agricultural sectors. Matching grants for agri-MSMEs will catalyse private sector investments in deforestation free and climate resilient agricultural value chains. The implementation of sustainably planned VFMPs will take into account new provisions under the forest law, enabling villagers to benefit from the commercial use and sale of timber and NTFPs from village forests, providing direct income to villagers, and providing revenue to the Forest Protection Fund through forest licensing fees, and taxes. The project will also help identify suitable new funding sources and actively facilitate that Laos gains access. Project 2 (specifically Activity 1.1.1) will further explore additional and suitable sources of long-term finance, including (among others):
  - Alternative REDD+ results-based payments for ERs generated in excess of the contract volume of the FCPF Carbon Fund. This will include potential market- and non-market voluntary initiatives such as the Lowering Emissions by Accelerating Forest Finance Coalition or participation in broader voluntary carbon markets demanding ERs from jurisdictional programs. The project will

<sup>203</sup> Double counting of emission reductions – understood to involve an emission reduction being counted more than once towards a mitigation pledge – will be avoided through the transparent reporting and accounting of emission reductions using UNFCCC (e.g. BUR technical annex), NDC and FCPF accounting protocols. Once the Government of Lao PDR receives FCPF payments for emission reductions, those emission reductions will be retired so that they cannot be 're-used'.

provide overall support for facilitating conformance with the methodological requirements (accounting and safeguards) of market-oriented carbon standards such as ART/TREES<sup>204</sup> or others.

- Market and cooperative approaches under Article 6 of the Paris Agreement, where Lao PDR will be supported on developing its approach to define eligible land use programs, projects, and units within their NDC; adherence to integrity principles, and with capacities to meet the requirements of an enhanced transparency framework to address issues related to corresponding adjustments.
- Overall support to the NDA to develop a financing strategy to identify and fundraise climate finance to meet conditional NDC targets and the climate change adaptation investment needs outlined in the NDC and that considers domestic government revenues as well potential strategies to work with private impact investors active in the region<sup>205</sup>.

217. Figure 17 below provides an overview of the main financing mechanisms the project plans to utilize to achieve its impact, contribute to a paradigm shift, and ensure the overall long-term sustainability of the project.

- **Develop the capacities of EPF and FPF to mobilize and channel climate finance:** The project will continue to strengthen the capacities of the EPF, which acts as an EE, to manage parts of grant financing for the project. The project will continue to channel GCF grant financing (in a staggered, performance-based manner) through the Climate Change Funding Window to participating villages and stakeholders for implementing SFM, FLR and deforestation free agriculture as well as matching grants to agri-MSMEs.<sup>206</sup> Project 2 will further build the capacity of EPF as it undergoes its GCF accreditation process (aligned with their 2<sup>nd</sup> GCF Readiness Grant), eventually enabling EPF to develop and implement their own GCF projects. Project 2 will also continue to support capacity building of FPF, in close coordination with the World Bank, to help them to meet the necessary international standards required for them to take over fund management and disbursement (including REDD+ results-based payments), and realize their legal mandate to collect and disburse forest sector financing to the district and village levels.
- **Strengthen the provision of alternative livelihood opportunities that facilitate a transition towards low-emission, deforestation free and climate resilient livelihoods and land use:** Additional income and livelihood opportunities, in conjunction with capacity building, extension support, participatory land use planning and reasonable law enforcement, will create a cascading effect and maintain the low-emission development trajectory triggered by the project. Project 2's strengthening of adaptation measures, including integrating planning in a landscape approach and scaling up climate resilient investments (among others), will further facilitate strengthened resilience of local livelihoods and the ecosystems upon which they depend. The financial and economic analysis (Annex 3) demonstrates that the proposed interventions are viable in the long-run, with positive net present values as well as many other social, economic and environmental co-benefits.
- **Ensure alignment with national policies and development plans:** The project is closely aligned with, and explicitly supportive of government policies and plans. By aligning the project with key national climate policies, priorities and commitments, the changes of continuity of impacts and activities after the GCF investment ends are very high.

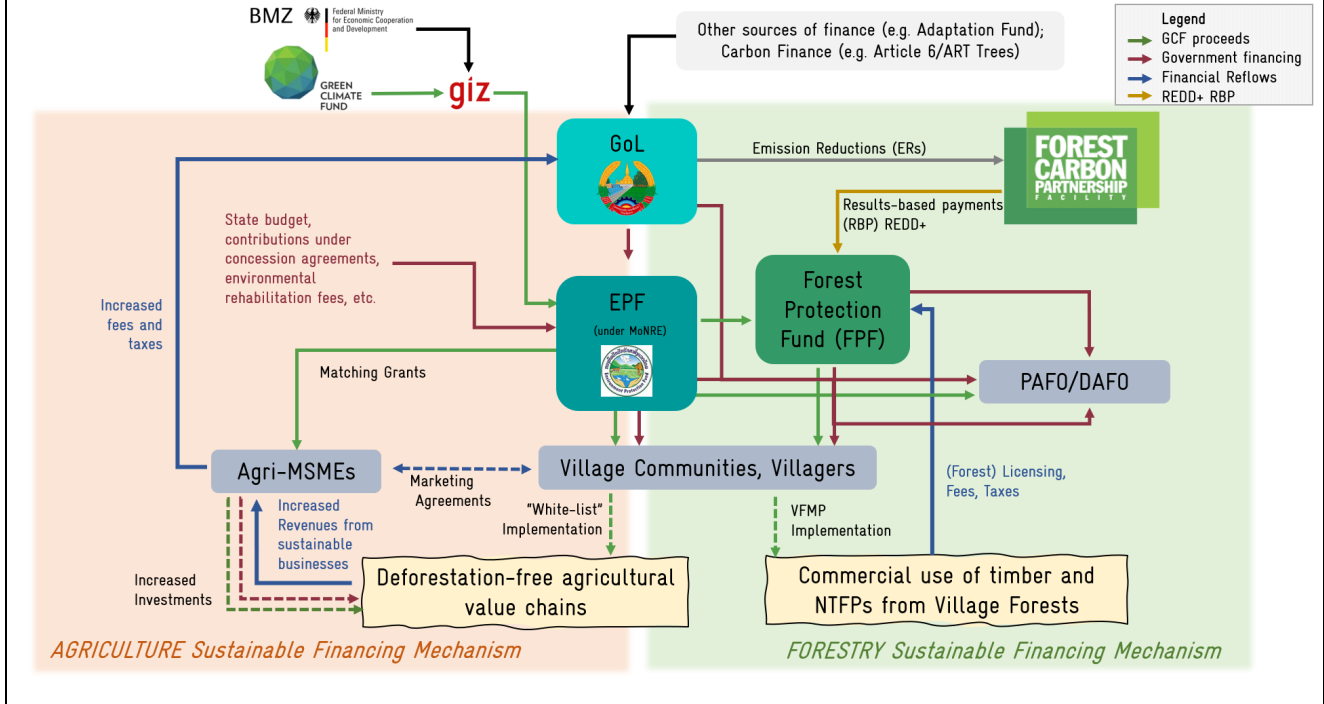
218. It will be the responsibility of the Government of Lao PDR, including the National REDD+ Task Force, MoNRE (including EPF) and MAF, to monitor and ensure that the structural funding gaps for low-emission, deforestation free and climate resilient land use will be closed. The National REDD+ Task Force, with its given mandate, will follow-up with and provide guidance to the Provincial REDD+ Task Force, chaired by the respective governors, to ensure the sustainability of the GCF financed paradigm shift pathway. In addition, strengthened capacities of EPF and FPF, as described above, will further facilitate improved monitoring, mobilization and channelling of public and private climate finance.

<sup>204</sup> The close link to the ER Programme ensures that excess ER are compatible with emerging market-based approaches like the LEAF programme that was initiated by the Governments of Norway and UK to bring more private sector finance into REDD+ while maintaining high environmental integrity (<https://leafcoalition.org/>). The Methodological Framework of the Carbon Fund allows fungibility of ER with the ART/TREES (<https://www.artredd.org/>) with limited adaptation (5-year reference period for the FREL). ART/TREES is anticipated to be the main standard for high integrity market transactions for jurisdictional and national REDD+ programs and shall also inform the development of any mechanism under Article 6 of the Paris Agreement. Thus, continued performance in reducing emissions even after the expiry of the CF ERPA opens the opportunity to access to international financing sources for REDD+.

<sup>205</sup> The few impact investors active in the country are predominantly invested in renewable energy and the provision of financial services. Prasad, M., Bauer, S., Gokhale, A., Borthakur, S., & Reddy, H. (n.d.). THE LANDSCAPE FOR IMPACT INVESTING IN SOUTHEAST ASIA. 40.

<sup>206</sup> For more information on the financing modalities, please refer to Chapter B.4.

**Figure 17: Overview of the complementary financing mechanisms utilized by the project to contribute to the project's long-term sustainability**





C. FINANCING INFORMATION						
C.1. Total financing						
(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)	Total amount			Currency		
	32.82			million euro (€)		
GCF financial instrument	Amount	Tenor	Grace period	Pricing		
(i) Senior loans	32.82					
(ii) Subordinated loans						
(iii) Equity						
(iv) Guarantees						
(v) Reimbursable grants						
(vi) Grants						
(vii) Results-based payments						
(b) Co-financing information	Total amount			Currency		
	41.26			million euro (€)		
Name of institution	Financial instrument	Amount	Currency	Tenor & grace	Pricing	Seniority
Government of Lao PDR	<u>In kind</u>	<u>6.91</u>	<u>million euro (€)</u>			
BMZ (implemented through GIZ)	<u>Grant</u>	<u>0.86</u>	<u>million euro (€)</u>			
ADB	<u>Senior Loan and grant</u>	<u>13.07</u>	<u>million euro (€)</u>			
IFAD	<u>Senior Loans</u>	<u>2.53</u>	<u>million euro (€)</u>			
BMZ (implemented through KfW)	<u>Grant</u>	<u>2.25</u>	<u>million euro (€)</u>			
World Bank (FCPF)	<u>FCPF Results-based payments</u>	<u>15.64</u>	<u>million euro (€)</u>			
(c) Total financing (c) = (a)+(b)	Amount			Currency		
	<u>74.08</u>			<u>million euro (€)</u>		
(d) Other financing arrangements and contributions (max. 250 words,	<p><u>Project 2 Co-finance:</u>  The following provides an overview of the co-financiers for Project 2:<sup>207</sup>  <b>The Government of Lao PDR</b> will contribute co-finance of Euro 5.92 million towards the implementation of Project 2. Key government inputs will be staff time contributions by national-, provincial- and district-level staff.</p>					

<sup>207</sup> Co-financing commitment letters are provided in Annex 13.

<p>approximately 0.5 page)</p>	<p><b>BMZ financing:</b> The total BMZ financing for the project amounts to Euro 3.11 million of this, Euro 0.86 million will be implemented through GIZ as an Executing Entity in Lao PDR. GIZ (Executing Entity) will finance the implementation of Activities 1.1.1, activity 1.2.1, 1.2.3, 2.1.1, 2.1.2 and 3.2.1 as well as parts of activities 3.1.1. The remaining Euro 2.25 million of BMZ financing will be implemented by KfW through its Village Forest Management Programme (VFMP).</p> <p><b>ADB</b> will provide co-financing of Euro 13.07 million to implement Activity 2.1.3 (in conjunction with the Sustainable Rural Infrastructure and Watershed Management Sector project, SRIWSM).</p> <p>The <b>IFAD PICSA</b> loan project with the Government of Lao PDR will co-finance Project 2 with Euro 2.53 million to support the implementation of Activity 2.1.3. IFAD will provide loans direct to the Ministry of Agriculture. The IFAD loan is a stand-alone, sovereign loan to the Government, which will be supervised on technical and fiduciary aspects. IFAD will also supervise procurements. IFAD supervision will involve field missions to the project area to check compliance with procedures.</p> <p>The <b>World Bank</b> through the FCPF Carbon Fund will co-finance Project 2 with EUR 15.64 million to support and sustain the implementation of activities under Components 2 and 3. World Bank co-finance will implement Activities 2.1.4 and 3.1.2 through the operationalization of the Benefit Sharing Plan in the six target provinces.</p> <p><u>Co-Financing Flows</u> IFAD, KfW and ADB sign loan contracts with the Lao Government (MoF/MAF) to channels funds to MAF and then onwards to the Departments in the Ministry and to sub-national agencies; BMZ channels funds to GIZ and GIZ then provides mainly technical assistance to local partners. See Chapter B.4 for more detailed information.</p> <p><u>Other financing (e.g., mobilized private finance) pr:</u> The project will mobilize at least EUR 1.8 million from the private sector, and specifically agri-MSMES, for supporting the development of climate resilient and deforestation free value chains through the strategic use of matching grants (Activity 2.2.1).</p>
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**C.2. Financing by component**

The following Table provides an overview of project finance by component and co-financing partners.

Component	Output	Indicative cost Options	GCF financing		Co-financing		
			Amount Options	Financial Instrument	Amount Options	Financial Instrument	Name of Institutions
Component 1: Creation of an enabling environment for REDD+ implementation	Output 1.1: Organizational structure and capacities of domestic (financial) institutions are strengthened to access, mobilize, manage, and monitor the use of climate finance from diverse public and private sources	1.70	1.64	Grants	0.06	In-kind Grants	GoL BMZ

	<u>Output 1.2: Participatory Village Land Use Plans are developed and are climate informed and integrate measures to strengthen climate resilience</u>	<u>6.64</u>	<u>4.84</u>	<u>Grants</u>	<u>1.81</u>	<u>in-kind Grants</u>	<u>GoL BMZ KfW</u>
<u>Component 2: Market solutions for agricultural drivers of deforestation</u>	<u>Output 2.1: Villagers are trained by capacitated government staff and enabled to produce sustainable, climate resilient and deforestation-free agricultural and agroforestry products, strengthening their access to sustainability-oriented markets</u>	<u>35.39</u>	<u>11.89</u>	<u>Grants</u>	<u>23.50</u>	<u>In-kind Grants Senior-Loans RbP</u>	<u>GoL BMZ ADB IFAD WB</u>
	<u>Output 2.2: Agri-MSMEs are capacitated and have improved incentives and access to finance to invest in marketing and processing for locally sourced deforestation-free and climate resilient agricultural products</u>	<u>3.08</u>	<u>3.08</u>	<u>Grants</u>			
<u>Component 3: Climate Change mitigation and</u>	<u>Output 3.1: Village communities are trained by capacitated government</u>	<u>14.87</u>	<u>5.53</u>	<u>Grants</u>	<u>9.34</u>	<u>In-kind Grants RbP</u>	<u>GoL BMZ KfW WB</u>

<u>adaptation through forestry</u>	<u>staff and have the financial resources to implement sustainable (village) forest management plans that contribute to REDD+ and strengthen the resilience of forest ecosystems and their livelihoods that depend on them</u>						
	<u>Output 3.2: NPA management plans are developed and communities are enabled and actively engaged in implementing conservation agreements in NPAs that enable sustainable forest management and forest conservation</u>	<u>4.22</u>	<u>2.25</u>	<u>Grants</u>	<u>1.97</u>	<u>In-kind</u>	<u>GoL</u>
<u>PMC</u>		<u>6.07</u>	<u>1.49</u>		<u>4.58</u>		<u>GoL</u> <u>BMZ</u> <u>IFAD</u> <u>WB</u>
<u>M&amp;E</u>		<u>1.60</u>	<u>1.60</u>				
<u>Contingencies</u>		<u>0.5</u>	<u>0.5</u>				
<b>Indicative total cost (EUR)</b>		<u>74.08</u>	<u>32.82</u>		<u>41.26</u>		

**C.3 Capacity building and technology development/transfer (max. 250 words, approximately 0.5 page)**

C.3.1 Does GCF funding finance capacity building activities?

Yes  No

C.3.2. Does GCF funding finance technology development/transfer?

Yes  No

219. The long-term sustainability of project interventions is enhanced by the project's focus on individual and institutional capacity building, both of the project's implementing 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 climate change, related risks and suitable best practices for climate-resilient and sustainable land use management. Through strengthened awareness and capacities, it is likely that they will continue to support such measures after project completion (see also Sections B.6 and D.2). Such interventions will further enhance the sense of ownership of provincial and district governments during the project lifetime, as well as the ongoing implementation of such activities after project closure.

## D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

This section refers to the performance of the project/programme against the investment criteria as set out in the GCF's [Initial Investment Framework](#).

### D.1. Impact potential (max. 500 words, approximately 1 page)

#### D.1.1 Impact Potential - Mitigation

220. The ER-P Reference Level (RL) accounting area covers precisely the same six provinces (Bokeo, Houaphan, Luang Namtha, Luang Prabang, Oudomxay and Sayaboury) as covered by this GCF project: therefore, the geographical footprints of the ER-P Reference Level and the GCF project are the same.
221. The methodological approach is based on the methodology used for the preparation of the Reference Level (RL), which was submitted and approved (in June 2018) by the FCPF Carbon Fund and is compliant with the Carbon Fund Methodological Framework<sup>208</sup>. The approach equates to a highly detailed Tier 3 approach in IPCC terminology. 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). The same methodology will be replicated for the ex-post assessment of the achieved GHG emission reductions and removals within the GCF Programme.
222. Project 2 (this project) mitigates 4.6 million tCO<sub>2</sub>eq during its 4-year implementation period, at a cost to the GCF of Euro 5.06/tCO<sub>2</sub>eq.<sup>209</sup> The overarching GCF Programme (i.e. Projects 1 and 2) will mitigate 11.7 million tCO<sub>2</sub>eq during the programme implementation period of 7 years (2020-2026).
223. The emission reduction potential is calculated similarly as for Project 1. It applies the FRL of the ER-Programme (including activity data and emission factors, forest cover change matrices for the years 2005, 2010 and 2015) and considers the forest area (by land use) being targeted through the forestry related interventions under component 3 (i.e. >260.000 ha).
224. Details on the calculations of the baseline scenario and the projection of the GCF implementation are outlined in the GHG Methodology Note in Annex 22a.
225. Large areas of the project area are covered by regenerating vegetation with the possibility to recover to mature forest under sustainable forest management (based on expert consultations). In 2050, when all designated forest areas are completely recovered and under sustainable management, the project area will be characterised as zero net emission forestry, contributing to Lao PDR's target to reach carbon neutrality by 2050 (as mentioned within Lao PDR's updated NDC).<sup>210</sup>

#### D.1.2. Impact Potential - Adaptation

226. Even though the project has its origins in mitigation, it does have adaptation merits, and Project 2 has been intentionally designed to mainstream adaptation throughout its activities. Lao PDR is a LDC with limited adaptive capacities, which is highly vulnerable to climate change impacts. Indeed, forestry and agriculture are two of four key sectors highlighted by Lao PDR's National Adaptation Programme of Action (NAPA),<sup>211</sup> as well as two of five key sectors identified in the NDC as being highly vulnerable to climate change.<sup>212</sup> The country is considered to have a high risk of river flooding, landslides, cyclones and wildfires, a medium risk for extreme heat;<sup>213</sup> and there are specific climate change impacts identified for the regions to be targeted with this project (see also the CRVA in Annex 2d).
227. Although this GCF proposal is a REDD+ initiative, it builds on the NDC that highlights the possibility to strengthen cross-cutting measures in the forestry and agricultural sectors. The proposal incorporates interventions that will promote climate change adaptation – notably enhanced land-use planning (including improved considerations to link local level planning to the watershed level), improvements to irrigation infrastructure, reforestation in catchment areas and low-emission and climate resilient agriculture, among others. It further supports private sector MSMEs to strengthen climate resilient and low-emission agricultural value chains, which will provide incentives that help mobilize additional finance for climate change mitigation and adaptation in the country. Beyond this, the project will support the mobilization and improved channelling of public and private funds for climate finance, including a strengthened emphasis on supporting investments that have cross-cutting climate change impacts (not only mitigation).

### Direct and Indirect Beneficiaries

<sup>208</sup> FCPF (2016), available at: <https://www.forestcarbonpartnership.org/sites/fcp/files/2016/July/FCPF%20Carbon%20Fund%20Methodological%20Framework%20revised%202016.pdf>.

<sup>209</sup> 80% mitigation share being considered for the calculation; budget requested for component 1-3.

<sup>210</sup> Lao PDR 2021. Nationally Determined Contribution.

<sup>211</sup> Lao PDR. 2009. National Adaptation Programme of Action to Climate Change.

<sup>212</sup> Lao PDR 2021. Nationally Determined Contribution.

<sup>213</sup> GFDRR. Global Facility for Disaster Risk Reduction. No Date. Lao People's Democratic Republic.

228. As described in Chapters B.1 and D.4, the project will work in some of the most vulnerable areas of Lao PDR, focusing on a sub-set of the population who is particularly at risk – smallholder farmers in predominantly upland areas, of which nearly half belong to ethnic minority groups.
229. Project 2 will directly support 153,700 persons (76,850 men and 76,850 women – equivalent to 2.15% of the national population) to implement climate resilient practices, including climate resilient and low-emission agriculture, as well as various measures for forest landscape restoration (implementing FLR in village forests and NPAs).<sup>214</sup> It will also contribute to increased generation and use of climate information in decision-making, through improved participatory land use planning, considering the link between local land use planning and the landscape level. By supporting the implementation of FLR, Ecosystem-based Adaptation (EbA), SFM and low-emission and climate resilient agriculture, based on integrated planning processes, it will further strengthen awareness of climate threats and risk-reduction processes. At the Programme level (i.e. Projects 1 and 2), 273,700 persons will directly benefit from the Programme (136,850 women and 136,850 men), equivalent to 3.8% of the national population).
230. Indirectly, Project 2 is expected to benefit 332,991 persons (166,496 women and 166,496 men – equivalent to 4.6% of the national population) through investments in sustainable land practices that will maintain or improve the provision of vital ecosystem services, as well as through improved forest monitoring and strengthened government capacities on climate change mitigation and adaptation.<sup>215</sup> The overarching Programme will indirectly benefit 723,382 persons (361,691 women and 361,691 men), equivalent to 10% of the national population.

### **Ecosystems brought under improved, deforestation-free and climate-resilient land management**

231. The overarching Programme will bring 2,112,000 ha of terrestrial ecosystems under improved sustainable and climate-resilient land management practices informed by PLUP, of which 1,422,000 are forest ecosystems,<sup>216</sup> and 700,000 ha area agro-ecosystems.<sup>217</sup> This includes also sustainable land management in 5 NPAs and 1 National Park, where the project will facilitate the restoration of forested land and the vital ecosystem services it provides. Through updating NPA management plans, strengthening forest monitoring and law enforcement, and through working closely with local communities to implement village forest conservation agreements the project will support the restoration and/or adoption of improved practices in 1,039,350 ha of conservation forests (see Chapter 6.6 for more information on the practices implemented in NPAs).<sup>218</sup> The total area of forests covered under village forest management plans is 382,650 ha.<sup>219</sup>
232. Focusing on the area of land covered directly by measures financed from VFAGs (related to PSAP and VFM), forest landscape restoration and sustainable forest management practices, including EbA, will be implemented on

<sup>214</sup> **Direct beneficiaries** calculated based on the following assumptions:

- 530 villages will be supported in Project 2 (240 villages with continued support from project 1, and an additional 290 villages under Project 2). There are approximately 530 people per village.
- It is assumed all villagers in the target villages are direct beneficiaries, as they will benefit from land use planning and other project-supported interventions.
- Population data is based on the average rural village size in the project area based on the Lao Population and Housing Census Data 2015 ([https://lao.unfpa.org/sites/default/files/pub-pdf/PHC-ENG-FNAL-WEB\\_0.pdf](https://lao.unfpa.org/sites/default/files/pub-pdf/PHC-ENG-FNAL-WEB_0.pdf)).

<sup>215</sup> **Indirect beneficiaries** are considered the population in the 29 districts covered by the project (17 districts within Luang Prabang, Sayaboury and Houaphan, and an additional 12 districts from Bokeo, Oudomxay and Luang Namtha), minus the number of direct beneficiaries. The population in all 29 districts will benefit from strengthened legal and regulatory frameworks from Project 1 and continued awareness raising and capacity building under Project 2, improved forest monitoring through PDMS, and strengthened government capacities on climate change mitigation and adaptation. The 29 districts are listed in Chapter 6.7, and the district population data was collected from the Lao PDR Population and Housing Census (2015).

<sup>216</sup> The Area (ha) under sustainable forest practices across forest categories = area of village forest and NPAs supported by the project. Project 2 will continue supporting NPAs and Village Forests Areas that are supported under Project 1.

Village forests supported:

- 180,000 ha of village forests from project 1 will continue to be supported by Project 2
- Project 2 is expected to support 290 new villages with VFM. The average area of village forests covered under project 1 was 700 ha. Therefore, it is estimated that new VF groups under Project 2 will cover 203,000 ha.

<sup>217</sup> Calculated considering the average village under Project 1 had 1,320.75 ha of agricultural land. This was then multiplied by 530 villages.

<sup>218</sup> Project 2 will work in 5 NPAs and 1 NP. Areas of NPAs and NP are determined based on their latest management plans. Baseline figures cover the 2 NPAs and 1 National Park covered under Project 1 (total area circa 672,200 ha): 70,000 ha Nam Sam NPA; 411,000 ha Nam et Phou Louey NP; and 191,200 ha Nam Pouy NPA. The total figure under project 2 includes the baseline figures plus 3 additional NPAs supported in Bokeo, Luang Namtha and Oudomxay (combined area of 367,150 ha in these 3 NPAs): 87,350 ha Phou Hi Phi NPA; 222,400 ha Nam Ha NPA; 57,400 ha Nam Kan NPA

<sup>219</sup> Village forests supported includes forests supported under Project 1 plus additional village forests established under Project 2. A total of 179,650 ha of village forests from project 1 will continue to be supported by Project 2. Project 2 is expected to support 290 new villages with VFM. The average area of village forests covered under project 1 was 700 ha. Therefore, it is estimated that new VF groups under Project 2 will cover 203,000 ha.

191,500 ha of forested land,<sup>220</sup> and low-emission and climate resilient measures will be implemented on in an additional 17,400 ha for a total Programme coverage of 31,800 ha of agricultural land.

233. Table 12 below provides more detailed information about how the project addresses the main climate-related hazards. In addition, Table in Section B.3 provides an overview of the adaptation and mitigation impacts of a subset of crops included within the White List. The development of tools and strengthening institutional capacities on climate change adaptation within the AFOLU sector, supported throughout all 3 components as a cross-cutting element, will further facilitate replication and upscaling (see also Chapters E.2 and E.4 below).

**Table 12: Overview of climate-related hazards and their impacts and how the project aims to address them**

Hazard	Impact	Project Interventions	Project Impact
Increased occurrence of extreme precipitation events and floods in the monsoon season	Increased occurrence of seasonal flooding during the monsoon season may lead to damage and losses of crops and livestock, damage to rural and transportation infrastructure, as well as a change in environmental services due to adverse environmental impacts (e.g. soil erosion and sedimentation). As majority of the population in the project area are smallholder farmers, including a high proportion of farmers from ethnic minorities, their livelihoods and food security will be adversely impacted.	Development and implementation of village forest management plans that consider climate risk and vulnerability within their planning and management practices (e.g. restoration of riparian buffer zones, implementing ecosystem-based approaches to strengthen resilience). Adoption of climate resilient agricultural practices, based on climate-informed PLUP, will also promote the selection of suitable practices with adaptation benefits (e.g. stabilization of soils and reducing sedimentation through agroforestry, planting bamboo in gully areas, etc.)	<ul style="list-style-type: none"> <li>Increased resilience of local livelihoods, and forest and agro-ecosystems<sup>221</sup> to floods through ecosystem-based adaptation and the adoption of climate resilient agricultural practices.</li> <li>Reduced risk of food insecurity due to EbA increasing the resilience against floods.</li> </ul>
Increased occurrence of extreme heat and droughts	Rising temperatures and increased occurrence of droughts and extreme heat may lead adversely impact crops (e.g. maize) and livestock (e.g. loss of productivity, crop failure, need for more input, erosion and soil degradation, pests and disease, among others). As majority of the population in the project area are smallholder farmers, many of which belong to ethnic minority groups, their livelihoods and food security will be adversely impacted due to agricultural losses and damages.	Promotion of climate resilient agricultural practices based on participatory land use planning processes, considering climate risk and resilience. Examples of practices promoted include: agroforestry (cardamom, coffee, fodder, fruit trees), <sup>222</sup> intercropping, improved livestock grazing areas (including shade), beekeeping with native bee species, among others. ADB financed Activity <sup>223</sup> applies a value chain and market linkage strategy to reduce the market and business risk for dry-season irrigators, including ensuring climate-informed planning and upgrading irrigation schemes, to	<ul style="list-style-type: none"> <li>Increased resilience of local livelihoods and agro-ecosystems due to the adoption of more resilient agricultural practices, based on climate-informed land use plans.</li> <li>Reduced risk of food insecurity due to the adoption of climate resilient agriculture and EbA increasing the resilience against droughts, and extreme heat (improving production, promoting diversification and reducing risk).</li> </ul>

<sup>220</sup> E.g. Forest patrolling for protection against encroachment; fire prevention (e.g. digging fire breaks, ploughing firebreaks, controlled burning of fire breaks, etc.); building small water reservoirs to provide water for firefighting and water for watering planted tree seedlings; reforestation to promote river bank stabilization and ecosystem-based adaptation; 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; and NTFP management and development. See Chapter **Error! Reference source not found.** for more information on the activities implemented in VFMPs.

<sup>221</sup> Specific areas of forest and agro-ecosystems to be provided in the feasibility study and funding proposal based on further spatial analysis.

<sup>222</sup> Promotion of agroforestry (with site-species matching of appropriate species) through Component 2 "White List", which can help stabilize soils and protect them against erosion (wind and rain), improve soil moisture, and create a micro-climate buffering effect, among other positive environmental impacts.

<sup>223</sup> The provincial teams in charge for the implementation of Project 1 are working closely together with the ADB and IFAD project in the three provinces. Cooperation modalities are in place, e.g. through PPMU (Provincial Project Management Unit), regular technical exchanges, often staff are based in the same office; exchange on and alignment of approaches and methodologies (e.g. ADB/IFAD applies the PLUP 2.0 guidelines; at district level the same people are in charge to implement I-GFLL (GCF 1) and ADB/IFAD project.



		strengthen the resilience of production and related value chains against increasingly dry conditions and drought. In addition, IFAD and ADB will support efforts that link agriculture to nutrition and natural resources promoting climate resilient practices that help address food and nutrition security (e.g. village nutrition teams).	<ul style="list-style-type: none"> <li>Value adding opportunities associated with climate resilient and deforestation free value chains are expected to further strengthen adaptive capacities of farmers.</li> </ul>
Increased occurrence of wildfires due to increasing temperatures and increasingly dry conditions.	<p>While it is not possible to separate wildfires from the anthropogenic triggers (e.g. the use of fire for clearing fallow land), there will be an increased risk that could increase both the frequency and severity of fires due to increasingly dry conditions and increasing temperatures. It may also be more difficult to put out forest fires in increasingly drier and warmer conditions. As an indirect impact of wildfires, there may also be a higher risk of erosion and sedimentation, that can in-turn increase flooding risks.</p> <p>Large scale forest fires can adversely impact forest function. In addition, fires can spread to adjacent villages, national parks (and ecotourism facilities), forest and agricultural plantations leading to losses and damages. They can lead to the loss of human life, and are attributed with diverse adverse health impacts including respiratory problems, and cardiovascular disease, among others.</p>	Development and implementation of village forest management plans that consider climate risk and vulnerability within their planning and management practices (including wildfire prevention and management). Capacity development on awareness and best practices will be supported for provincial and district governments on wildfire prevention and management, and village forestry groups will be trained on climate risks and best practices for prevention and resilience building.	<ul style="list-style-type: none"> <li>Increased resilience of the livelihoods of forest-dependent communities and forest ecosystems upon which they depend through the application of sustainable forest management practices that helps strengthen their resilience to wildfires (e.g. fire break-lines, fire management, improved awareness and warnings).</li> </ul>

**D.2. Paradigm shift potential (max. 500 words, approximately 1 page)**

**D.2.1 Overall contribution to climate resilient, deforestation free and low-emission development pathways<sup>224</sup>**

234. To overcome path dependencies and support a paradigm shift, the project will continue the initiated changes in current land and forest management practices of Project 1, and expand the approaches (based on lessons learned from project 1) to 3 new provinces. Elements contributing to the overall paradigm shift in the project area, including the following (see also Figure 18 below):

- Implement climate-informed participatory land use planning and measures to strengthen tenure security, improve land use planning, and implement these land use plans:** Project 2 will continue to scale up the PLUP 2.0 approach, with a strengthened focus on climate change adaptation,<sup>225</sup> to 290 villages, including the integration of participatory land use plans into broader village cluster level plans, to facilitate holistic planning, promote watershed protection, and address upstream and downstream interlinkages between land use and land use change, and climate risks to stabilize the mountainous shifting cultivation landscapes of Northern Laos.
- Scale up investments in sustainable, climate resilient and deforestation free agricultural practices:** The proposed GCF project specifically focuses on investments at village level in both agriculture and forestry. Based on the new forest law, villagers can use timber for commercial purposes, providing an additional incentive for the sustainable management of village forests. With investments through VFAG for the implementation of VFMPs, ViFoCA and PSAP (White List), options and incentives to change current business practices towards deforestation free, low emission and climate resilient practices are provided. This is further aided by strengthening linkages with private sector actors in support of the development of climate resilient and deforestation free agricultural value chains that that not only provide climate benefits, but also provide predictability of demand for sustainable agricultural production and reduce pressure on forests. This includes agri-SMEs and sustainability-oriented agroforestry companies, as well as actors in the Lao National Chamber

<sup>224</sup> For more information, refer to Chapter E.2.

<sup>225</sup> Climate change adaptation supplement to be developed to ensure adaptation is integrated within the PLUP 2.0 approach, with related capacity building on climate change, including risks and resilience building, to be conducted for government staff and local villagers. For more information refer to the detailed activity sheets in the Feasibility Study (Annex 2a)

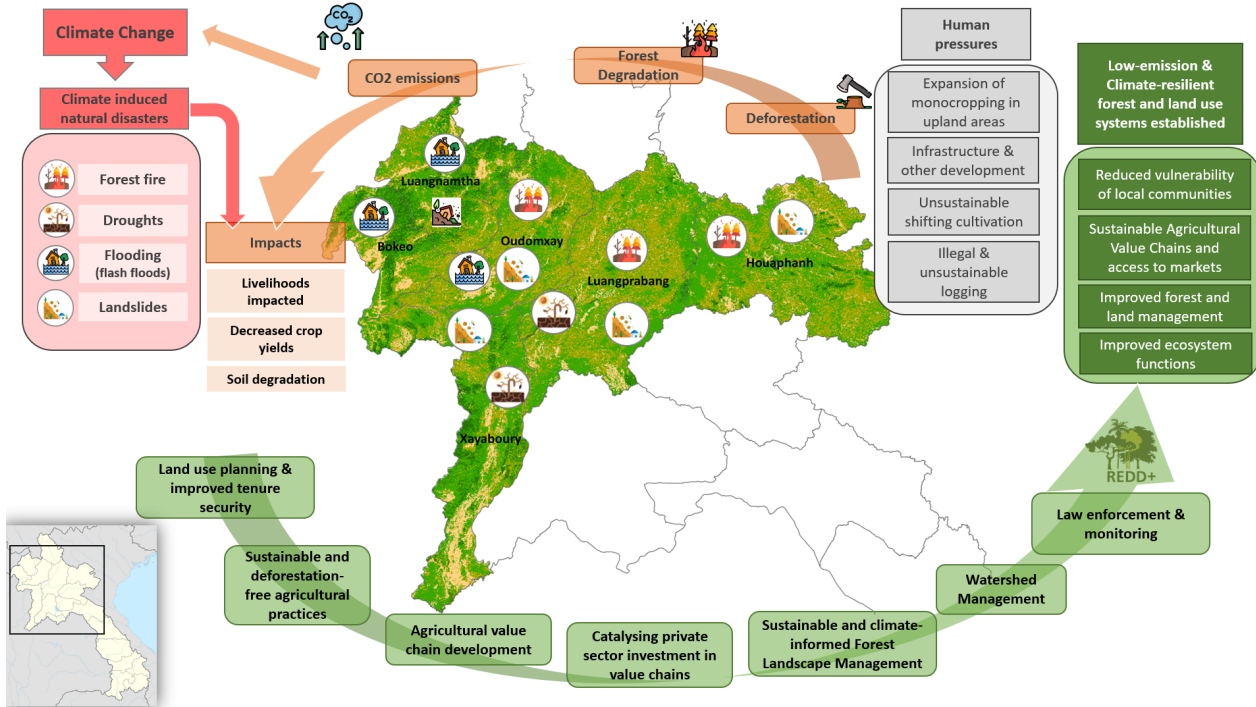
of Commerce and Industry. Beyond this, Project 2 supports the implementation of the NDC to through nature-based climate change solutions, while strengthening synergies between adaptation and mitigation in the forestry and agricultural sectors. Adaptation measures have been strengthened within Project 2, recognizing the interlinked dynamics between land use and land use change and climate risk/resilience, and the potential to strengthen cross-cutting measures with both adaptation and mitigation benefits for local forest-dependent communities and ecosystems.

- **Catalyse private sector investments in value chains with incentives to transition towards climate resilient, low-emission and deforestation free value chains in the AFOLU sector:** The project's jurisdictional approach bridging agriculture, forestry and financial sectors and business activities is critical to enable real land use changes and more sustainable forest and food systems. The project is also supporting the development of sustainable value chains by linking agri-MSMEs to producers adopting deforestation-free agriculture with the aim of facilitating market access for sustainably produced products at village level. Agri-MSMEs committed to the sustainable transformation and processing with offtake agreements from capacitated local producers are key to enable a paradigm shift towards low-emission and climate resilient land and forest management.
- **Scale-up investments in sustainable and climate resilient forest landscape management, and watershed protection:** Project 2 will continue to work on watershed protection through activity 2.1.3 co-financed by ADB as well as with village forestry and NPAs to prioritize sustainable management, while generating livelihood opportunities for local forest-dependent communities to benefit from the sustainable management of forest resources. This will include supporting the planning and implementation of VFMPs and ViFoCA to enable communities to benefit from provisions under the new forestry law, which enables communities to receive additional benefits for the sustainable management and utilization of forest resources. By conducting climate-informed PLUP, VFMPs and NPA management plans will build on these processes, and create a more holistic and harmonized planning approach facilitating improved forest landscape management, reflected in the plans developed, implemented and monitored by the project.
- **Strengthen law enforcement and monitoring:** Project 2 will continue to bridge national strategies with regional realities, where the revised and improved legal and regulatory framework for forestry (supported under Project 1) will be applied at scale within the project region, improving the enforcement of new regulations. Project 2 will also establish PDMS in the 3 additional provinces under project 2, and support the operationalization of these systems (and related institutional strengthening) in all six provinces. A strengthened emphasis in Project 2 will be placed on ecosystem-based adaptation, and how forest management can strengthen the resilience of forest ecosystems and forest-dependent communities.
- **Improve the mobilization and monitoring of sustainable finance for investments in climate resilient and deforestation free sustainable land management:**
  - Ensure climate finance is accessible to local beneficiaries: The Climate Change Funding Window brings concrete benefits to local beneficiaries, incentivizing villages to develop climate-informed village development plans with a vision of change. Its set up further ensures there are clear incentives for performance, and is transforming how climate finance is mobilized to local villages within Lao PDR.
  - Strengthen institutional capacities for mobilizing and channelling climate finance: Continued capacity building for EPF and FPF will support Lao PDR to improve the mobilization and channelling of funds for climate action (including from international funds, through the future GCF accreditation of EPF, and through additional results-based payments for REDD+, among others).
  - Development of additional incentives to mobilize private sector finance and facilitate a transition towards more sustainable value chains: The project's matching grant-scheme targets agri-MSMEs, a key actor at the interface of production and markets, to support the development of sustainable value chains and the transition towards deforestation free and climate resilient agriculture and agroforestry value chains (Activity 2.2.1). This activity will reward private sector enterprises, agri-MSMEs, and provide capacity building in sustainable agricultural practices and markets, which could potentially reduce the need to expand the agricultural frontier and therefore protect vital forest ecosystems.
  - Increase mobilization of additional climate finance: Project interventions are further expected to increase access to finance, and mobilize additional funds for climate action. The project includes measures to facilitate improved access to international climate finance, including mechanisms related to the implementation of Article 6 of the Paris Agreement, as well as from voluntary REDD+ initiatives, with cross-cutting adaptation benefits (reflecting lessons learned from strengthening cross-cutting benefits from REDD+ within this project), based on market and non-market mechanisms.<sup>226</sup> Domestic government revenues may also potentially increase from fees, royalties, fines and taxes.

<sup>226</sup> The project will strengthen opportunities for REDD+ finance to contribute to cross-cutting interventions, with both climate change mitigation and adaptation benefits (e.g. FLR in degraded forest areas, climate resilient and deforestation free agriculture).

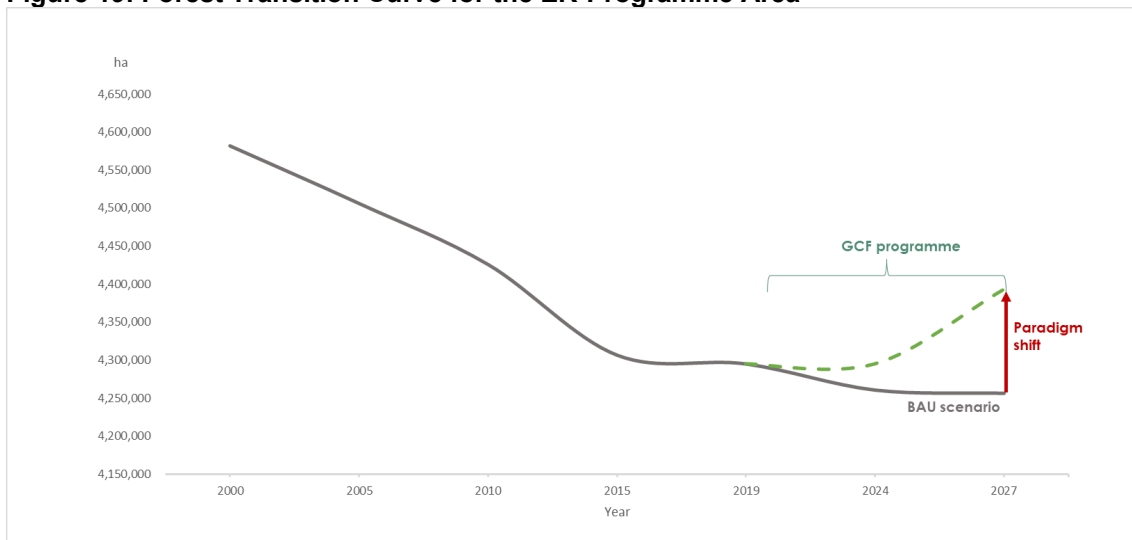
235. For more information on the project's various financing mechanisms, see also Chapters B.3-B.6.

**Figure 18: The Project's Envisioned Paradigm Shift**



236. The following Figure 19 shows how the overarching Programme will result in a shift in the forest transition curve, and support forest recovery.

**Figure 19: Forest Transition Curve for the ER-Programme Area**



**D.2.2 Potential for scaling-up and replication<sup>227</sup>**

237. The ER-Programme provides the basis for investments at scale to initiate the anticipated transformational change, and overcome the barriers facing Lao PDR to transition towards low-emission, deforestation free and climate resilient development pathways. This project aims at scaling up successful approaches, and linking them to private sector engagement to mobilize additional finance for climate action, and ensure the long-term sustainability of project-supported investments.

238. The Programme (Project 1 and 2) is already ambitious in its scale, impacting approx. 30% of Laos' annual GHG emissions, reaching over 700,000 people in six provinces (many of whom are poor and live in remote areas) and covering approximately 35% of the national territory, 32% of the country's forest cover, and where around 40% of

<sup>227</sup> For more information, refer to Chapter E.2.

the country's deforestation and degradation occurs. Deforestation and forest degradation exacerbate the vulnerability of local villagers and the ecosystems to climate change, and action is urgently needed in this region of Lao PDR to strengthen the resilience of ecosystems and local livelihoods to a changing climate. Beyond this, the project provides the basis for scaling up REDD+ and climate resilient and deforestation free sustainable land management, facilitating a cross-cutting approach, beyond the project's six provinces to ten additional provinces, in order to cover the entire country.

239. For Laos, essential enabling pre-conditions, both for the success of the project, and also for future replication and up-scaling in other provinces, are: (a) human and institutional capacities, and (b) sustainable financing. Both are cornerstones of the project's Theory of Change, which focuses on capacity building, institutional strengthening and unlocking additional public and private financing streams for transforming the sector.

### D.2.3 Potential for knowledge and learning

240. Project 2 has a knowledge management plan with comprehensive actions that will be applied (within the FS in Annex 2a).<sup>228</sup> The GCF project provides relevant tools to enable decision makers, provincial governments and local communities to understand and learn about the benefits of REDD+ and climate resilient land management approaches in order to change the business-as-usual model and facilitate scaling up public and private investments in climate change mitigation and adaptation. The project is further committed to facilitating comprehensive communication and exchange of information to build awareness and capacity development on the revised forest regulations to ensure their proper application (including those supported under Project 1), as well as awareness on climate risks, and best practices for climate resilient agriculture, sustainable land management, ecosystem-based adaptation and gender equality and social inclusion. Project 2 further aims to increase the use of climate information in decision making processes, and ensure that land use is climate-informed to reduce strengthen adaptive capacities, and the overall resilience of ecosystems and local livelihoods to climate change. Collaboration with national universities will be sought involving them in climate resilient and deforestation free AFOLU related activities.

241. To facilitate the adoption of climate-informed, sustainable agricultural and forest practices the project will use training of trainer (ToTs) programmes<sup>229</sup> involving the extension staff of District Agriculture and Forestry Offices (DAFO) at the district level. This will help to ensure continued capacity building and knowledge transfer after project completion. In addition, a special emphasis will be given to:

- Improving information systems and mapping,
- Generation and application of climate change information (including climate risk and planning, implementing and monitoring suitable risk reduction practices)
- Applying guidelines, with a strengthened emphasis on climate change adaptation, and
- Training individuals able to use remote sensing data and generate maps to enable Provincial Offices of Forestry Inspection (POFIs) and District Offices for Forestry Inspection (DOFIs) to continuously monitor deforestation and forest degradation via PDMS.
- Best practices for climate resilient and deforestation free agriculture, sustainable land management, SFM, FLR and EbA

### D.2.4 Contribution to the creation of an enabling environment<sup>230</sup>

242. The programmatic approach, through Projects 1 and 2, aimed to create an enabling environment for sustainable land and forest management and REDD+ in a systemic manner, helping to unlock results-based payments through support to the FCPF Emission Reductions Programme. The Programme gives special attention to support in policy and regulatory reform for forestry and land use planning.

243. Project 1 advanced substantially with the revision of the regulatory framework, establishment of SOPs (e.g. for law enforcement and monitoring), and REDD+ mainstreaming within socio-economic development plans. As such, these activities have been removed from Project 2 (although Project 2 will benefit from these advancements, and will continue to raise awareness to facilitate compliance with the regulatory framework). In addition, Project 1 facilitated the development of key guidelines that will continue to be used for Project 2, which will facilitate a streamlined implementation of Project 2 (e.g. PLUP 2.0, VFAG and VFM guidelines).

<sup>228</sup> Overall Project 2 has been designed based on lessons learned and experiences from Project 1, which are reflected throughout the FP. Some lessons learned, included the need for further capacity building (e.g. strengthened emphasis on extension within Activity 2.1.1), knowledge management and sharing of lessons learned (e.g. harmonization of local law enforcement processes), which have been incorporated into the design of the project. For more information refer to Annex 2c, which provides an overview of the progress and lessons learned from Project 1.

<sup>229</sup> Several ToT and training modules have been developed under Project 1, that will facilitate upscaling under Project 2. Some may require revisions to strengthen adaptation and reflect best practices and lessons learned from Project 1, in which case they will be revised. Where new trainings are required, a similar approach involving ToTs will be applied that facilitates the institutionalization and effective management of knowledge.

<sup>230</sup> For more information, refer to Chapter E.2.



244. Project 2 also dedicates an entire Component 1 to improving the enabling environment for sustaining the project's activities and impacts beyond its duration (see Section B.3 for details). It focuses on (among others):

- Gender equality and social inclusion (from planning to implementation and monitoring)
- Sustainable financing for SFM and FLR in order to permanently close a structural funding gap for transforming the forest sector towards net zero emissions in 2050 (see below), while also strengthening resilience of vulnerable ecosystems and production systems, and the rural households who depend on them for their livelihoods,
- Law enforcement and monitoring to ensure compliance with the regulatory framework, and safeguard the project's social and environmental impacts,
- Establishment of PDMS in the 3 additional provinces, and operationalization of PDMS in all six provinces
- Participatory climate-informed land use planning, following PLUP 2.0 and the Project 2 supported climate change adaptation supplement, which will serve as the foundation for scaling up deforestation free and climate resilient investments in the AFOLU sector,
- Socio-economic development planning in order to strengthen the authorities' mandate to scale-up sustainable land management practices (with both mitigation and adaptation benefits) across the country and receive public budget resources for doing so,
- Strengthening of village land use and natural resources management capacities, including by the creation of the VFAG management committees,
- Capacity building of extension staff within DAFO to provide climate-informed extension and facilitate the adoption of best practices for climate resilient and deforestation free agriculture, scaling up PSAP through investments covered within the White List. This will ensure they deliver tailored support to local villagers, and will be able to replicate and scale this support and related extension services within the country.
- Capacity building of EPF and FPF to mobilize, channel and monitor sustainable climate finance,
- Capacity building of EPF to thrive for GCF Accreditation as a Direct Access Accredited Entity, and develop high-quality proposals to mobilize additional climate finance and
- Revision of management plans for 4 NPAs, 1 NP, and development of management plans for 290 village forests, which will provide clear plans for inclusive and transparent forest management that generates livelihood benefits for local forest-dependent communities, while reducing deforestation and forest degradation and strengthening the overall resilience of vital forest ecosystems.

#### **D.2.5 Contribution to the national / local regulatory framework and policies**

245. A strategic component of the GCF Programme is to strengthen the policy and regulatory framework. The GCF Project 1 focused on 6 areas: (i) mainstreaming REDD+ into socio-economic development plans (SEDPs); (ii) strengthening the regulatory framework (revision, modification and drafting of relevant laws, decrees and regulations) to enable sustainable forest management and private sector investment in village-based agroforestry development; (iii) strengthening law enforcement and compliance monitoring; (iv) support land use planning and measures to improve tenure security; and (v) strengthening the forest and forest carbon MRV system. Project 2 will build upon the work already being implemented under Project 1 and will continue to strengthen, amongst others, law enforcement, land use planning and tenure security of local village communities.

246. With support of the GCF Project 1 and other development partners the regulatory framework has improved substantially, especially for forest management, and Laws such as the Land Law and Forest Law have been revised. Subsequent policies are being revised but often sub-national agencies still lack the capacities to fully apply these. Therefore, Project 2 will not support further revision of policies and the regulatory framework, but instead will focus on the coherent implementation of the regulatory framework through capacity building and implementation of sustainable deforestation free, climate resilient and low-emission investments and activities.

247. In addition, the programme continues to support Lao PDR to meet their climate targets. It will support Lao PDR with the implementation of their updated NDC, which puts a strong emphasis on the forestry and agricultural sectors for both mitigation and adaptation (see B.1 for more detailed information). A strengthened focus on adaptation has thus been integrated into this project's design, and the project is committed to building on synergies with ongoing and planned projects on climate change adaptation and disaster risk reduction. Sections B.1 and D.5 provide more detailed information on the alignment with the regulatory framework.

### **D.3. Sustainable development (max. 500 words, approximately 1 page)**

248. GCF-supported interventions will produce significant sustainable development benefits, and contribute to the achievement of the Sustainable Development Goals (SDGs).

#### **D.3.1 Economic-benefits**

249. The project will generate diverse economic benefits, including:

- **Poverty eradication livelihood improvement:** Some of the poorest districts of the country are in the project area, which are among the most vulnerable to climate change. The poverty headcount-ratio (percentage of the

population living below the national poverty line) in the project area ranges between 20.2% and 37%. The project will ensure the participation of poor and vulnerable households (Component 2 and 3), and help them to strengthen their resilience to climate change (e.g. through climate-informed land use planning and the identification of the most suitable land use practices, facilitating access to markets by strengthening of agri-value chains and supporting agri-MSMEs, scaling up village forestry, and implementing conservation agreements with local communities in NPAs, among other measures).

- **Increased land productivity and incomes of supported households:** investments in the implementation of PSAP promoted practices will help farmers increase yields and maintain land productivity. By strengthening the links between farmers at village level and agri-MSMEs and by strengthening the transformation, value adding, and marketing capacities of agri-MSMEs in support of climate resilient and deforestation free value chains, the predictability of demand for sustainably produced products will be enhanced, contributing to increasing incomes of supported farmers. In the long-term, incomes can also be enhanced through the sustainable commercial use of timber from village forests as outlined in the new forest law.
- **Strengthened adaptive capacities and resilience of local livelihoods to climate change in order to avoid future losses and damages:** The project's main beneficiaries are smallholder farmers in upland areas, whom are among the most vulnerable to climate change in Lao PDR (see Chapters B.1 and D.4 for more information). By promoting climate resilient agricultural practices, the project will also help strengthen villagers' adaptive capacity – enabling them to adapt to climate change and reduce future impacts (e.g. through diversification, implementation of climate resilient practices, among others). This could help avoid losses and damages in the future, whereas diversification can help to strengthen farmers' coping capacities and ultimately their resilience to climate change (see also CRVA in Annex 2d).
- **Improved mobilization and channelling of finance for climate action and sustainable land management:** Improved mobilization (from public and private sources, supported under Activity 1.1.1) and channelling of climate finance to VFAGs will improve villagers access to funds for investments in low-emission and climate resilient AFOLU.
- **Strengthened business plans and value chains:** Project support for agri-MSMEs will support businesses to develop bankable business plans, and will enable them to move towards more sustainable value chains. Support under Activity 2.2.1 will further improve the agri-MSMEs possibilities to access loans and private finance through developing investment ready business plans for the sustainable processing of promoted commodities under the "White List" supporting the development of more sustainable agricultural value chains. Tax revenue from taxes and charges may also rise as a result of this enhanced economic activity.

### D.3.2 Environmental and Social co-benefits

250. Although this GCF Programme began as a mitigation-focused (REDD+) initiative, Project 2 incorporates interventions that will promote climate change adaptation – notably integrated land-use planning, improvements to irrigation infrastructure, reforestation in catchment areas and climate resilient agriculture. These linkages will help to strengthen the resilience of local livelihoods and ecosystems against climate change, which can contribute to positive long-term effects (environmental and social co-benefits) measured against the backdrop of climate change.

#### Social-Benefits

251. Project 2 is expected to continue to generate additional social benefits in the project area:

- **Improved food security and nutrition:** Malnutrition is a permanent threat to the rural population in the project area, as the inhabitants depend on traditional smallholder rain-fed agricultural and shifting cultivation systems, which are particularly vulnerable to climate change. The prevalence of undernourishment in Laos is currently 17.1% with higher rates in the project area.<sup>231</sup> The project will increase the nutrition and food security of beneficiary households (Component 2) through improved deforestation free and climate resilient agricultural practices.
- **Health benefits:** The project will generate various health benefits. As mentioned in Section B.1 Northern Lao PDR is particularly impacted by forest fires, which are projected to become more frequent and intense due to climate change and increasingly dry conditions. The project will support the implementation of measures to improve forest fire prevention and preparedness (e.g. digging or ploughing fire breaks, controlled burning of fire breaks, building small water reservoirs for providing water for firefighting etc.), which will have a positive health benefit for local communities (e.g. reducing adverse respiratory and cardiac health impacts from smoke inhalation and haze).<sup>232</sup> Ecosystem-based adaptation measures will further strengthen the resilience of local villagers against climate-related natural hazards that often result in injury or loss of life (e.g. floods, wildfires).

<sup>231</sup> <https://www.adb.org/countries/lao-pdr/poverty>.

<sup>232</sup> This is particularly relevant in northern Lao PDR, where there is a high correlation between poverty and exposure to harmful particulate matter due to forest fires. For more information refer to: Reddington, C.L., Conibear, L., Robinson, S., Knote, C., Arnold, S.R., V. Spracklen, D. 2021. Air Pollution From Forest and Vegetation Fires in Southeast Asia Disproportionately Impacts the Poor. GeoHealth. <https://doi.org/10.1029/2021GH000418>

Studies in other regions of Southeast Asia have found tropical deforestation has accelerated local warming, and worsened local's exposure to heat and heat-related ailments.<sup>233</sup>

- **Inclusion of ethnic minorities:** There are at least 23 specific ethnic groups present in the project area. The project aims to work with diverse ethnic groups, and provide targeted support that is culturally appropriate and targeted to their needs. Social inclusion is a cross-cutting theme within the GCF-supported Outputs, Activities and Actions. Project 2 aims to continue to promote an inclusive approach, ensuring beneficiaries from diverse ethnic groups and marginalised villages are included and empowered. An Ethnic Group Development Plan has been developed for Project 2, following the GCF Indigenous Peoples Policy and building on stakeholder consultations (see the Ethnic Group Development Plan in Annex 6d), highlighting the specific needs of ethnic and indigenous groups. Priorities outlined in the framework include: strengthening their voice in the context of village decision-making; access to land, forest and natural resources for livelihood purposes; respect for customary use of land (including for ancestral and spiritual uses; and appropriate access to information, including use of ethnic languages and simple imagery to accommodate lower literacy rates. Project 2 will continue to support the implementation of the plan and will closely monitor the project's impact on ethnic minorities and social inclusion. For more information refer to the Ethnic Group Development Plan in Annex 6d.

#### Environmental-Benefits

252. In addition to the climate change mitigation and adaptation benefits described under B.3.1, the project is expected to generate key environmental benefits, including (among others):

- **Enhanced biodiversity conservation:** Enhancing biodiversity conservation through the protection of natural forests and the promotion of more resilient and sustainable forest management in at least 1,039,350 ha of national parks and NPAs through the implementation of the full Programme. Project 2 will work in 367,150 ha of NPAs (plus continuation on 672,000 ha of NPAs under Project 1), with particularly strong biodiversity benefits, including important habitats for diverse species (see FS in Annex 2a for more detailed information) for more detailed information on biodiversity). Supporting village forestry establishment and ViFoCA operations in each province will also help to restore landscapes, foster healthy and resilient ecosystems, and help establish biodiversity corridors. Biodiversity corridors will be further strengthened by their deliberate inclusion in the land use planning at village level. These efforts are aligned with those outlined in the country's Biodiversity Strategy and Action Plan (2016-2025).
- **Enhanced provision of vital ecosystem services:** Reducing deforestation and forest degradation, and implementing sustainable and climate resilient land use practices will help improve the provision of vital ecosystem services, including (among others): carbon storage, water regulation, climate regulation (e.g. micro-climate buffering), habitat provision, flood regulation, and the provision of food, fibre and fuel. This will further benefit from watershed protection and more holistic land use planning under the PLUP 2.0 approach (with strengthened adaptation mainstreaming and capacity building under Project 2), which considers the interlinked dynamics of land use practices and ecosystem services.
- **Reduced unauthorized clearing of forested land:** Improving land-use planning, governance, PDMS and enforcement tools, processes and capacities will also help reduce unauthorised clearing of forested land, and ensure that land use is based on sustainable, participatory and accurate plans.
- **Facilitation of sustainable production practices:** Strengthening the development of sustainability oriented-markets and climate resilient value chains will provide new incentives towards sustainable production patterns. Promoting the use of climate resilient and deforestation free agricultural practices will also help improve soil quality, strengthen agro-biodiversity (through intercropping and agroforestry systems), reduce soil degradation, erosion and sedimentation, and reduce agrochemical use (and thus the risk of soil and water contamination, and potential health impacts).<sup>234</sup>

#### **D.3.3 Gender-Sensitive Impact**

253. Women are disproportionately impacted by climate change and deforestation and forest degradation. Women, as the main collectors of forest products, know forests well and have seen the impact of deforestation and forest degradation on their livelihoods. As forests become increasingly degraded, women must either travel longer distances, or use less NTFPs for domestic consumption. Women are also highly dependent on agriculture for their livelihoods, where 63% of working women are employed in the sector.<sup>235</sup> Consulted female stakeholders noted they can see the impact of some land use practices resulting in soil degradation and productivity declines (e.g.

<sup>233</sup> E.g. Parsons, L.A., Jung, J., Masuda, Y.J., Vargas Zeppetello, L.R., Wolff, N.H., Kroeger, T., Battisti, D.S., Spector, J.T. 2021. Tropical deforestation accelerates local warming and loss of safe outdoor working hours. CellPress Open Access One Earth. <https://doi.org/10.1016/j.oneear.2021.11.016>

<sup>234</sup> The project will not promote nor procure synthetic fertilizers or pesticides. It will instead promote organic alternatives, integrated pest management and raise awareness of the risks of agro-chemical use. For more information please refer to the Pest Management Plan in the ESMF (Annex 6c).

<sup>235</sup> World Bank Data Bank n.d.

maize monocropping), however they noted there is a need for additional technical and financial support to facilitate actual investments, and build capacities (while addressing barriers for women to access information and extension/investment support on good agricultural practices)<sup>236</sup> They further noted the need for support in marketing, identifying suitable business opportunities and strengthening financial literacy and business skills for women.<sup>237</sup> Beyond this, women are often particularly adversely impacted by climate-related natural disasters, and support is needed to reduce their exposure and vulnerability to such hazards.<sup>238</sup>

254. Project 2 has developed a Gender Assessment and a Gender Action Plan (GAP, Annex 8b), which builds on the assessment and action plan conducted for FP117. The GAP forms the basis for operationalizing the results and recommendations of the gender assessment. It contains specific gender elements to be implemented through project implementation, where gender equality is considered a cross-cutting element throughout the project's outputs and activities. Project 2 will continue to work closely with the Lao Women's Union to ensure the effective engagement of women. All project activities will proactively involve empowerment elements for village women, including promoting their leadership roles in local structures, including ensuring a quota of at least 30% female in village committees. The project will include training on business skills development for women that will help to address common participation gaps and barriers, including financial support as well as facilitate opportunities for women related to agroforestry, forest management and climate resilient agricultural activities. It will also strengthen awareness for women and men within the project area on climate risks and best practices to reduce these risks and strengthen the resilience of local communities and ecosystems. All extension staff and trainers supporting Project 1 will be trained on gender equality and social inclusion, including time-saving activities (see also Section G.2 below, and the gender assessment and gender action plan in annexes 6a and 6b).

#### D.4. Needs of recipient (max. 500 words, approximately 1 page)

##### D.4.1 Economic and social development level of the country and affected population

255. Laos is a landlocked least-developed country (LLDC) bordered by Myanmar and China to the northwest, Vietnam to the east, Cambodia to the southwest and Thailand to the west and southwest. The country has a HDI of 0.613, ranking it 137th (out of 189) globally. Prior to the COVID-19 pandemic, Lao PDR's growth had been amongst the fastest in Asia, averaging more than 7.7% per year for most of the last decade. According to the World Bank country profile, growth is expected to be driven by the construction sector, supported by investments in large infrastructure projects (mainly energy), and a resilient services sector, led by wholesale and retail trade growth.

256. Growth has been largely dependent on natural resources, and this has placed increasing pressure on the environment. Environmental degradation is taking an economic toll on the country due the depletion of natural resources and adverse impacts on environmental services as well as to human health from pollution and waste: 70% of the Lao population still depends on forests and waterways for income and nutrition. Lao PDR has recognized the limitations of this economic model and is implementing reforms to drive a greener and more inclusive model.

257. Many of the country's poorest people live in rural areas and are the most vulnerable to pollution, climate risks, and deforestation. The green growth agenda aims at improving local livelihoods by diversifying income sources and involving the private sector to spur market developments – for instance by promoting sustainable forest management and nature-based tourism. However, as described in Section B.2, various barriers persist that prevent a paradigm shift towards low-emission, deforestation free and climate resilient development pathways.

##### D.4.2 Impact of COVID-19 on Lao PDR

258. Since the development of Project 1, Lao PDR's economy has been greatly affected by the COVID-19 pandemic. UNICEF released a series of reports in 2021 that note the country's economy could contract by 1.8-3.3%.<sup>239</sup> In addition, the pandemic has generated substantial other impacts including loss of life and long-term health impacts for the population, increased unemployment, poverty, reduced nutrition, and an increase in gender-based violence, among others.<sup>240</sup> A rapid assessment of Food Security and Agriculture conducted by World Food Programme

<sup>236</sup> [FP117 Gender Assessment.](#)

<sup>237</sup> [FP117 Gender Assessment and the Gender Assessment for Project 2 \(Annex 8a\)](#)

<sup>238</sup> Women are often particularly adversely impacted by climate-related natural disasters, as they often are responsible for caretaking and face increased risk of gender-based violence, poverty, insecure employment, and human trafficking. These impacts are further exacerbated by their lower access to and management of resources, access to services and political representation, as well as the persistence of gender norms and stereotypes (with such barriers particularly pronounced for women from ethnic minorities - see the Gender Assessment for more detailed information). See also Desai, B.H., Mandal M. 2021. Role of Climate Change in Exacerbating Sexual and Gender-based Violence against Women: A New Challenge for International Law. Environmental Policy and Law, 51: 137-157. Uniacke, P. 2018. Climate Adaptation Strategies and the Role of Gender. The Asia Foundation. Available online: <https://asiafoundation.org/2018/04/11/climate-adaptation-strategies-and-the-role-of-gender/>;

<sup>239</sup> [UNICEF Lao PDR. 2021.](#)

<sup>240</sup> UNICEF Lao PDR. 2021. [Impact of COVID-19 Household Financial Security](#); UNICEF Lao PDR. 2021. [Impact of COVID-19 on Tackling Nutrition Challenges](#);



(WFP) in May 2020 found producers in Bokeo and Luang Namtha were among the hardest hit, especially cash crop producers (e.g. cardamom, rubber, tea, and coffee) and horticulture producers.<sup>241</sup> This was particularly due to restrictions in movement, changes in market access and availability and prices of food.<sup>242</sup> There is a need for additional technical and financial support in Lao PDR to contribute to a green-recovery, without placing an additional debt burden on Lao PDR (see D.4.4 below).

#### D.4.3 Climate risk and vulnerability

259. In its Second National Communication to the UNFCCC, Lao PDR identifies itself as an LDC with limited adaptive capacities that is highly vulnerable to climate change impacts. The Economy and Environment Programme for Southeast Asia (EEPSEA) ranks Lao PDR as one of the most climate-vulnerable countries in the region. Internationally, Lao PDR ranked as the 45<sup>th</sup> most vulnerable country to climate change in the world (out of 180 countries) in 2019.<sup>243</sup> Focusing on the period from 2000 to 2019, Lao PDR ranked #52.<sup>244</sup> As such, it ranks in the top 25-30% of vulnerable countries to climate change. The Lao Government, through their Draft Strategy on Climate Change of the Lao PDR Vision to the year 2050, Strategy and Programs of Action to the year 2030, highlights the gravity of climate change noting “*Droughts and flooding are expected to damage agriculture, irrigation systems, and roads and bridges, and impair crop production.*”<sup>245</sup> They further stress the risk that climate change poses for the country’s food security, and estimates that over half of the population is “*extremely vulnerable to climate change impacts*”.<sup>246</sup> As described in Section B.1, high rates of deforestation and forest degradation exacerbate the regions’ vulnerability to climate change. Climate action is urgently needed as climate change will have a detrimental effect on the population and the country’s economy.
260. The forthcoming Third National Communication to the UNFCCC states that Northern Lao PDR is among the most vulnerable areas to climate change in the country, due to low adaptive capacities, high sensitivity, and high exposure to climate-related natural hazards.<sup>247</sup> As described in Section B.1, deforestation and forest degradation are closely linked with climate risk in Northern Lao PDR, and continued deforestation exacerbates the risk posed by climate change to local ecosystems and communities. These provinces contain the districts with the highest rates of deforestation and forest degradation within the ER-Programme accounting area and contain the remaining forest areas most at risk of deforestation/forest degradation. Project 2 primarily address the three provinces of Luang Namtha, Bokeo and Oudomxay in northern Lao PDR, where poverty rates are among the highest in the country, exceeding the national average by 23%. Food security is a major challenge for many households in rural areas with an estimated 25% of rural households in the region accounted as food-poor.<sup>248</sup>
261. Supporting Laos in its effort to safeguard forests will be critical for the country and for the Indochina region at large that is rapidly depleting its natural resources, and exacerbating its risk and vulnerability to climate change. Urgent action is needed to implement cross-cutting measures to reduce deforestation and forest degradation, while supporting ecosystem restoration, biodiversity conservation, building up the resilience of forest-dependent persons and rural households, and supporting a green-recovery from the COVID-19 pandemic.

#### D.4.4 Financing needs

262. The NDC notes financing needs for the mitigation 2030 conditional targets is estimated at USD 4.76 billion. The cost for needed adaptation interventions is not provided in the NDC. The NDC further highlights that Lao PDR “*seeks support from developed country parties in the design of innovative financial mechanisms that can blend public and private capital as a means of mitigating risks and unlocking private sector investment in climate project*” (p.8),<sup>249</sup> in addition to support on capacity building, policy design, and monitoring, among others.
263. There is a structural funding gap facing Lao PDR, which limits the country’s ability to invest in low-emission and climate resilient development. In terms of public financing, the government is able to commit co-finance to the project amounting to EUR 7 million. Public budgets are extremely tight and are further constrained due to the COVID-19 pandemic response. Numerous development partners working on climate change, forestry and agriculture in Lao PDR have already committed grant financing, including to the GCF projects 1 and 2. The World Bank (FCPF Carbon Fund) is offering Lao PDR REDD+ results-based payments, but it is mentioned in FP 117 and the country’s ERPD that additional finance is required to help Lao PDR unlock these payments. This has been a

<sup>241</sup> WFP, World Food Programme. 2020. [Rapid Assessment of Food Security and Agriculture in Lao PDR.](#)

<sup>242</sup> WFP. 2020. [Rapid Assessment of Food Security and Agriculture in Lao PDR.](#)

<sup>243</sup> Eckstein, D., Künzel, V., Schäfer, L. 2021. [Global Climate Risk Index 2021.](#)

<sup>244</sup> Eckstein, D., Künzel, V., Schäfer, L. 2021. [Global Climate Risk Index 2021.](#)

<sup>245</sup> Government of Lao PDR [2020]. Draft Climate Change Strategy.

<sup>246</sup> Government of Lao PDR [2020]. Draft Climate Change Strategy.

<sup>247</sup> Following definitions under AR4.

<sup>248</sup> Pimhidzai, O., Fenton, N. C., Souksavath, P. and Sisoulath, V. (2014), Poverty Profile in Lao PDR: Poverty Report for the Lao Consumption and Expenditure Survey 2012–2013. Available at:

<http://documents.worldbank.org/curated/en/868521467998508506/pdf/100120-WP-P146141-PUBLIC-Box393225B-Poverty-Profile-in-Lao-PDR-publication-version-12-19-14.pdf>.

<sup>249</sup> Government of Lao PDR 2021. [Nationally Determined Contribution.](#)



major goal of the overarching programme, and unlocked results-based payments will be reinvested into Project 2 through the implementation of the approved REDD+ benefit sharing plan via Activities 2.1.4 and 3.1.2.

264. Looking beyond grant finance, Lao PDR has limited ability to take on additional debt, as the “*risk of external debt distress remains high*”. Beyond this Moody’s downgraded Lao PDR’s issuer rating in August 2020, stating the country faces severe liquidity stress. As such, there is limited ability for Lao PDR, a LLDC, to take on additional loans for climate change mitigation and adaptation. Acknowledging the need to mobilize additional public and private sector finance for climate action, the project will serve to use grant finance from GCF to strengthen national funds and institutions, mobilize additional public and private finance, and address the structural funding gap facing the forestry sector in Laos. It further addresses key capacity gaps and will create an enabling environment that facilitates the adoption of cross-cutting climate measures in the land use sector by smallholder farmers and forest-dependent persons in Northern Lao PDR. Please refer to Section B.5. for further details on financing alternatives, and the justification for the GCF support.

265. The local private sector is also unable to finance the transition towards more sustainable forest and landscape management at scale in the absence of technical and financial support. From the supply side of capital, many financial institutions in Lao PDR have a limited operational footprint in rural areas, making it physically difficult for remotely located individuals and businesses in the agriculture and forestry sector to reach bank branches. Further, banks tend to have very conservative policies requiring high levels of collateral (mainly immovable assets such as land and buildings), high interest rates, and short-term repayment periods making investments in land use in general unattractive and particularly in sustainability-oriented investments which tend to have longer repayment periods. From the demand side, and focused specifically on agri-MSMEs, which are key actors to support the development of climate resilient and deforestation free value chains, there remain significant needs for technical support to drive a transition towards more sustainable business models. Most agri-MSMEs are capital constrained and many lack proper business and financial planning, the financial literacy required to understand the types of lending products that are available as well as the process to apply for a loan. Long-term planning is often lacking, and operations are covering short-term needs only. Despite this, and through the strategic use of matching grants and tailored technical assistance, the project aims to mobilize EUR 1.8 million from agri-MSMEs to support climate resilient and deforestation free value chain development (Activity 2.2.1).

## D.5. Country ownership (max. 500 words, approximately 1 page)

### D.5.1 Inclusion within GCF country programme

266. The GIZ Project ‘Scaling up the Implementation of the Lao PDR Emission Reductions Programme through improved governance and sustainable forest landscape management (Project 2)’ is part of the Lao PDR GCF Country Programme 2020-2023 under Priority Area ‘Supporting an increase and maintenance of national forest cover through forest restoration, conservation, improved forest governance and private sector investment’.<sup>250</sup> The country work programme highlights the alignment of the project with the country’s long-term adaptation objectives, where a strengthened focus on adaptation has been integrated within Project 2’s design (including promoting integrated land use planning and natural resource management, promoting climate resilience in forest ecosystems and NPAs, and promoting climate resilient agricultural systems, among others).<sup>251</sup> The country programme further highlights the nomination of EPF by the Lao PDR NDA to become a national AE, and readiness support provided by GIZ. By continuing to work with EPF the project will continue to build their capacities and support them as they advance with their accreditation process, and eventually develop and implement their own projects to strengthen climate change adaptation and mitigation.

267. The project is also included in the GIZ AE work programme.

### D.5.2 Coherence with existing policies and commitments

268. As mentioned in Section B.1.5 (and described in detail in the FS in Annex 2a), the project is closely aligned with the Government of Lao PDR’s socio-economic development plans and strategy, as well as priorities for climate change mitigation and adaptation in the agriculture, forestry, and other land use sector in Lao PDR. Since the approval of FP117 by GCF, the design of Project 2 has been adapted to reflect the (draft) Climate Change Strategy (2021), updated NDC (2021) - including a strengthened focus on adaptation and cross-cutting measures in the AFOLU sector, and Forestry Strategy to 2035, among others.

269. Lao PDR is highly committed to implement REDD+ to achieve its NDC target in the forestry sector. The engagement with the FCPF Carbon Fund and the ER-Programme is seen as key for the transformation of the forest and land

<sup>250</sup> Government of Lao PDR. 2021b. [Lao PDR Green Climate Fund Country Programme 2021 - 2023](#)

<sup>251</sup> See Table 6 (page 12) in the [Country Programme Document](#) for more detailed information on the long-term adaptation objectives in key sectors in Lao PDR.

use sector in northern Laos. In recent years the Government of Lao PDR could already show success in reducing deforestation and forest degradation.

#### **D.5.3 Capacity of AE and EEs to deliver**

270. Project 2 builds on the approved GCF Project FP117, where GIZ with its headquarters in Germany serves as AE, and GIZ with its management structure in Laos and EPF as EEs. Thus, all EEs all have demonstrated experience implementing a GCF project, and have shown they have sufficient capacities to deliver.
271. GIZ is one of the largest international providers of capacity development and technical assistance on climate change worldwide. GIZ as AE already developed and submitted several funding proposals to GCF, with 4 approved proposals under implementation (FP117, FP132, FP103, FP059).
272. EPF has been acting as an Executing Entity under Project 1 and is responsible for channelling EUR 11 million to project beneficiaries at provincial and district level (e.g. PAFOs, DAFOs), private sector and final beneficiaries (e.g. VFAGs). EPF served as an implementing agency for the USD 41 million World Bank LENSII project, facilitating investments in conservation at the local level. They also implemented the following projects (among others):
- Sustainable Forest and Land Management in the Dry Dipterocarp Forest Ecosystems of Southern Lao PDR (Safe Ecosystem Project, GEF \D00094709, UNDP): 1.2 million USD
  - Implementation of the Lao PDR Emission Reductions Programme through improved governance and sustainable forest landscape management (Project 1, GCF, GIZ): 11.1 million EUR
  - Ecosystem-based Adaptation in Lao PDR, (GCF, UNEP): 8.6 million USD.
273. The EPF also received technical support from a GIZ-implemented GCF Readiness Project to become a GCF Accredited Entity alongside Project 1 (readiness activities concluded with the successful submission of the Online Accreditation System (OAS) application by the EPF in October 2019) and got in January 2021 the second phase of the Readiness Project approved by the GCF to continue the Readiness Support which will be implemented without Delivery Partner.
274. Additional information on the AE and EEs' capacities to implement the project are provided in Section B.4.

#### **D.5.4 Role of the National Designated Authority (NDA)**

275. As mentioned, this project is embedded in the Programme (FP 117), and has thus been informed by substantial engagement with the NDA, government ministries and other key stakeholders. Regular communication and updates have been shared with the NDA and key government ministries throughout the programme/ project 1 development process. Representatives of the NDA have attended cross-sectoral multi-stakeholder workshops to provide feedback on the project and the broader ER-Programme. A letter of no-objection was provided by the NDA for FP 117, confirming the project conforms to the country's national priorities, strategies and plans, and that it is in accordance with relevant laws and regulations. GIZ reports continuously to the NDA regarding the implementation of Project 1 'Implementation of the Lao PDR Emission Reductions Programme through improved governance and sustainable forest landscape management', i.e., through the submission of the GCF Inception Report and the 1<sup>st</sup> Annual Performance Report (APR) in March 2021 and the 2<sup>nd</sup> APR in March 2022.
276. The Concept Note of Project 2 was submitted to the NDA in July and November 2021. Individual meetings between GIZ and the NDA regarding the development of Project 2 have been organized on January 25<sup>th</sup> and March 3<sup>rd</sup>, 2022. In November 2021, the NDA moderated a number of consultation meetings between NDA, UNDP, GIZ, and MAF in order to discuss possible implications of the geographical and technical overlap of the GIZ GCF Project 1 and 2 and the UNDP GCF Project, which was under preparation at this time. On December 9<sup>th</sup>, 2021, the NDA organized a meeting on 'Coordination and Consultation with Accredited Entities on Pipeline of GCF Projects in the Lao PDR GCF Country Programme 2021 – 2023' and on December 15<sup>th</sup>, the 'Green Climate Fund (GCF) Annual Update Meeting' has been conducted by the NDA. On both occasions, GIZ had been invited to present the progress on Project 1 as well as an update on Project 2 development.
277. Thus, the NDA has been involved throughout the development of both Projects 1 and 2. A letter of no-objection has been provided by the NDA for Project 2 on 27.05.2022 (Annex 1), confirming the project conforms to the country's national priorities, strategies and plans, and that it is in accordance with relevant laws and regulations.

#### **D.5.5 Engagement with civil society organizations and other relevant stakeholders**

278. The programme (projects 1 and 2) contributes to the implementation of the ER-Programme and National REDD+ Programme, both of which have been developed based on extensive stakeholder consultations. These processes have laid a strong foundation for the design of the GCF programme.
279. Projects 1 and 2 have been developed through extensive engagement with diverse stakeholders, including civil society organizations (e.g. Lao Women's Organization, among others), development organizations, private sector actors (e.g. Agri-MSMEs), men and women from local villages in the project region, and governmental actors from diverse sectors and levels of government. For the elaboration of FP 117, consultations with over 1,066 local men

and women from local villages were conducted, including men and women from diverse ethnic groups, in all six provinces.

280. The design of Project 2 has been informed by lessons learned from Project 1, and stakeholder feedback received due to the ongoing implementation of the project's stakeholder engagement plan.<sup>252</sup> Additional consultations with 543 persons (30% women) have been conducted during the project development process to inform the Funding Proposal and its supporting Annexes, including: national and provincial workshops (all six provinces), one on one stakeholder consultations with civil society, private sector,<sup>253</sup> governmental agencies, as well as stakeholder consultations at the district and village levels in Oudomxay, Luang Prabang and Sayabouri. The stakeholder consultations at local level included male and female villagers from diverse ethnic backgrounds. At district level, governmental institutions, the Lao Women's Union and the Lao Front for National Development have been consulted. In general, stakeholders noted the relevance of the project to strengthen their livelihoods and generate both climate and sustainable development benefits.<sup>254</sup> Annex 7 provides an overview detailing how stakeholder recommendations have been integrated into project design.

## D.6. Efficiency and effectiveness (max. 500 words, approximately 1 page)

### D.6.1 Efficiency and effectiveness

281. The project is estimated to contribute to reducing 4.6 million tCO<sub>2</sub>e relative to the FREL over its 4-year project implementation period. The mitigation cost for the project is 12.25 EUR per tCO<sub>2</sub>eq and the cost to the GCF is 5.08 EUR per tCO<sub>2</sub>eq. For the Programme (Projects 1 and 2), the mitigation potential is estimated at 11.7 million tCO<sub>2</sub>eq relative to the FREL over a 7-year implementation timeframe. The mitigation cost for the Programme is EUR 10.04 per tCO<sub>2</sub>eq and the cost to the GCF is estimated at EUR 3.21 per tCO<sub>2</sub>eq.<sup>255</sup>

### D.6.2 Financial viability

282. The activities under Component 1 of Project 2 are of a public good nature and will not generate financial returns but will contribute to the overall objective of reducing emissions from deforestation and increasing the resilience of local communities and ecosystems to climate change. The activities under Component 1 are suited for receiving grant funding. Component 2 will scale the adoption of sustainable, climate resilient and deforestation free agricultural practices (PSAP) and technologies and Component 3 will scale SFM and FLR in village forests and NPAs.

283. Activities under Components 2 and 3 will generate enhanced financial reflows for target beneficiaries relative to business-as-usual practices. However, given that target beneficiaries are for the most part subsistence farmers, which rely on shifting cultivation in upland areas and face knowledge, capacity, and market access constraints, positive financial returns would not be feasible in the absence of the GCF project grant and the significant co-finance that the project will mobilize both as loans and grants. The ability of the GoL to take on additional loans to support the activities in the project is limited as according to the IMF's 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 develop a comprehensive medium-term debt management strategy". Despite these constraints, the government borrowed EUR 24.1 million from ADB and EUR 11.35 million from IFAD to complement GCF Projects 1 and 2. On these grounds, the proposed GCF grant provides the adequate level of concessionality for this project (see Chapter B.5 for a more detailed description of the approach followed to ensure minimum levels of concessionality).

284. The economic rate of return to the GCF finance is of close to 31%.<sup>256</sup> The economic rate of return is estimated based on the financial flows from Components 2 and 3 as well as from the value of abated emissions due to project implementation (See Financial and Economic Assessment in Annex 3). The project's economic rate of return can be considered conservative as it does not integrate any other social or environmental benefits that will be generated during its the implementation.

<sup>252</sup> The Programme's stakeholder engagement plan will be revised during the project development process, and, as necessary, adjustments will be made to strengthen stakeholder engagement in the context of Project 2.

<sup>253</sup> Private sector interviews involved consultations with 39 stakeholders, including agri-MSMEs, collectors of NTFPs and other actors working in topics related to agriculture production and processing factories, among others.

<sup>254</sup> The results of these consultations are described in greater detail in FP117's Feasibility Study (Annex 2a), Environmental and Social Impact Assessment (ESIA, Annex 6a), Stakeholder Engagement Plan (Annex 7), Gender Assessment (Annex 8a), and Ethnic Group Development Plan (Annex 8d).

<sup>255</sup> Calculations are based on budget allocations for investment and do not consider budget allocations for PMC, M&E and incidentals

<sup>256</sup> The ERR is sensitive to the price of carbon utilized as an assumption to monetize ERs as well as to other financial assumptions. A sensitivity analysis is presented in the Financial and Economic Assessment in Annex 3.

### D.6.3 Application of best practices

285. The agriculture and forestry sectors are identified as key for climate change mitigation and agriculture as a key sector for climate change adaptation in the country's UNFCCC technology needs assessments for adaptation and mitigation<sup>257</sup> as well as in the NDC the country's draft Climate Change strategy. Land use management practices currently in use in the project area tend to have low productivity and for the most part cannot be considered as climate resilient, as good agricultural practices nor as sound forest management practices. The concepts of good agricultural practices alongside additional principles to ensure that agricultural practices result in climate resilient and deforestation free agriculture have been integrated in the PSAP approach developed under Project 1 and further strengthened and scaled up under Component 2 of Project 2. The implementation of forestry activities under Project 1 found that the current approach is effective and well-tailored to the local context in the project area. Supporting the intention laid out in the latest NDC, adaptation will be strengthened across all project outputs and activities to tap the synergies between adaptation and REDD+, and facilitate the upscaling of climate resilient and deforestation free sustainable land management.
286. The TNA outlines a range of recommended interventions, such as watershed protection and reforestation, irrigation, climate-smart agriculture and crop diversification, that are currently being promoted under Project 1 and will be further scaled up under Project 2. These interventions reflect best-practices such as participatory land use planning (PLUP) and the application of modern technology (such as GPS, remote sensing and GIS). Guidelines facilitating participatory planning processes,
287. As highlighted in Chapter B.3, Project 2 will build on the improvements to the regulatory framework, SOPs and guidelines developed within Project 1. These guidelines have been developed considering best practices and lessons learned from related projects and initiatives in Lao PDR (including those described in Chapter B.3 and the Feasibility Study in Annex 2a), and will facilitate replication and upscaling. Additional support will be provided in Project 2 to strengthen climate change adaptation and cross-cutting synergies, supporting the NDC's intention to promote climate resilience in farming systems and the management of forest ecosystems, and strengthen integrated land use planning and environmental management.<sup>258</sup>
288. Lessons learned from Project 1 have been closely considered during the elaboration of Project 2, and are reflected in the design, as highlighted throughout Chapter B.3 (and further described in the Feasibility Study in Annex 2a).

<sup>257</sup> Lao PDR (2017) Barrier Analysis and Enabling Framework for Climate Change Adaptation; and Lao PDR (2017) Barrier Analysis and Enabling Framework for Climate Change Mitigation accessed: <https://unfccc.int/ttclear/tna/reports.html>

<sup>258</sup> Government of Lao PDR. 2021. Nationally Determined Contribution (NDC). Vientiane, Lao PDR.

## E. LOGICAL FRAMEWORK

### E.1. Project/Programme Focus

- Reduced emissions (mitigation)
- Increased resilience (adaptation)

### E.2. GCF Impact level: Paradigm shift potential (max 600 words, approximately 1-2 pages)

The following Table provides an overview of the GCF impact level paradigm shift potential criteria under the Integrated Results Management Framework. Annex 2e provide more detailed information on the rating of the current state of each baseline.

Assessment Dimension	Current state (baseline)		Potential target scenario (Description)	How the project/programme will contribute (Description)
	Description	Rating		
<b>Scale</b>	At the time of this Funding Proposal Formulation (2021-2022), upland farmers in six northern provinces, whom are among the most vulnerable to climate change, will be adversely impacted by climate change as business as usual practices put their livelihoods, food security and agri- and forest ecosystems at risk. Accelerating deforestation and forest degradation in the six provinces, which are together responsible for around 40% of national deforestation, further exacerbates the impact of climate change and related losses and damages (see	<u>Medium</u>	<p>Paradigm shift would involve a transition away from business as usual baseline activities that drive deforestation and forest degradation, and exacerbate climate risk and vulnerability. Instead the project would create a paradigm shift towards climate resilient and deforestation free sustainable land management. This would be facilitated by the:</p> <ul style="list-style-type: none"> <li>▪ Elaboration of climate-informed PLUP</li> <li>▪ Improvements in monitoring and forest law enforcement</li> <li>▪ Improvements in access to international and domestic (public and private) finance for climate action,</li> <li>▪ Strengthening of capacities of national institutions to access, manage and monitor climate finance and impacts.</li> <li>▪ Adoption of low-emission, deforestation free and climate resilient agricultural practices</li> </ul>	<p>Project interventions are projected to deliver 4.6 million tCO<sub>2</sub>eq emission reductions over a 4-year period, without considering additional impacts from replication and up-scaling. This represents a significant step towards a paradigm shift for GHG emissions, and will support Lao PDR to unlock additional results-based payments from the FCPF Carbon Fund.</p> <p>At the same time, Project 2 will strengthen the resilience of 153,700 direct beneficiaries (76,850 men, 76,850 women) comprised of some of the most vulnerable communities in Lao PDR, through supporting them to strengthen their adaptive capacities and adopt more resilient livelihood activities. Indirectly, the project will support 332,991 persons (166,496 men, 166,496 women) living in the supported target districts who will benefit from improved consideration of climate information in decision making and land use planning processes, and improved capacities of district staff on climate change adaptation and</p>



	<p>Chapter B.1 for further information).</p> <p>Despite initial results from the implementation of FP117 a paradigm shift towards low-emission and climate resilient forest and land use practices will not be reached as outlined in the programmatic approach described within FP 117 without additional support to ensure local land and forest management practices fully transition to climate resilient, low-emission and deforestation free agriculture and forestry with the aim of further unlocking emission reduction payments and, hence, secure long-term finance for the Lao forestry sector.</p>		<ul style="list-style-type: none"> <li>▪ Strengthening of low-emission, deforestation and climate resilient agri-value chains, with a focus on agri-MSMEs</li> <li>▪ Implementation of climate-informed sustainable village forest management</li> <li>▪ Elaboration of climate-informed protected area management plans, that support REDD+ and strengthen the resilience of communities located within and around the NPA</li> <li>▪ Strengthening of adaptive capacities of local authorities and villagers through strengthening awareness of climate risk and vulnerability and the use of climate-information in land use planning and decision-making processes, as well as raising awareness and supporting investments in suitable risk reduction practices (e.g. investments in forest landscape restoration, climate-resilient and deforestation-free agriculture).</li> </ul>	<p>mitigation. Overall, the programme will directly build the resilience of 273,700 beneficiaries (136,850 men and 136,850 women), and will indirectly benefit 723,382 persons (361,691 men and 361,691 women).<sup>259</sup></p> <p>The project will further support the implementation of climate resilient land management activities on 2,100,000 ha of forest and agri-ecosystems. This includes the adoption of climate resilient agricultural practices on 17,000 ha of agri-ecosystems, and sustainable forest management on 191,500 ha through VFAGs.</p>
<p><b>Replicability</b></p>	<p>At the time of this Funding Proposal Formulation (2021-2022), Project 1 (FP117) laid the ground for the transformational change in the project area, including supporting policy mainstreaming, strengthening the</p>	<p><u>Medium</u></p>	<p>If capacities can be built and additional finance (international and domestic, public and private) can be mobilized, climate resilient, deforestation free and sustainable land management could be replicated and scaled-up within other villages, village clusters, districts, and provinces in Lao PDR, with key insight on lessons learned and best practices</p>	<p>This project aims at scaling up successful approaches, and linking them to private sector engagement to mobilize additional finance for climate action, and ensure the long-term sustainability of project-supported investments. Specifically, the project will support the replication of PLUP, as well as deforestation- and climate resilient agricultural practices, based on a White List and the standardized PSAP/ VFAG approach, which is particularly</p>

<sup>259</sup> Refer to FP Chapter D.1 for detailed information on beneficiary calculations and assumptions.

	<p>regulatory framework, and implementing and improving the MRV system (with the establishment of provincial deforestation monitoring systems), among others. It also supported interventions on the ground in 3 provinces, namely: Houaphan, Sayabouri and Luang Prabang.</p> <p>However, to fully reach the paradigm shift towards low-emission and climate resilient forest and land use practices, additional technical and financial support is needed to replicate and scale-up investments in climate resilient and deforestation free sustainable land management in 6 provinces.</p>		<p>for upland areas in neighbouring countries such as Vietnam, Thailand and Myanmar.</p> <p>Beyond this, the project would provide key experiences that inform the operationalization of Lao PDR's REDD+ strategy. The implementation of the Lao PDR ER-Programme under Projects 1 and 2 and the institutional arrangements in place to manage results-based payments from REDD+, will also facilitate the implementation of REDD+ at the national level (including Southern Lao PDR). While the ecosystems and landscapes differ in Southern Lao PDR, the financing mechanisms, participatory land use planning processes, standard operating procedures and monitoring systems, as well as capacity building processes would provide a flexible framework, where climate change adaptation has been mainstreamed, to facilitate the replication and scaling up of deforestation free, climate resilient and low-emission sustainable land management.</p>	<p>relevant for rural upland agricultural producers in the region. This will help strengthen the adaptive capacities of local farmers and forest-dependent communities.</p> <p>It will further support the replication and eventual scaling up of more resilient and sustainable (village) forest management across six northern provinces. This will be facilitated by the recent agreement of the Government of Lao PDR to channel RBPs to these 6 provinces, as agreed in the FCPF Benefit Sharing Plan, which will support replication and upscaling in the region (e.g. supporting communities in and around national parks with conservation agreements, and supporting village forest management). PDMS will also be replicated in the three additional provinces under Project 2 (Bokeo, Oudomxay and Luang Namtha).</p> <p>The project's phased and gradual approach to scaling up forest management (such as VFM, sustainable forest management activities within NPAs), is suitable and needed to gradually build up the capacities of government staff, and local forest-dependent men and women. It builds on past experiences in Lao PDR, and not only supports the development of management plans (based on thorough participatory land use planning), but also provides hands-on capacity building and finance to implement the annual operational plans. The anticipated bonus payments (i.e. performance-based payments) will bridge the phase until forests can be commercially used as outlined under article 120 of the revised forest law. In addition, with the approved Benefit Sharing Plan under the ER-Programme sub-national agencies will receive finance to provide their services and village communities will receive finance to further implement their agriculture and forest management plans.</p>
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<p><b>Sustainability</b></p>	<p>At the time of this Funding Proposal Formulation (2021-2022), the Government of Lao PDR has shown commitment and ownership to REDD+ and strengthening climate resilience in Lao PDR, e.g. through the new Forestry Law, National REDD+ Strategy to 2025 and Vision to 2030, among others. Lao PDR's latest NDC (2021) emphasizes the need to strengthen linkages between adaptation and REDD+, however without additional technical and financial support – such efforts are limited.</p> <p>In terms of needed technical support, capacity building is critical at the sub-national level, where capacities are low and staff turnover is high. This limits the overall adoption and sustainability of investments in sustainable land management.</p> <p>In terms of financial support, a major barrier for investing in low-emission and climate resilient land use is the limited availability of public and private</p>	<p style="text-align: center;"><u>Low</u></p>	<p>The ER-Programme, in which both Projects 1 and 2 contribute to, provides the basis for investments at scale to initiate the anticipated transformational change, and overcome the barriers facing Lao PDR to transition towards low-emission, deforestation free and climate resilient development pathways. This project aims at scaling up successful approaches, and linking them to private sector engagement to mobilize additional finance for climate action, and ensure the long-term sustainability of project-supported investments. That said, it is clear that the situation in Lao PDR is complex, and such a transition needs to be gradual and grounded in the local context.</p> <p>The target scenario would ensure that adaptation is adequately mainstreamed into guidelines, manuals and procedures for PLUP, PSAP, VFAG and VFM. In addition, it would have sufficient human and institutional capacities in place to plan, implement and transparently and effectively monitor investments in low-emission, deforestation free and climate resilient AFOLU at scale, considering a holistic landscape approach. This would range from awareness of climate risk and vulnerability, best practices for low-emission, best practices for deforestation free and climate resilient sustainable land management, gender-equality and social inclusion, and robust monitoring practices. It would further involve the application of PDMS, and strengthened capacities on forest monitoring and law enforcement, to ensure compliance with PLUP, PSAPs, and VFMPs.</p> <p>In addition, access to public and private finance for climate action would be increased,</p>	<p>Essential enabling pre-conditions, both for the sustainability and success of the project, as well as for future replication and up-scaling in other provinces, are: (a) human and institutional capacities, and (b) sustainable financing. Both are cornerstones of the project's Theory of Change, which focuses on capacity building, institutional strengthening and unlocking additional public and private financing streams for transforming the AFOLU sector.</p> <p>Project interventions are expected to increase access to finance, and mobilize additional funds for climate action. The project includes measures to strengthen access to international climate finance, including mechanisms related to the implementation of Article 6 of the Paris Agreement, as well as from voluntary REDD+ initiatives, with cross-cutting adaptation benefits, based on market and non-market mechanisms. Project measures will also strengthen national institutions' capacities (e.g. supporting EPF to become accredited to the GCF) to access, manage and monitor climate finance (Activity 1.1.1).</p> <p>Project activities also seek to engage the private sector to ensure the sustainability of results. Specifically, through the project's matching grant-scheme tailored to agri-MSMEs, a key actor at the interface of production and markets, the project will support the development of sustainable value chains and facilitate transition towards deforestation free and climate resilient agri- and agro-forestry value chains (Activity 2.2.1).</p> <p>The long-term sustainability of measures supported by the project, as well as their continued replication and scaling will be</p>
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	<p>finance (see also Sections B.2 and B.5):</p> <ul style="list-style-type: none"> <li>▪ Lao PDR faces severe liquidity stress and has a limited capacity to take on further loans for climate action,</li> <li>▪ Producers and agri-MSMEs have limited access to financing (limited FIs in rural areas), and often do not meet the necessary conditions (e.g. lack of collateral).</li> <li>▪ While private sector finance for climate action is considered critical to help fill financing gaps, there is a mismatch between private sector and public sector objectives and climate action. There tends to be a short-term perspective in land use management from the private sector and producers, driven by market conditions, which drives investments in unsustainable land management.</li> </ul>		<p>and mechanisms to channel climate finance would be strengthened (e.g. through the EPF or PPF).</p> <p>Beyond this, villagers would have strengthened adaptive capacities and increased incomes through adopting alternative, more resilient, sustainable livelihood opportunities. This could be through investing in climate resilient value chains (e.g. via agri-MSMEs), through VFM benefitting from changes in the forest law to market sustainable produced forest and NTPFs from village forests, or through implementing climate resilient agricultural practices that limit losses due to climate change, and increase yields and/ or diversify income.</p>	<p>facilitated by the institutionalization of trainings, capacity building, and through the development of SOPs and clear guidance, guidelines and procedures. Capacities of POFI, DOFI, PONRE, MONRE, PAFO, DAFO and EPF will be strengthened throughout project implementation on climate risk and vulnerability, climate change adaptation, climate resilient, deforestation free and low-emission SLM.</p> <p>The operationalization of PDMS in all 3 provinces, combined with capacity building support, will enable POFI to conduct near real time monitoring of forest cover change, and provide increased transparency and accountability to detect large scale deforestation. Improved monitoring, combined with investment support and capacity building on sustainable land management, will improve the overall sustainability and success of the measures, which in turn will facilitate Lao PDR to unlock further results-based payments in the future.</p> <p>The project interventions will facilitate greater (and more sustainability-oriented) private sector investment in the forestry and agriculture sectors. The matching grant-scheme under this project will enable private sector investments from MSMEs – which play a key role in the agricultural sector in Lao PDR - with a focus on developing sustainable, climate resilient, and deforestation free value chains in support of ensuring the sustainability of the PSAP promoted practices.</p> <p>In terms of mobilizing additional sources of climate finance to ensure the sustainability of interventions, the project will support the Lao PDR to assess and implement the readiness actions necessary to participate in the market-</p>
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				based schemes that emerge in the context of Article 6 of the Paris Agreement. Additionally, Lao PDR will be supported in assessing options and actions required for participating in market and non-market voluntary REDD+ initiatives for accessing results-based finance for emission reductions in excess of the Carbon Fund contract volume. Finally, the project will support Lao PDR in fundraising efforts for meeting its adaptation investment gap.
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**E.3. GCF Outcome level: Reduced emissions and increased resilience (IRMF core indicators 1-4, quantitative indicators)**

The following Table outlines the GCF outcome level core indicators related to reduced emissions and increased resilience. For more information on the GHG calculations and methodology refer to the GHG Methodology Note in Annex 22.

GCF Result Area	IRMF Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions / Note
				Mid-term	Final <sup>260</sup>	
<u>MRA4 Forestry and land use</u>	<u>Core 1: GHG emissions reduced, avoided or removed/sequestered</u>	<p><b>Government sources:</b></p> <ul style="list-style-type: none"> <li>Approved Reference Level (RL) of the FCPF ER-PD</li> <li>Biennial Update Report (BUR) to the UNFCCC</li> <li>Official REDD+ Office Reports</li> </ul> <p><b>Project sources:</b></p> <ul style="list-style-type: none"> <li>Project M&amp;E in cooperation with JICA</li> </ul> <p>Mid-term evaluation report to have information on CO2 emission reductions / sequestration</p>	<p>Project 2:</p> <p>Net annual forest-sector GHG emissions of 8.5 million tCO<sub>2</sub>eq</p>	<p>Project 2:</p> <p>1 million tCO<sub>2</sub>eq of avoided emissions and removals</p>	<p>Project 2:</p> <p>4.6 million tCO<sub>2</sub>eq of avoided emissions and removals</p>	<p>Lifespan: 4 years Project 2</p> <p>Lifespan target of GHG emissions: 4.6 million tCO<sub>2</sub>eq – given that emission reductions are calculated against a Forest Reference Emissions Level (FREL) the emissions over a longer lifespan are not calculated.</p> <p>Annual emission reductions: 1.14 tCO<sub>2</sub>eq (average over lifespan).</p>

<sup>260</sup> The final target means the target at the end of project/programme implementation period. However, for core indicator 1 (GHG emission reduction), please also provide the target value at the end of the total lifespan period which is defined as the maximum number of years over which the impacts of the investment are expected to be effective.

						<p>Programme ex-ante estimate: 11.7 million tCO<sub>2</sub>eq</p> <p>GHG emission reductions have been calculated based on the methodology used for the preparation of the Reference Level (RL) of the Lao PDR Emissions Reduction Programme (ER-P), which was submitted and approved (in June 2018) by the FCPF Carbon Fund and is compliant with the Carbon Fund Methodological Framework. More detailed information is provided in the GHG Emission Reduction Methodology Note in Annex 22.</p>
<p><u>ARA1 Most vulnerable people and communities</u></p>	<p><u>Core 2: Direct and indirect beneficiaries reached</u></p>	<ul style="list-style-type: none"> <li>▪ Data from Village Authorities obtained during FPIC 1</li> <li>▪ Data from District Authorities</li> <li>▪ Project M&amp;E</li> </ul> <p>Evaluation reports to have information on adaptation impacts</p>	<p>Project 1 target:</p> <p>120,000 persons from project 1 (60,000 male, 60,000female) will be continued to be supported by Project 2</p> <p>390,391 indirect beneficiaries (195,196 men, 195,195 women) under project 1</p>	<p>Project 2:</p> <p>82,110 direct beneficiaries (41,055 men, 41,055 women)</p> <p>238,716 indirect beneficiaries (119,358 men, 119,358 women)</p>	<p>Project 2:</p> <p>273,700 direct beneficiaries (136,850 men, 136,850 women)</p> <p>723,382 indirect beneficiaries (361,691 men, 361,691 women)</p>	<p><b>Direct beneficiaries</b> calculated based on the following assumptions:</p> <ul style="list-style-type: none"> <li>▪ 530 villages will be supported in Project 2 (240 villages with continued support from project 1, and an additional 290 villages under Project 2).</li> <li>▪ Population data is based on Lao Population and Housing Census Data 2015 (<a href="https://lao.unfpa.org/sites/default/files/pub-pdf/PHC-ENG-FNAL-WEB_0.pdf">https://lao.unfpa.org/sites/default/files/pub-pdf/PHC-ENG-FNAL-WEB_0.pdf</a>)</li> <li>▪ For Project 1, an average of 500 inhabitants per village was used to calculate the number of direct beneficiaries, based</li> </ul>

						<p>on the Lao Housing and Population Census, which focused on three provinces: Houaphan, Luang Prabang and Sayabouri.</p> <ul style="list-style-type: none"> <li>▪ An average value of 530 inhabitants per village was assumed for Project 2 villages (based on the Lao Housing and Population Census, considering the inclusion of an additional 3 provinces.</li> <li>▪ It is assumed all villagers in the target villages are direct beneficiaries, as they will benefit from land use planning and other project-supported interventions.</li> </ul> <p><b>Indirect beneficiaries</b> calculated based on the following assumptions:</p> <ul style="list-style-type: none"> <li>▪ Population in all 29 districts (17 districts within Luang Prabang, Sayabouri and Houaphan, and an additional 12 districts from Bokeo, Oudomxay and Luang Namtha) benefit from strengthened legal and regulatory framework, improved monitoring and government capacities on climate change mitigation and adaptation.</li> </ul>
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						<ul style="list-style-type: none"> <li>Indirect beneficiaries = population in all 29 supported districts – the number of direct beneficiaries</li> <li>17 districts covered under Project 1</li> <li>12 districts under Project 2</li> <li>District population data from <a href="#">Lao Population and Housing Census Data (2015)</a></li> </ul>
<u>ARA1 Most vulnerable people and communities</u>	<u>Supplementary 2.1: Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options</u>	<ul style="list-style-type: none"> <li>FPIC monitoring</li> <li>PSAP monitoring data</li> <li>Project M&amp;E</li> </ul> <p>Evaluation report to have information on adaptation impacts</p>	<p>Project 1 target:</p> <p>53,720 persons from project 1 (26,860 men, 26,860 women)</p> <p>Project 2:</p> <p>0</p>	<p>Project 2</p> <p>18,900 beneficiaries (9,450 men, 9,450 women) adopting more climate resilient livelihood options</p>	<p>Project 2</p> <p>75,604 beneficiaries (37,802 men, 37,802 women) adopting more climate resilient livelihood options</p>	<p>Calculated based on the number of beneficiaries who access PSAP funds.</p> <p>158 persons accessed PSAP funds on average per village under project 1 during the first round of PSAP implementation. An additional 103 persons could access PSAP funds as part of the bonus payment assuming 65% of bonus payment is channelled towards agricultural activities.</p> <p>Programme target:</p> <p>129,323 beneficiaries adopting improved and/or new climate resilient livelihood options</p>
<u>ARA4 Ecosystems and ecosystem services</u>	<u>Core 4: Hectares of natural resources brought under improved low-emission</u>	<ul style="list-style-type: none"> <li>PLUP and VFMP Monitoring Data</li> <li>Participatory land use plans developed under Activity 1.2.2</li> </ul>	<p>Project 1 target:</p> <p>920,000 ha</p>	<p>Project 2:</p> <p>1,500,000 ha of terrestrial</p>	<p>Project 2:</p> <p>2,122,000 ha of terrestrial</p>	<p>Programme level – the final target in Project 2 includes continuation of activities that started under Project 1. Total</p>

	<p><u>and/or climate-resilient management practice</u></p>	<ul style="list-style-type: none"> <li>▪ Village Forest Management Plans developed under Activity 3.3.1</li> <li>▪ Protected Area Management Plans developed under Activity 3.2.1</li> <li>▪ Project M&amp;E</li> <li>▪ Mid-term evaluation report to have dedicated section on adaptation impacts</li> </ul>		<p>ecosystems brought under improved sustainable and climate resilient land management practices, of which:</p> <ul style="list-style-type: none"> <li>▪ 1,100,000 ha are forest ecosystem</li> <li>▪ 400,000 are agri-ecosystems</li> </ul>	<p>ecosystems brought under improved sustainable and climate resilient land management practices, of which:</p> <ul style="list-style-type: none"> <li>▪ 1,422,000 ha are forest ecosystems</li> <li>▪ 700,000 are agri-ecosystems</li> </ul>	<p>area of all land use plans for 530 villages.</p> <p>Area of agricultural land was calculated assuming 1,320.75 ha of agriculture land per village (the average agricultural area per village under Project 1) x 530 villages.</p> <p>Area of forest land was calculated assuming the inclusion of village forests, 5 NPAs and 1 NP.</p> <p>Village forests supported:</p> <ul style="list-style-type: none"> <li>▪ 180,000 ha of village forests from Project 1 will continue to be supported by Project 2</li> <li>▪ Project 2 is expected to support 290 new villages with VFM. The average area of village forests covered under Project 1 was 700 ha. Therefore, it is estimated that new VF groups under Project 2 will cover 203,000 ha.</li> </ul> <p>In terms of NPAs:</p> <ul style="list-style-type: none"> <li>▪ 672,200 ha are NPAs supported under Project 1, that will be continued to be supported under Project 2</li> <li>▪ 367,150 ha are additional NPAs that are included within Project 2 in the 3</li> </ul>
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						newly added provinces (Bokeo, Oudomxay and Luang Namtha)
<u>ARA4 Ecosystems and ecosystem services</u>	<u>Supplementary 4.1: Hectares of terrestrial forest, terrestrial non-forest, freshwater and coastal marine areas brought under resoration and/or improved ecosystems</u>		Project 1 target:  852,200 ha of National Park, NPAs and village forests	Project 2:  1,100,000 ha of National Park, Protected Areas and village forests	Project 2:  1,422,000 ha of National Park, Protected Areas and village forests	<p>Area of national parks, NPAs and village forests covered within the programme.</p> <p>Village forests supported:</p> <ul style="list-style-type: none"> <li>▪ 180,000 ha of village forests from Project 1 will continue to be supported by Project 2</li> <li>▪ Project 2 is expected to support 290 new villages with VFM. The average area of village forests covered under Project 1 was 700 ha. Therefore, it is estimated that new VF groups under Project 2 will cover 203,000 ha.</li> </ul> <p>In terms of NPAs:</p> <ul style="list-style-type: none"> <li>▪ 672,200 ha are NPAs supported under Project 1, that will be continued to be supported under Project 2</li> <li>▪ 367,150 ha are additional NPAs that are included within Project 2 in the 3 newly added provinces (Bokeo, Oudomxay and Luang Namtha)</li> </ul>

**E.4. GCF Outcome level: Enabling environment (IRMF core indicators 5-8 as applicable)**

The following Table provides an overview of enabling environment-related GCF core indicators under the Integrated Results Management Framework. Annex 2e provides additional information on the rating for the current state.

Core Indicator	Baseline context (description)	Rating for current state (baseline)	Target scenario (description)	How the project will contribute	Coverage
<p><u>Core Indicator 5: Degree to which GCF investments contribute to strengthening institutional and regulatory frameworks for low emission climate-resilient development pathways in a country-driven manner</u></p>	<p>Project 1 advanced with the strengthening of institutional and regulatory frameworks for REDD+ in Lao PDR. This included, supporting various regulations to mainstream REDD+ and sustainable land and forest management, updating development plans. In addition, project 1 started institutional strengthening and capacity building in 3 of 6 provinces (Houaphan, Luang Prabang and Sayabouri). With these advances, there are clear experiences that can be replicated in the remaining 3 provinces (e.g. trainings on gender equality, social inclusion, FPIC, PLUP, PSAP, VFAGs and VFM, establishing PDMS, capacity building).</p> <p>In addition, project 1 has generated valuable experiences and supported capacity building of EPF through providing EPF the</p>	<p><u>low</u></p>	<p>The target scenario would see the capacities of government officials in PONRE, DONRE, PAFO, DAFO, POFI and DOFI strengthened in all six provinces, enabling them to continue to support and eventually replicate and scale up investments in climate resilient, deforestation free and low-emission sustainable land management.</p> <p>In terms of finance, the target scenario would see Lao PDR access additional sources of climate finance (e.g. adaptation fund, mechanisms under Article 6 of the Paris Agreement; and voluntary REDD+ initiatives), that will support the country to implement measures to meet the climate change targets set out in NDC and Climate Change Strategy.</p> <p>In addition, EPF would become accredited to GCF,</p>	<ul style="list-style-type: none"> <li>▪ Project 2 will support the establishment of proven management systems in the remaining 3 provinces (e.g. PDMS), and provide ongoing capacity support to government staff at the provincial and district level in all 6 provinces, understanding that upscaling and replication is a gradual process. This will ensure capacity building ranges from improving planning (considering best practices for adaptation mainstreaming, FPIC, gender equality and social inclusion), as well as implementation of best practices for PLUP, climate resilient and deforestation agriculture, SFM and FLR, and transparent and effective monitoring.</li> </ul>	<p><u>National level (one country)</u></p>

	<p>role of EE. Through supporting EPF with the establishment of their climate change funding window, project 1 has improved channelling of climate finance to priority investments within villages across Houaphan, Luang Prabang and Sayabouri. EPF has since begun the process of applying for GCF accreditation, although additional support is needed to support them with this process.</p> <p>While these advancements are a step in the right direction, there are several barriers that persist in Lao PDR that limit the transition to low-emission and climate resilient development pathways. First of all, Lao PDR is a LDC, and there are insufficient government resources and capacities for climate change adaptation and mitigation. Lao PDR's NDC (2021) highlights the urgent need to mobilize additional climate finance from the public and private sector to invest in climate change mitigation and adaptation, where forestry and agriculture are among two of its priority sectors. It</p>		<p>enabling the fund to plan, implement, and monitor climate finance projects.</p>	<ul style="list-style-type: none"> <li>▪ It will build on the manuals, guidelines, training materials and other resources developed under project 1, while providing additional support to mainstream adaptation throughout these processes and materials (strengthening the linkages between climate change mitigation and adaptation, and facilitating investments in resilience building within the AFOLU sector).</li> <li>▪ Project 2 will also help fill the critical gap related to financing climate action. It will:</li> <li>▪ Support EPF to continually strengthen their capacities, gain experience managing a matching grant scheme, and support its accreditation process to access international climate finance, and develop, implement and monitor high quality climate change projects.</li> <li>▪ Build the capacities of FPF to prepare them to eventually sustainably</li> </ul>	
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	<p>further notes the need to strengthen the synergies between REDD+ and climate change adaptation, which are often untapped. A key opportunity for this is to integrate adaptation within PLUP, PSAP and VFM, however until now there is no systematic approach.</p>			<p>manage and disburse potential climate finance sources (e.g. Climate Change Funding Window, REDD+ Results-based Payments under the FCPF, and other sources)</p> <ul style="list-style-type: none"> <li>▪ Support Lao PDR with a set of comprehensive measures that will facilitate the additional mobilization of climate finance to meet the country's NDC – this will include support to the readiness process for participating in mechanisms under Article 6 of the Paris Agreement (including supporting the process of developing eligibility criteria for programs, projects, and units); action plans for meeting the requirements of voluntary REDD+ initiatives; and supporting the NDA to develop a financing strategy identify and fundraise climate finance to meet conditional NDC targets and the climate change adaptation</li> </ul>	
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				investment needs outlined in the NDC	
<p><u>Core indicator 7: Degree to which GCF Investments contribute to market development/transformation at the sectoral, local, or national level</u></p>	<p>Poverty and lack of alternative livelihood opportunities (e.g. off-farm employment) have resulted in a high dependence on land and forests for household income in the project area. Project 1 developed the PSAP approach for transitioning to deforestation free production in target villages.</p> <p>Further engagement of the private sector to support the development of deforestation free value chains is required. Agri-MSMEs are critical actors to support the development of these value chains given their position as a critical actor at the intersection of deforestation, production systems and value chains. However, they are often left out of discussions on sustainability, and here is a notable absence of financing opportunities for agri-MSMEs to invest in sustainable forestry, agroforestry, and deforestation free climate resilient agriculture activities. These factors contribute to creating a bottleneck for the development of</p>	<p><u>medium</u></p>	<p>The targeted scenario would see deforestation free and climate resilient agriculture and agroforestry practices implemented by producers. Implementation would be supported, incentivized, and maintained through more predictable market demand for deforestation free commodities from value chain actors, especially by agri-MSMEs. This would lead to strengthened and more sustainable agricultural value chains.</p> <p>In terms of finance, the target scenario, would see the availability of finance for agri-MSMEs seeking to undertake investments in sustainability oriented activities.</p>	<p>Project 2 will scale the implementation of the PSAP approach (Activity 2.1.1) in the three new provinces. This will facilitate the transition to deforestation free and climate resilient agricultural production systems in the targeted villages and support producers to enhance their productivity. Specifically, the approach will address key drivers of deforestation, such as agricultural expansion and unsustainable pioneering and rotational shifting cultivation.</p> <p>The approach of Project 2 also seeks to integrate farmers into climate resilient and low-emission agricultural value chains. Through supporting private sector actors, and specifically, agri-MSMEs purchasing commodities from target villages (Activity 2.2.1) to enhance their capacities and sustainability performance and with targeted financial support for sustainable investments the project aims to strengthen these value chains and support a</p>	<p><u>Multiple sub-national areas within a country</u></p>



	deforestation free and sustainability oriented value chains.			<p>market-shift towards deforestation free and climate resilient agriculture.</p> <p>In terms of forestry, the project will support villagers to benefit from changes in the forest law to economically benefit from the sustainable management of village forests (Component 3). This is a new provision under the new forestry law, and the project enters at an opportune moment to support villagers from forest management planning to implementation and monitoring, while strengthening income-generating opportunities for local villagers from SFM and FLR.</p>	
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**E.5. Project/programme specific indicators (project outcomes and outputs)**

The following table outlines the project specific indicators (project outcomes and outputs). Baseline values reflect progress made under Project 1.

Project/programme results (outcomes/ outputs)	Project/programme specific Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions / Note
				Mid-term	Final	
<b>Outcome 1:</b> Governance and the implementation of low-emission and climate-informed planning is	Area (ha) of village agricultural and forested land covered by PLUPs and under more	<ul style="list-style-type: none"> <li>Approved participatory land use plans/ PLUP monitoring</li> </ul>	Project 1 target:	Project 2:	Project 2:	Average area per village under PLUP was calculated based on average values from Project 1, where the

strengthened and sustainable financing sources are accessed	sustainable and climate-resilient management	<ul style="list-style-type: none"> <li>PDMS and reports from POFI/ DOFI</li> <li>Project M&amp;E</li> </ul>	920,000 ha	1,290,000 ha	2,100,000 ha	average PLUP village land use plan covered 3,838 ha. 530 villages: Comprised of 170 villages from Project 1 and 70 from KfW village forestry, plus 290 under Project 2 (240 in new provinces and additional 50 in existing provinces)
Output 1.1 Organisational structure and capacities of domestic (financial) institutions are strengthened to access, mobilize, manage and monitor the use of climate finance from diverse public and private sources	Number (#) of public institutions with strengthened capacities to manage and monitor climate finance from diverse public and private sources	<ul style="list-style-type: none"> <li>Documentation of trainings (attendance sheets, materials)</li> <li>Project M&amp;E</li> <li>Gap assessment and action plan Article 6</li> <li>Conformance plan with requirements of REDD+ voluntary initiatives</li> </ul> <p>NDA financing strategy for NDC implementation</p>	Project 2: 0 public institutions	Project 2: 1 institution	Project 2: 2 institutions	Public institutions (EPF and FPF)
Output 1.2 Participatory village Land Use Plans are developed, are climate informed and integrate measures to strengthen climate resilience	# of climate-informed participatory village LUPs developed	<ul style="list-style-type: none"> <li>Approved and finalized participatory land use plans / PLUP monitoring</li> </ul> <p>Project M&amp;E</p>	Project 1 target: 240	Project 2: 320	Project 2: 530	170 from project 1 and 70 from KfW village forestry, plus 290 under project 2 (240 in new provinces and additional 50 in existing provinces)
<b>Outcome 2:</b> Vulnerabilities of villagers are reduced and their livelihoods are improved by engaging in climate resilient, deforestation free value chains and access to markets	Area (ha) under sustainable, deforestation free and climate resilient agricultural practices	<ul style="list-style-type: none"> <li>PSAP work plan and PSAP monitoring</li> <li>VFAG documentation and registration for cooperation on sustainable agricultural practices</li> <li>Village Agricultural Activity and Investment Plan</li> <li>Field survey results</li> </ul> <p>Project M&amp;E</p>	Project 1 target: 14,400 ha  Project 2: 0	Project 2: 4,350 ha	Project 2: 17,400 ha	Project 2 will target approximately 17,400 ha. This was calculated considering the following assumptions: the average landholding of upland dependent families is of 1.2 hectares. The project will be able to support PSAP implementation on an average of 50 upland dependent families per village in 290 villages

						<p>through the VFAG initial payment and the bonus payment (this would come to a total of 14,500 families with approximately 17,400 hectares in total). The VFAG initial payment will be on average of EUR 10,800 and can reach at least 27 families with EUR 400 for PSAP implementation (under project 1 there have been 29-30 families accessing PSAP funding under VFAGs)..It is assumed that villages will receive a bonus performance-based payment averaging EUR 10,000 and that 65% of that bonus payment will be channelled to PSAP activities and support an additional 20 upland dependent families.</p> <p>This assumes also that across the 3 new provinces there are 523 people/village on average living in a total of 922 rural villages. That corresponds to an average of circa 100 families per rural village (5.3 persons/family). Assuming the figures are similar in the 3 provinces of Project 1, and in the 290 target villages in total, this adds up to a total of 29,000 families overall. PSAP only addresses the upland farming families, which are</p>
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						estimated to be 60% of the total.  Total Programme Target: 31,800 ha.
	% of beneficiaries that report an increase in overall climate resilience	<ul style="list-style-type: none"> <li>Household surveys at baseline, mid-term and end of the project</li> </ul> Project M&E	0%	18% beneficiaries report an increase in overall climate resilience	At least 75% of beneficiaries report an increase in overall climate resilience	This will be measured based on household survey results. From the households participating in PSAP (as described in the assumptions/ note above), at least 75% of participating households in the survey report an increase in their resilience.
Output 2.1 Villagers are trained by capacitated government staff, and enabled to produce sustainable, climate resilient and deforestation free agricultural and agroforestry products, strengthening their access to sustainability-oriented markets	# of villages received funding for PSAP implementation from the VFAG for climate resilient and deforestation free agriculture and agroforestry	<ul style="list-style-type: none"> <li>PSAP work plans</li> <li>PSAP and VFAG monitoring</li> <li>VFAG documentation and registration for cooperation on sustainable agricultural practices</li> <li>Village Agricultural Activity and Investment Plan</li> <li>Field survey results</li> </ul> Project M&E	Project 1 target: 170  Project 2: 0	Project 2: 130	Project 2: 290	170 villages received funding for PSAP implementation from VFAG in Project 1  It is assumed all 290 villages supported under Project 2 will receive funding for PSAP implementation.
Output 2.2 Agri-MSMEs are capacitated, and have improved incentives and access to finance to invest in marketing and processing for locally sourced deforestation free and climate resilient agricultural products	# of agri-MSMEs receiving matching grants to invest in climate resilient, low-emission and/or deforestation free value chains	<ul style="list-style-type: none"> <li>Signed matching grant agreements</li> <li>Business plans</li> </ul> Project M&E	Project 2: 0	Project 2: 15	Project 2: 60	Assumes that there will be 60 agri-MSMEs supported that will be able to access matching grants with average grants across categories of EUR 30,000

<p><b>Outcome 3:</b> Sustainable management, protection and rehabilitation of forest ecosystems is improved</p>	<p>Area (ha) under more resilient and sustainable forest practices across forest categories (village forestry and protected areas)</p>	<ul style="list-style-type: none"> <li>▪ Approved Protected Area Management Plans</li> <li>▪ Approved Village Forest Management Plans</li> <li>▪ VFM and ViFoCA monitoring</li> <li>▪ Project M&amp;E</li> <li>▪ Monitoring reports of PoFI and DOF</li> </ul>	<p>Project 1 target: 852,200 ha</p>	<p>Project 2: 1,100,000 ha</p>	<p>Project 2: 1,422,000 ha</p>	<p>Area (ha) under sustainable forest practices across forest categories = area of village forest and NPAs supported by the project. Project 2 will continue supporting NPAs and Village Forests Areas that are supported under Project 1.</p> <p>Village forests supported:</p> <ul style="list-style-type: none"> <li>▪ 180,000 ha of village forests from project 1 will continue to be supported by Project 2 (with an average of 750 ha per village forest)</li> <li>▪ Project 2 is expected to support 290 new villages with VFM. The average area of village forests covered under Project 2 was assumed at 700 ha.<sup>261</sup> Therefore, it is estimated that new VF groups under Project 2 will cover 203,000 ha.</li> <li>▪ In total VFM will cover 383,000 ha.</li> </ul> <p>In terms of NPAs:</p> <ul style="list-style-type: none"> <li>▪ 672,200 ha are NPAs supported under Project 1, that will be continued to be supported under Project 2</li> </ul>
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<sup>261</sup> The average area was reduced to 700 ha per village to be more conservative, as village forest size in the additional 3 provinces is likely to be slightly smaller. This is partly linked with the size of NPAs, which are larger in area in the 3 NPAs covered under Project 1, where villagers in the same districts as these NPAs tend to have larger village forests.



						<ul style="list-style-type: none"> <li>367,150 ha are additional NPAs that are included within Project 2 in the 3 newly added provinces (Bokeo, Oudomxay and Luang Namtha)</li> <li>In total, these 5 NPAs and 1 NP cover 1,039,350 ha</li> </ul>
Output 3.1 Village communities are trained by capacitated government staff and have the financial resources to implement sustainable (village) forest management plans that contribute to REDD+ and strengthen the resilience of forest ecosystems and the livelihoods that depend on them	# of village forest management plans developed and under implementation that contribute to strengthened resilience	<ul style="list-style-type: none"> <li>Approved Village Forest Management Plans</li> <li>Project M&amp;E</li> <li>Grant requests from VFAG for VMP implementation</li> <li>Monitoring reports of PoFI</li> </ul>	Project 1 target: 240	Project 2: 340	Project 2: 530	240 villages supported under Project 1 with VFM, who will receive continued support under Project 2 (as described under Chapter B.3). 290 additional villages will be supported under Project 2 (240 in Bokeo, Luang Prabang and Oudomxay, and 50 in Houaphan, Luang Prabang and Sayabouri)
Output 3.2 National Protected Area (NPA) management plans are developed and communities are enabled and actively engaged in implementing conservation agreements in NPAs that enable sustainable forest management and forest conservation	<p>a) # of climate-informed NPA management plans revised and under implementation</p> <p>b) # of village forest conservation agreements signed and under implementation</p>	<ul style="list-style-type: none"> <li>Approved Protected Area Management Plans</li> <li>Approved ViFoCA</li> <li>Project M&amp;E</li> <li>PDMS and monitoring reports of PoFI and DOF</li> </ul>	Project 2 baseline: a) 0 b) 41	Project 2: a) 4 b) 80	Project 2: a) 6 b) 140	<p>All NPA and National Parks have management plans that will require revision for the period from 2025-2030</p> <p>ViFoCA in baseline developed by development partners (4 in Nam Sam NPA, 23 in Nam et Phou Louey National Park, 14 in Nam Pouy NPA, 0 in Phou Hi Phi, 0 in Nam Ha NPA, 0 in Nam Kan NPA).</p>
<b>Project/programme co-benefit indicators</b>						

Co-benefit 1: Improved food security	Percentage (%) of direct beneficiaries (male and female) who confirm improved food security	<ul style="list-style-type: none"> <li>Survey (mid-term, and final survey)</li> <li>Project M&amp;E</li> </ul>	0%	50% of female beneficiaries 50% of male beneficiaries	70% of female beneficiaries 70% of male beneficiaries.	Surveys to be conducted in target villages at project mid-term and project-end.
Co-benefit 2: Enhanced conservation of biodiversity	Area of NPAs where sustainable forest management and conservation are implemented with strong biodiversity benefits, including important habitats for diverse species including the black gibbon, among others	<ul style="list-style-type: none"> <li>Approved Protected Area Management Plans, ViFoCA</li> <li>Project M&amp;E</li> <li>Monitoring reports of PoFI and DOF</li> </ul>	Project 1 target: 670,000 ha	Project 2: 900,000 ha	Project 2: 1,039,350 ha	<p>Baseline figures cover the 2 NPAs and 1 National Park covered under Project 1 (total area circa 672,200 ha):</p> <ul style="list-style-type: none"> <li>70,000 ha Nam Sam NPA</li> <li>411,000ha Nam et Phou Louey NP</li> <li>191,200 ha Nam Pouy NPA</li> </ul> <p>Total Figure under project 2 includes 3 additional NPAs supported in Bokeo, Luang Namtha and Oudomxay (combined area 367,150 ha):</p> <ul style="list-style-type: none"> <li>87,350 ha Phou Hi Phi NPA</li> <li>222,400 ha Nam Ha NPA</li> <li>57,400 ha Nam Kan NPA</li> </ul>

### E.6. Project/programme activities and deliverables

The following Table describes all project activities and sub-activities. For further information on their timing, refer to the Implementation Timetable in Annex 5.

Activities	Description	Sub-activities	Deliverables
Activity 1.1.1 Climate change funding window and sustainable finance	Activity 1.1.1 will strengthen institutional capacities to channel and mobilize additional climate finance (EPF and FPF). It will further support EPF with their GCF accreditation process. It also will support Lao PDR to assess additional options for finance for REDD+ results, with cross-	<ul style="list-style-type: none"> <li>Sub-activity 1.1.1.1 Enhancing the capacities of EPF &amp; FPF to manage and monitor climate finance, including results-based payments</li> <li>Sub-activity 1.1.1.2 Options assessment and action plan for</li> </ul>	<ul style="list-style-type: none"> <li>Capacity development plan for enabling EPF and FPF to manage and monitor climate finance implemented</li> <li>Gap assessment and action plan for enabling the participation of Lao PDR in market mechanisms under Article 6,</li> </ul>

	cutting climate change benefits, in excess of the contract volume of the FCPF Carbon Fund; support the readiness activities for participating in mechanisms under Article 6 of the Paris Agreement; and will support the NDA in developing a financing strategy for climate change adaptation and for meeting the targets in the country's ambitious NDC.	securing long-term financing for NDC implementation in the AFOLU sector	including options to address issues related to corresponding adjustments <ul style="list-style-type: none"> <li>▪ Viability assessment for Lao PDR participation in existing REDD+ voluntary market and non-market mechanisms</li> <li>▪ Conformance plan to meet the requirements of market-oriented REDD+ Financing strategy and implementation plan NDC implementation</li> </ul>
Activity 1.2.1 Law enforcement and monitoring	Activity 1.2.1 will strengthen law enforcement and monitoring to ensure transparent and robust forest monitoring. It will involve training provincial and district staff on best practices and SOPs developed under Project 1, supporting the development of 3 PDMS (Bokeo, Luang Namtha and Sayabouri), operationalization of PDMS in all 6 provinces, harmonization of approaches and improvement of knowledge management for strengthened law enforcement.	<ul style="list-style-type: none"> <li>▪ Sub-activity 1.2.1.1 Training to facilitate implementation of enhanced law enforcement</li> <li>▪ Sub-activity 1.2.1.2 Operationalization of provincial deforestation monitoring systems (PDMS)</li> <li>▪ Sub-activity 1.2.1.3 Harmonization of approaches and improvement of knowledge management for strengthened law enforcement</li> </ul>	<ul style="list-style-type: none"> <li>▪ 3 new PDMS established for additional provinces included under Project 2 (Bokeo, Oudomxay and Luang Namtha)</li> <li>▪ POFI and DOFI staff trained on PDMS, and are able to monitor forest cover change with new remote sensing technologies according to SOPs</li> <li>▪ PDMS operational in all 6 provinces</li> <li>▪ PDMS monitoring approaches are harmonized</li> <li>▪ Annual summary reporting protocols from the village level made available at the DPMU</li> </ul>
Activity 1.2.2 Land use planning and improved tenure security	Activity 1.2.2 will support mainstreaming of climate change adaptation into PLUP 2.0 processes (through the development of an adaptation supplement), followed up training of PLUP teams at the provincial and district level on climate change adaptation, best practices for PLUP, FPIC, gender equality and social inclusion (GESI). With strengthened capacities, tools and supporting materials, PLUP teams then conduct PLUP in 290 villages (240 villages in Bokeo, Luang Namtha and	<ul style="list-style-type: none"> <li>▪ Sub-activity 1.2.2.1 Mainstreaming climate-change adaptation into land use planning manuals and guidelines, provincial core PLUP trainers on climate risk and vulnerability and suitable interventions to strengthen climate resilience</li> <li>▪ Sub-activity 1.2.2.2 Participatory village land use planning (PLUP) in target project districts (linked with Activity 1.2.1 and Components 2 and 3) in hotspot areas<sup>262</sup></li> </ul>	<ul style="list-style-type: none"> <li>▪ Village land use plans developed and under implementation</li> <li>▪ Land use plans (developed and under implementation) have at least 70% compliance</li> <li>▪ At least 70% of all adult villagers in target (of which 50% are female) villages state that they feel actively included in the PLUP process</li> </ul>

<sup>262</sup> In some district and target villages, donor-funded initiatives such as the GIZ LMPD project have supported land use planning. These land use plans will not require a new land use planning exercise and the programme will build upon and support their implementation and monitoring

	Oudomxay, and 50 villages in Houaphan, Luang Prabang and Sayabouri), which will guide the implementation of investments under Components 2 and 3.	<ul style="list-style-type: none"> <li>Sub-activity 1.2.2.3 Monitoring and enforcement of land use plans</li> </ul>	
Activity 1.2.3 Knowledge management, FPIC, safeguards and gender	Activity 1.2.3 focuses on knowledge management and communication related to the project. It further involves the implementation of the Environmental and Social Management Plan (ESMP) and Gender Action Plan (GAP), and ensures compliance with FPIC procedures and safeguards (where the FPIC process is cross-cutting throughout the project outputs and activities).	<ul style="list-style-type: none"> <li>Sub-activity 1.2.3.1 Knowledge management and communication</li> <li>Sub-activity 1.2.3.2 Implementation of the Environmental and Social Management Plan (ESMP) and Gender Action Plan (GAP) and ensuring compliance with FPIC and safeguards</li> </ul>	<ul style="list-style-type: none"> <li>Project communication plan implemented</li> <li>Awareness campaigns designed and implemented in newly added project provinces and districts</li> <li>Project website maintained and regularly updated</li> <li>Safeguard-related activities systematically recorded</li> </ul>
Activity 2.1.1 Promotion of sustainable, climate informed and deforestation free agricultural practices and technologies	Activity 2.1.1 will facilitate the implementation of sustainable, climate informed and deforestation free agricultural practices and technologies in 290 villages in the 6 provinces. It will involve institutional strengthening on PSAP at the provincial and district levels, climate change adaptation mainstreaming in PSAP processes and manuals, working with villagers to develop and implement PSAP investment plans that are tailored to their local context and priorities (which build on climate-informed PLUP developed under Activity 1.2.2), and support ongoing knowledge management and learning to continually strengthen and improve the PSAP approach and generate new information on best practices for deforestation free and climate resilient agricultural practices. Transferring of funds for PSAP investment plan implementation will be linked with VFAGs, established and operated under Activity 2.1.2.	<ul style="list-style-type: none"> <li>Sub-Activity 2.1.1.1 Capacity building and knowledge management for sustainable, climate resilient and deforestation free agricultural practices and technologies</li> <li>Sub-Activity 2.1.1.2 Scaling of PSAP planning approach to 290 villages</li> <li>Sub-Activity 2.1.1.3 Implementation of PSAP Agricultural Activity and Investment Plan</li> </ul>	<ul style="list-style-type: none"> <li>DAFO and TSC staff trained on climate resilient good agricultural practices, related to the White List, and the PSAP/ VFAG process</li> <li>Climate resilient and deforestation free agricultural practices adopted, leading to increased yields, disaggregated by crops</li> <li>For climate resilient and deforestation free agricultural practices: Each eligible village receives approximately EUR 10,800 upfront as an incentive payment, and later approximately EUR 10,000 in the form of a performance-based bonus payment (contingent on performance and forest area size)</li> <li>Participation rates of women in community meetings are at least 40%</li> </ul>
Activity 2.1.2 Investments in sustainable, climate informed and deforestation free agricultural practices and agroforestry	Activity 2.1.2 will support the set up and implementation of Village Forestry and Agriculture Grants (VFAG), following the	<ul style="list-style-type: none"> <li>Sub-activity 2.1.2.1 Scaling up the VFAG approach to 290 villages</li> </ul>	<ul style="list-style-type: none"> <li>VFAGs set up and operational in 290 villages, channelling funds from EPF to local villages for PSAP investment plan</li> </ul>

	guidelines developed under Project 1. VFAG will serve as the mechanism which will receive EPF grants, channelling funds to the village level.	<ul style="list-style-type: none"> <li>Sub-activity 2.1.2.2 Capacity building of new VFAG committees</li> <li>Sub-activity 2.1.2.3 Monitoring of VFAGs</li> </ul>	implementation (under Activity 2.1.1), and VFM (under Activity 3.1.1)
Activity 2.1.3 Watershed forest management to support small-scale irrigation investments	Activity 2.1.3 complements ADB investment in 11 small-scale agricultural irrigation schemes through support to ensuring that the forested landscapes in the catchment areas of the irrigation projects remain intact through improved land management (including good agricultural practices) and through reduced pressure from drivers of deforestation and degradation (e.g. lack of alternative livelihood opportunities, poverty, malnutrition, low agricultural productivity, lack of value adding activities and weak negotiation/marketing skills).	<ul style="list-style-type: none"> <li>Sub-activity 2.1.3.1 Market oriented production</li> <li>Sub-activity 2.1.3.2 Watershed ecological services protected</li> <li>Sub-activity 2.1.3.3 Improved nutritional status</li> </ul>	<ul style="list-style-type: none"> <li>11 market assessments conducted for dry season and upland crops</li> <li>Small-scale irrigation schemes modernized, covering a command area of at least 2,900 ha</li> <li>3 district nutrition teams operational</li> </ul>
Activity 2.1.4 Implementation of benefit sharing plan for climate-smart agriculture and sustainable livelihoods for forest dependent communities	Activity 2.1.4 will support the implementation of the ER-Programme's benefit sharing plan, with a focus on supporting community-level investments climate-smart and deforestation free agriculture	<ul style="list-style-type: none"> <li>Sub-activity 2.1.4.1 Operationalization of benefit sharing plan for sustainable agriculture and sustainable livelihoods for forest dependent communities</li> </ul>	<ul style="list-style-type: none"> <li>Benefit sharing plan implemented, including investments in community infrastructure, and climate-smart agriculture practices</li> </ul>
Activity 2.2.1 Catalysing private sector investments in sustainable climate-informed and deforestation free value chains	Activity 2.2.1 will channel support agri-MSMES to enhance their sustainability performance through targeted technical assistance support and will provide matching grants through EPF to eligible agri-MSMES in 6 provinces to improve their access to finance for sustainable investments; support the development of sustainable value chains, and increase overall investments in sustainable deforestation free, low-emission and climate resilient agriculture.	<ul style="list-style-type: none"> <li>Sub-Activity 2.2.1.1: Climate resilient and deforestation free value chain development</li> <li>Sub-Activity 2.2.1.2: Matching grants to support agri-MSMES develop climate resilient and deforestation free value chains</li> </ul>	<ul style="list-style-type: none"> <li>Signed cooperation agreements with 60 agri-MSMES from 6 provinces to work on climate resilient deforestation free business plans</li> <li>60 agri-MSMES access matching grants, mobilizing at least EUR 1.8 million of private finance</li> </ul>
3.1.1 Village Forest Management (VFM)	Activity 3.1.1 involves the development, implementation and monitoring of VFMPs. Additional attention will be paid to	<ul style="list-style-type: none"> <li>Sub-activity 3.1.1.1 Mainstreaming of climate change adaptation in VFMPs and training DAFO and PAFO on</li> </ul>	<ul style="list-style-type: none"> <li>Adaptation mainstreamed in VFMP guideline</li> <li>290 VFMPs approved in target villages</li> </ul>



	mainstreaming climate change adaptation within VFMPs.	<p>climate change adaptation within village forestry</p> <ul style="list-style-type: none"> <li>▪ Sub-activity 3.1.1.2 Development of VFMPs</li> <li>▪ Sub-activity 3.1.1.3 Implementation and monitoring of VFMPs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Village forests sustainably managed under approved VFMPs for 290 villages</li> <li>▪ Participation rates of women in community meetings are at least 40%</li> </ul>
3.1.2 Implementation of benefit sharing plan for Sustainable Forest Management (SFM) and Forest Landscape Restoration (FLR)	Activity 3.1.2 will support the implementation of the ER-Program's benefit sharing plan, with a focus on supporting community-level investments in SFM and FLR. It will be implemented by the World Bank.	<ul style="list-style-type: none"> <li>▪ Sub-activity 3.1.2.1 Operationalization of benefit sharing plan for SFM and FLR</li> </ul>	<ul style="list-style-type: none"> <li>▪ Benefit sharing plan implemented, including investments in SFM and FLR</li> </ul>
3.2.1 National Protected Area (NPA) management	Activity 3.2.1 will continue to support the sustainable management of NPAs and national parks (NPs) through improved law enforcement, NPA management and Village Forest Conservation Agreements (VilFoCA)	<ul style="list-style-type: none"> <li>▪ Sub-activity 3.2.1.1 Capacity building on climate change adaptation and NPA management</li> <li>▪ Sub-activity 3.2.1.2 Improvement of management and law enforcement in NPA conservation landscape</li> <li>▪ Sub-activity 3.2.1.3 Development of new and amendment of existing Village Forest Conservation Agreements (VilFoCA)</li> <li>▪ Sub-activity 3.2.1.4 Implementation of VilFoCA (sustainable land use, forest conservation and management)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Development of new and revision of existing VilFoCA in 5 NPAs and 1 National Park</li> <li>▪ Forests in 5 NPAs and 1 National Park sustainably managed in cooperation with local guardian villages under approved NPA management plans and through VilFoCA.</li> </ul>

**E.7. Monitoring, reporting and evaluation arrangements (max. 500 words, approximately 1 page)**

### **Monitoring, reporting and evaluation arrangements**

289. Monitoring, reporting and evaluation arrangements (in addition to the ESMP and GAP) 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.

290. The project will apply a customized results-based monitoring and evaluation (M&E) system. The M&E system will track project inputs, activities and sub-activities. Outputs and impacts, as well as associated financial flows across all outputs in all project provinces and districts.

291. This system will be based on:

- GIZ Standard Operating Procedures (“GIZ’s evaluation policy – principles, guidelines and requirements”)
- M&E System from Project 1 (ensuring it is optimized based on the lessons learned during implementation)<sup>263</sup>
- Project 2 monitoring and evaluation plan (Annex 11)
- Project 2 integrated results management framework and logical framework
- Project 2 implementation timetable (Annex 5)
- Project 2 operations manual (Annex 21)
- Requirements of GCF’s Annual Performance Report
- Procedures and requirements of project partners and stakeholders in Lao PDR

292. The oversight for M&E and reporting lies with the GCF AE. The NPMU in Lao PDR will implement the M&E system and work closely with the PPMUs, DPMUs, GIZ EE in Vientiane, as well as government and development partners.

### **Recruitment of M&E staff**

Immediately when Project 2 commences, GIZ’s GCF AE will make available one expert to oversee and coordinate the project M&E and reporting routines. As soon as GCF project proceeds become available in Laos, the project will recruit M&E specialists. The specialist will work closely together and support the management of the M&E system and provide on-the-job training for dedicated M&E experts from the NPMU, six PPMUs and other stakeholder of the system where requested. In addition, the experts will maintain the Cloud Database, and additional specialist inputs may be required for certain technical areas (e.g. agriculture or forestry).

### **Independent monitoring and evaluation studies**

293. GIZ AE will initiate a mid-term evaluation and a final evaluation of Project 2.

294. GIZ evaluations are carried out by GIZ’s independent evaluation unit. This unit is steered by a corporate unit that is separate from operational business and reports directly to the Management Board. Moreover, evaluations are conducted with the support of external evaluators.

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<sup>263</sup> Overall, the set-up of the Monitoring System of Project 1 has shown to be functional, including its technical aspects (using a Cloud Database), the staffing requirements (see chapter below) and the structure of the system (Action Inputs, Steps, Activity Requests, Units). Also, the integration of the Monitoring System with the safeguards and gender monitoring systems has shown to be efficient and effective. Thus, the same approach will be replicated for Project 2.

295. GIZ applies the 'Evaluation criteria for German bilateral development cooperation' (2006, revised 2020) on a standard basis in project evaluations. These are based on the six evaluation criteria agreed by the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD): relevance, effectiveness, efficiency, overarching development results (impact), coherence and sustainability.
296. Additionally to the six OECD DAC evaluation criteria, the following five GCF criteria will be evaluated: Gender equity, country ownership, innovativeness in results areas, replication and scalability as well as unexpected results.
297. Regarding GCFs' Evaluation Principle: Impartial, objective and unbiased and relevance, use and participation: All provisions for upholding the GCF evaluation principles described in Chapter V (a-d) of the Evaluation Policy are followed (see DAC standards and DeGEval evaluation standards). In line with the UNEG norms, evaluation team members selected by GIZ must not be directly responsible for the policy setting, design or management of an evaluation project.
298. Regarding GCFs' Evaluation Principle: Credibility and Robustness: As a matter of principle, GIZ takes care to use an appropriate combination of quantitative and qualitative methods of empirical social research in evaluations. The mix of methods is adapted to the object of the evaluation and the evaluation questions. To ensure robust evidence, GIZ uses a theory-based approach as a minimum standard for its central project evaluations. The contribution analysis has proven to be a suitable design. The aim of contribution analyses is to collect empirical evidence on whether and to what extent contributions to observed changes can be associated with a project. Furthermore, the analyses should increase the understanding and knowledge of what works, what does not work and why.
299. Projects will be rated based on the six OECD/DAC and on the GCF evaluation criteria. Each of the OECD/DAC and GCF criteria is rated on a scale of 1 to 100. Using a points system serve to increase the transparency of ratings, whilst enabling better comparability between individual projects.
300. An Interim Independent Evaluation Report and a Final Independent Evaluation Report will be submitted to the GCF as per timeline agreed in the funded activity agreement (FAA).
301. Results from the mid-term evaluation should be reflected within the project design, to influence upscaling, and improve overall project implementation (adaptive management).

#### **Data collection and frequency**

302. The NPMU will coordinate data collection for implemented activities through responsible executing departments / divisions at 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 head office, again at least every six months.

#### **Measurement, reporting and verification (MRV) of reduced GHG emissions**

303. The MRV of reduced emissions is an essential activity for monitoring the project's efficiency and effectiveness as well as for continued learning across the programme. In cooperation with JICA, FP117 included a dedicated technical assistance package that was specifically devoted to the measurement and reporting of achieved emission reductions, which ensures a system is in place that will continue to support GHG MRV under Project 2. 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 Section D.1 and Annex 22a).

## F. RISK ASSESSMENT AND MANAGEMENT

### F.1. Risk factors and mitigations measures (max. 3 pages)

304.A detailed analysis of Project 2 risks is provided in Chapter 12 of the Feasibility Study (Annex 2a). Environmental and social risks are considered in the Environmental and Social Impact Assessment (ESIA, Annex 6a), and Environmental and Social Management Plan (ESMP, Annex 6b). Gender-specific risks are considered in the Gender Assessment and Gender Action Plan (Annexes 8a and 8b, respectively).

#### Selected Risk Factor 1 - Selected Risk Factor 1 – Loss of capacities and knowledge due to turnover among project related government staff

Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>Low</u>

#### Description

High staff turnover and limited numbers of government extension staff impedes retention of skills and knowledge in the relevant sectors and institutions.

#### Mitigation Measure(s)

- Lessons accrued during project 1 showed that emphasis on documentation and dissemination are important to facilitate knowledge retention, capacity building and knowledge exchange. This includes the development and utilization of clear and user-friendly guidelines and protocols (including those developed under project 1, including, but not limited to: PLUP 2.0, PSAP, VFAG and VFM guidelines), the institutionalization of trainings/workshops (e.g. developing training modules and supporting training of trainers, to facilitate replication and upscaling of trainings), and improving knowledge management systems.
- Continuous engagement with relevant authorities at the national, provincial and district level will further help strengthen knowledge exchange and maintain organizational knowledge. National, provincial and district PMUs and project steering committees will further help to sustain this exchange (see also Chapter B.4).
- Experience from project 1 has also shown that training of multiple staff members in each department / province/ district or team will mitigate the risk of knowledge and capacity drain. Such an approach will be continued within Project 2.
- A knowledge management plan has been developed for Project 2, which is available in Chapter 7 of the Feasibility Study (Annex 2a).

#### Selected Risk Factor 2 - Weak forest law enforcement and corruption

Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>Medium</u>

#### Description

While efforts to reduce corruption in the forest sector have improved law enforcement and reduced corruption, there is still a risk that corruption could persist.

#### Mitigation Measure(s)

- Project 1 developed SOPs improved investigative procedures, whistle-blower systems and improved anti-corruption safeguards that form the basis of efforts for law enforcement and forest monitoring. Continued support under Project 2 Activity 1.2.1 will further strengthen law enforcement, increase transparency and reduce corruption in the forest sector (e.g. training on aforementioned procedures, systems and safeguards, establishment and operationalization of PDMS). PDMS includes a transparent reporting system that is effective, accessible and culturally appropriate to permit reporting at village-, district-, province- and national-level. Lessons learned from project 1 highlighted the relevance of this tool, and the need for continued support for scaling up PDMS within the project area (see Activity 1.2.1 in Section B.3 for more detailed information).
- Project 1 further strengthened the regulatory framework, supporting revisions in the Decree on Protected Areas (ongoing), Forestry Strategy 2021-2035 the National REDD+ Strategy (April 2021), technical guidelines for village forest management planning (June 2021), among others, which have created a stronger basis for reducing

deforestation and forest degradation – including forest law enforcement and monitoring. Project 2 will continue to raise awareness on the legal and regulatory framework.

- Projects 1 and 2 support to improve land use planning and implement sustainable land management activities (e.g. PSAP, VFM), further provides tailored incentives to facilitate the sustained adoption deforestation free and climate resilient sustainable land management activities.

**Selected Risk Factor 3 - Insufficient demand from agri-MSMEs for matching grants and limited participation of private sector actors in the implementation of project activities**

Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>Medium</u>

**Description**

Investments in climate resilient and deforestation free value chains may not materialize. This could be due to various factors (e.g. private sector actors do not want to participate in the project activities and prefer to continue using BAU practices or face competing priorities, private sector actors may not meet the project's eligibility criteria, or business plans do not meet a sufficient quality).

**Mitigation Measure(s)**

- Private sector assessments undertaken for Project 1 and interviews undertaken for the feasibility study of Project 2 reveal that there is willingness by companies to participate in the project and receive technical support for strengthening operational capacities and diversifying their business models.<sup>264</sup>
- Project 2 will hire an international technical specialist, with expertise on agriculture and private sector engagement, to support all activities under Component 2, given the project's strengthened emphasis on Component 2 and private sector investments through agri-MSMEs.
- The project will contract a technical assistance provider to support the process of identifying, screening, shortlisting, and selecting agri-MSMEs to partner with the project. They will further support agri-MSMEs throughout the matching grant cycle. This will ensure there are sufficient companies seeking to benefit from the access to matching grants, and will support them throughout the matching grant cycle (e.g. with business plan development, compliance with white list and eligibility criteria, and processes to seek additional alternative sources of finance (e.g. bank loans).
- The process to access matching grants will be reflective of the capacities available among agri-MSMEs in northern Lao PDR. The design of the matching grant component under Activity 2.2.1 has been informed by consultations with other donors in Lao PDR, including World Bank and ADB, on best practices and experiences for developing matching grant schemes.<sup>265</sup>

**Selected Risk Factor 4 – Promoted investments implemented by villagers and agri-MSMEs could become more financially attractive and create perverse incentives that could accelerate deforestation and forest degradation**

Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>Medium</u>

**Description**

Promoted investments implemented by villagers and agri-MSMEs could become more financially attractive and create perverse incentives that could accelerate deforestation and forest degradation.

**Mitigation Measure(s)**

- Awareness raising is cross-cutting throughout project activities on climate change and the importance of forests for both climate change mitigation and adaptation, and other socio-economic and environmental benefits.

<sup>264</sup> Under Project 1, detailed interviews were conducted with agri-MSMEs in Luang Prabang and Sayabouri. The main objectives of the survey were to review the current Agri-MSME landscape in the 2 provinces, assess common business models, attempt a first categorization of companies, and assess their financial situation and need for external financing. Additional private sector analyses have been undertaken in the Project 1 target provinces, with interviews of 167 companies/traders. As a result, 18 products were identified that matched with the "White List" under Project 1 developed (including broom grass, job's tear, paper mulberry, rice, cardamom, rattan, red bean, bamboo, tea, coffee and sesame).

<sup>265</sup> For example, it was strongly recommended to include technical assistance to support MSMEs to develop business plans and support them with administrative procedures, which has been reflected within the project design. More detailed information is provided within the Feasibility Study (Annex 2a).



- Investments in PLUP, law enforcement and monitoring will facilitate improved transparency and monitoring and law enforcement, improving the detection and enforcement of infractions. Villagers will be incentivized to
- At the village level, the PLUP developed under activity 1.2.2 informs the PSAP process which with its White List outlines sustainable practices that have already been screened for their sustainability and suitability for the project area and Village Forest Management Plans. In addition to law enforcement, compliance with the plans will be promoted through village peer pressure and incentivized through bonus payments and a second VFAG funding cycle.
- Eligibility criteria are developed which will screen agri-MSMEs, and contracts with agri-MSMEs will further include legal commitments to deforestation free and sustainable practices. The implementation of business and investment plans by agri-MSMEs will be continuously monitored by a contracted TA provider to ensure that they contribute to climate resilient and deforestation free value chain development.
- Long-term relationships between farmers and companies are being actively facilitated with a focus on sustainability and TA will be used as an essential tool to link agri-MSMEs receiving matching grants with producers adopting deforestation free and climate resilient practices

**Selected Risk Factor 5 – limited institutional and cross-sectoral coordination limits the effectiveness of project activities**

Category	Probability	Impact
<u>Technical and operational</u>	<u>Low</u>	<u>Medium</u>

**Description**

Sub-optimal cross-sectoral coordination and potential conflicting interests may limit the adoption and effectiveness of REDD+ and related measures.

**Mitigation Measure(s)**

- Chapter B.1.5 outlines the project's alignment with the national policy framework, where it is evident the project is well aligned with the priorities of the Government of Lao PDR. This project has been developed together with the Government of Lao PDR, through extensive consultations and meetings with government actors and other stakeholders at the national, provincial, district and village level. Country ownership, which is central to addressing the barriers identified in B.2 as well as other challenges related to coordination, is further highlighted under Chapter D.5, where current efforts highlight the government's commitment to the project.
- Improved cross-sectoral planning and dialogue between key actors (including MPI, MAF, MONRE, PONRE, PAFO, POFI) is a cross-cutting measure throughout various project activities.
- The GCF Project 2 continues to build on the 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 in Project 1, the National and Provincial REDD+ Task Forces will support project steering, and ultimately facilitate ongoing cross-sectoral coordination.
- REDD+ Results-based payments from the FCPF Carbon Fund provide an additional incentive for the Government to maintain strong ownership over the GCF programme and commitments to achieving the Project 2 results.
- Improved land use planning under PLUP (Activity 1.2.1) will continue to improve monitoring and enforcement of land use based on plans. PSAP and other agricultural support under Component 2 *and* improved planning and monitoring of forest areas under Component 3, will increase accountability and enforcement, ultimately limiting encroachment, over-harvesting and unsustainable forest use.

**Selected Risk Factor 6 - Noncompliance of land use plans**

Category	Probability	Impact
<u>Other</u>	<u>Low</u>	<u>High</u>

**Description**

Participating households may not comply with land use plans that are developed and approved and undertake illegal harvesting activities to generate income. Ethnic groups poor households could be particularly affected, as they are the most likely to experience economic dislocation due to their reliance on the land.

**Mitigation Measure(s)**

- As in Project 1, participation in Project 2 activities is voluntary and based on the principle of (FPIC). A Grievance mechanism will be clearly communicated in culturally appropriate ways in the same manner it has been done in Project 1 participating villages, and villagers are able to access the mechanism to file any grievance (see ESIA for more details on the grievance redress mechanism).
- The PLUP methodology ensures that land use plans are developed using participatory stakeholder processes and aligned to priorities and interests of each village thereby reducing risks of non-compliance.
- PLUP teams 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 management,
- VFAG will provide incentives that will help overcome opportunity costs and support the transition to sustainable land use – through PSAP and VFMP this will be combined with regular patrolling and forest cover monitoring (Activity 1.2.1) are accompanying measures to mitigate encroachment in forest areas.
- 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). 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 7 – insufficient capacities within the Forest Protection Fund slow project activities**

Category	Probability	Impact
<u>Technical and operational</u>	<u>High</u>	<u>Low</u>
<b>Description</b>		
The capacity development process of FPF takes too long and FPF is unable to channel RBPs and project funding during the implementation of the project		
<b>Mitigation Measure(s)</b>		
<ul style="list-style-type: none"> <li>Dedicated support to FPF is considered in activity 1.1.1, including the provision of support for the FPF to enhance its governance structure, and processes to be able to meet international fiduciary and safeguard standards as well as to be able to screen, assess, and monitor climate mitigation and adaptation projects in the forestry sector.</li> <li>A contingency plan is in place, as FPF currently does not meet fiduciary requirements to channel results-based payments as co-finance for Project 2 (for Activities 2.1.4 and 3.1.2). As stated in the draft Benefit Sharing Plan (BSP)<sup>266</sup>, “the activation of the contingency plan puts the DoF as the modality to receive and disburse the advance and results-based payments under the ERPA, while committing to improve the FPF’s capacity to meet World Bank’s fiduciary requirements. Under this modality, the REDD+ Division under the DoF will oversee funds disbursement and reporting”. Once FPF is deemed ready to take-over fund management by DoF, the WB will conduct a complete and comprehensive fiduciary assessment.</li> </ul>		

**Selected Risk Factor 8 – Risk of money laundering, terrorist financing, prohibited practices and sanctions**

Category	Probability	Impact
<u>Prohibited practices</u>	<u>Low</u>	<u>High</u>
<b>Description</b>		
Risk of project funds being used for money laundering, terrorist financing, prohibited practices and sanction risks.		
<b>Mitigation Measure(s)</b>		
<ul style="list-style-type: none"> <li>None of the project activities will be undertaken in any jurisdiction which is subject to or affected by United Nations Security Council Resolutions (UNSC).</li> <li>No individual or entity that is listed on any UN sanctions list will be involved in any manner with the project or its activities, either as a counterpart, executing entity, implementation partner nor beneficiary.</li> <li>The project will not provide direct cash payments from EPF to villagers. EPF transfers funds amounting to an average of 10.800 EUR to each established VFAG account, plus the equivalent of 1.500 EUR for the first year of</li> </ul>		

<sup>266</sup> <https://www.forestcarbonpartnership.org/country/lao-pdr>.

VFMP activities. Only the elected VFAG committee is entitled to withdraw funds from the VFAG account (multiple signatures) and only based on the approved “PSAP investment plan” and the “annual village forest management activity plan”. In the PSAP investment plan the participating families of upland farmers are listed with their selected White List activity, the grant amount to receive from the VFAG (up to 400 EUR), their own contributions, and the items to be funded by the VFAG funds. Depending on the type of agricultural inputs required, some of these will be purchased directly by the beneficiary family (e.g. tools and small materials) against receipt, while seeds or planting material will generally be ordered and purchased by DAFO in bulk. Only for those items that the family will purchase directly, cash payments will be made by the VFAG committee to the individual family. This could be for any of the White List activities, as selected by the particular family. Official receipts will need to be provided to VFAG in return. These measures (VFAG committees, and ensuring alignment with the White List and approved VFM annual plan and PSAP investment plans) will prevent fraud, abuse, money laundering, terrorist financing or prohibited practices. Procedures are described in greater detail within the Project Operations Manual and related guidance (see Annex 21).

- In addition to controls applied for VFAGs (described above), the project will follow GIZ (AE)’s approved Procurement and Consultant Guidelines, which have been reviewed and accepted by the GCF as part of its accreditation process. Procurement will be carried out by the EEs and procurement activities will be agreed upon between the AE and EEs as part of the annual operational planning. When awarding contracts for goods, works and consulting services to be financed in full or in part from the GCF grant, the EE shall observe the regulations for public procurement, which apply in the EE’s country. Minimum standards are presented within the Project’s Procurement Plan in Annex 10a to the FP. A Procurement Operational Manual, with guidelines and templates to provide guidance for the implementation of the procurement plan, will be developed. Project procurement will be transparently documented, as per the Plan in Annex 10a.
- The EPF has, in the frame of the Readiness Support to help them become accredited to the GCF, developed a code of business conduct where principles to be considered related to money laundering and anti-terrorist financing are described. The document pending final approval by the EPF board. In addition, the process to detect anti-money laundering, anti-terrorist and financial provisions have been updated.
- Complaints and allegations of impropriety, wrong-doing or other related issues in the project will managed following GIZ’s [Compliance Management System](#) (CMS). GIZ’s CMS is based on Standard 980 issued by the German Institute of Public Auditors (IDW PS 980) and the international management standard ISO 37301. The CMS includes a [code of ethics](#), annual compliance reporting,<sup>267</sup> an [anti-corruption policy](#), and a [whistleblowing procedure](#). GIZ’s whistle blowing procedures includes an anonymous entry channel for information on serious violations of GIZ’s internal principles of conduct, internal rules as well as applicable laws (e.g. related to corruption and bribery, embezzlement, fraud, misappropriation, conflicts of interest, sexual misconduct and sexual exploitation, and violation of human rights).

<sup>267</sup> E.g. The 2020 GIZ Annual Compliance Report is available at the following link: <https://www.giz.de/en/downloads/giz2020-en-annual-giz-compliance-report.pdf>

## G. GCF POLICIES AND STANDARDS

### G.1. Environmental and social risk assessment (max. 750 words, approximately 1.5 pages)

#### G.1.1 Environmental and Social Impact Assessment (ESIA)

305. The ESIA of the project is provided in Annex 6a. The ESIA rates the risk of the project as **category B** (medium risk). There are potential adverse impacts due to the project's activities, but they are not unprecedented in the project area, they are site-specific and limited to the project's footprint, are neither irreversible nor cumulative, and there are good measures available to avoid, mitigate and/or manage these risks and potential adverse impacts.
306. The project is expected to generate primarily positive impacts and is well aligned with the country's context as well as the overarching policy and regulatory framework, as outlined in Chapters D.1- D.5. That said, the project area represents a diverse set of socio-economic, cultural and environmental conditions. The 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. The socio-economic risks that may arise during implementation will be higher in some areas than others and are also likely to fluctuate over time. This underscores the importance of the site-specific ESMP that has been developed for the project (see Annex 6b). The high percentage of non-Lao-Tai ethnic groups in the project area also requires a higher degree of risk management as per the GCF Indigenous People Policy to ensure they equitably benefit from the project and their livelihoods are adequately safeguarded.
307. Self-assessments conducted by MAF and MoNRE vis-à-vis REDD+ readiness indicate that districts, particularly in remoter areas, are often understaffed, under-budgeted and under-equipped. District Agriculture and Forest Offices (DAFOs) do not necessarily have anyone available who has had more than minimal exposure to REDD+ and climate change concepts, nor gender equality and social inclusion. Project 1 put effort into capacity development of respective local government staff and extension services, and Project 2 will continue to build on these efforts.
308. Free, prior and informed consent (FPIC) is at the core of the project's approach. All activities under Project 2 are oriented around FPIC.<sup>268</sup> FPIC and other participatory approaches have been implemented under Project 1 and will be continued and upscaled under Project 2 (Figure 12 in Chapter B.3 depicts the project's overall implementation approach, including the FPIC process).<sup>269</sup> The project's Ethnic Group Development Plan (EGDP, Annex 6d) further outlines the FPIC process, as well as other key considerations for ensuring social inclusion and safeguarding the rights of ethnic minorities.

#### G.1.2 Environmental and Social Management Plan (ESMP)

309. The ESMP is provided in Annex 6b and EGDP in Annex 6d. Designed in response to the risks identified in the ESIA, the purpose of the ESMP is to provide a practical plan to manage the environmental and social risks and impacts associated with the project's activities, as well as to allow for meaningful and inclusive multi-stakeholder consultations and engagement. The ESMP takes into account the circumstances of vulnerable, marginalized individuals and members of ethnic groups that are affected or potentially affected by the project. The ESMP also aims to assist Lao government counterparts, in cooperation with the Project Management Units and GIZ team, to maintain and/or improve the project's environmental and social management system during project implementation. The ESMP will help to ensure that all activities proposed under Project 2 are screened, assigned appropriate environmental and social risk categories and that the environmental and social risks and impacts are sufficiently assessed. Where impacts and potential impacts are identified and if these are unavoidable, proper mitigation measures will be planned to compensate for residual impacts and to provide for restoration.
310. The ESMP has been drafted based on the ESMP developed for Project 1, with revisions to ensure it is fit for purpose for the revised activities under Project 2. It has further been adapted based on lessons learned and experiences from the implementation of Project 1 to streamline its implementation from an operational perspective. It is compliant with the GCF Revised Environmental and Social Policy (adopted in 2021), and the GCF Indigenous Peoples Policy, and it has therefore extensively incorporated the International Financial Cooperation (IFC)'s Performance Standards on Environment and Social Sustainability, the World Bank's Safeguards Policy and the Lao national safeguards regulatory and policy framework.

<sup>268</sup> A detailed description of the project's FPIC process is provided in the Ethnic Groups Development Plan (Annex 6d).

<sup>269</sup> Project 2 will apply the same FPIC process as Project 1. This process builds upon experience from diverse past projects (including with VFM under the CliPAD project), and during the Project 2 development process the Project 1 team highlighted that these processes are perceived as effective and well-tailored to the local context. Support for this approach was reiterated during stakeholder consultations, including by villages participating within Project 1.

### G.1.3 Project Risk Mitigation Approach

311. Of the eight IFC Performance Standards (PS) the project triggers all eight, and its management system will require the development of mitigation hierarchies to manage and mitigate risks (as per Performance Standard 1 and the Indigenous Peoples Policy, see Table 13 below). For more detailed information refer to the ESIA and ESMP in Annex 6a-b.

**Table 13: Overview of environmental and social (E&S) risks and impacts, and mitigation measures**

PS	E&S Risks and Impacts	Mitigation measures
PS 1: Assessment and management of E&S risks and impacts	The project will have a suitable ESMP in place for its duration. The ESMP for Project 2 builds on the environmental and social safeguard management system developed for Project 1, which has been found to be an effective system for risk management. This system involves several tools to screen for risk, monitor risk and has established a mitigation hierarchy. It further provides a detailed overview of the specific roles and responsibilities for ESS and risk management, and ensures that increased dialogues take place at local levels.	<ul style="list-style-type: none"> <li>▪ A detailed ESMP has been developed, including the project's Grievance Redress Mechanism (GRM) and EGDP, Annex 6b), accompanied by a stakeholder engagement plan (Annex 7), and a gender action plan (Annex 8b).</li> <li>▪ For all activities implemented with villagers at the local level (e.g. PLUP under Activity 1.2.2 and activities within Components 2 and 3), participation is voluntary and based on FPIC. FPIC agreements will be made with all participating villages prior to the implementation of interventions.</li> </ul>
PS2: Labour and working conditions	The ES risk is assessed as low. Programme staff will be in capacity building, advisory and management positions. Forest workers sustain injury during cutting operations	<ul style="list-style-type: none"> <li>▪ Develop safety operational procedures for all programme activities that may pose risks to people or equipment including for GoL partners and other stakeholders involved in programme implementation</li> <li>▪ Organize training on safety procedures</li> <li>▪ Staff supporting the implementation of activities related to forest management to be trained on OHS good practices, protocols and equipment (including protective equipment)</li> <li>▪ Support the procurement of safety equipment including cut-resistant pants and protective goggles that should be used by beneficiaries to reduce risk.</li> </ul>
PS 3: Resource Efficiency and Pollution Prevention	The risk is assessed as low. While use of chemical fertilizers and pesticides is not promoted, the use can still not be fully excluded. Crop processing facilities can generate small amounts of solid and liquid wastes depending due to their small scale of operation.	<ul style="list-style-type: none"> <li>▪ Follow the Lao Pesticide Law, and the Pesticide Management Plan (PMP) developed for the ER-PD's ESMF and promote awareness raising on pesticide safety procedures (the PMP has been attached to ESIA Annex 10).</li> <li>▪ Promotion of agrochemical-free agriculture through the application of good agricultural practices. Bio-controls will be promoted.</li> <li>▪ Inclusion of management of waste and pollution during production should be included in the business and investment plans developed by Agri-MSMEs supported by the project.</li> <li>▪ Continued consultations and socio-economic monitoring at the village and Agri-MSME level throughout program implementation</li> </ul>
PS 4: Community health, safety and security	This performance standard may be relevant to the project in the context of the potential use of pesticides/herbicides in project-promoted annual cropping and plantations.	<ul style="list-style-type: none"> <li>▪ The project promotes agrochemical-free agriculture through the application of good agricultural practices. The project will not directly procure nor promote agrochemicals. The project will ensure compliance with the Lao Pesticide Law, and follow the Pesticide Management Plan (PMP) developed for the ER-PD's ESMF. The management, use and disposal of agrochemicals must be monitored, and protocols are in place to deal with potential negative social and/or environmental impacts. Best practices and additional information are outlined in the Pest Management Plan (available in ESIA).</li> </ul>
PS 5: Land acquisition and involuntary resettlement	Secure land tenure remains an issue. In rural areas most parcels have no titles. Many upland areas, customary, communal lands may not be recognized by the State. The project may unintentionally contribute to changed,	<ul style="list-style-type: none"> <li>▪ The project will implement PLUP, based on proven best practices, FPIC and regular consultations to ensure an inclusive process that enables all village members to benefit from the project. Participation in the project is voluntary, and the project's complaint and GRM will be communicated to all participants to ensure that complaints and grievances can be filed in an accessible and culturally appropriate manner.</li> <li>▪ The FPIC process will ensure that land access considerations – including gender-, ethnic- and income-differentiated risks – are fully incorporated into</li> </ul>



	reduced or denied access to land through some of its activities (for example PLUP for different land-uses) resulting in unintended negative livelihood impacts.	<p>the PLUPs developed by the project. The ancestral and spiritual land and forest use will be respected.</p> <ul style="list-style-type: none"> <li>Technical support will be provided for villagers through capacity development / trainings and extension support. Capacity development of government staff at the provincial and district level will ensure there are sufficient capacities to facilitate implementation and will further include efforts to improve inclusiveness and gender equality in participatory processes.</li> <li>Project 1 supported communal and collective land use planning to provide tenure security for forest and agricultural land and its outputs. These activities will be continued and upscaled under Project 2.</li> </ul>
PS 6: Biodiversity conservation and sustainable management of living natural resources	There is potential that some of the agricultural activities, especially promotion of agroforestry, will turn the Revegetated (RV) category of land to plantations, thus reducing biodiversity. Project activities in NPAs and national parks will need to closely monitor potential adverse impacts on biodiversity.	<ul style="list-style-type: none"> <li>PLUP will ensure improved and more holistic land use planning.</li> <li>In terms of agriculture, the project promotes specific production models, which have been pre-screened for their sustainability and suitability in the project area (e.g. of multi-cropping approaches, such as Maize and Cassava intercropping with soy bean/mung bean). Detailed extension and supporting materials are available to facilitate implementation of best practices (see Feasibility Study in Annex 2a).</li> <li>To mitigate adverse E&amp;S impacts, the project has established clear exclusion and eligibility criteria for screening agri-MSMEs supported by the project.</li> <li>In terms of forestry, the project promotes best practices for SFM and FLR, using native and locally adapted species. NPA management will build on best practices piloted under the ICBF project, and the revision of NPA management plans and elaboration of ViIFoCA will facilitate the sustainable management regimes are operationalized by local communities, while ensuring their livelihoods are strengthened through SFM and FLR.</li> <li>The project will support training of trainers, and improve extension support to local farmers to increase crop productivity, improve soil conditions, and reduce soil erosion, among other benefits (see also Chapter D.3).</li> <li>It will further support capacity building and awareness on climate change and best practices to enhance biodiversity, ecosystem resilience, SFM and FLR.</li> <li>Implementation of regular monitoring of land use changes. PDMS and institutional strengthening will further improve transparency, effectiveness and accountability related to forest monitoring.</li> </ul>
PS 7: Indigenous peoples	The project area contains more people of the non-Lao-Tai ethnic groups than of the Lao-Tai ethnic group in most of the selected districts.	<ul style="list-style-type: none"> <li>The project will minimise, mitigate and compensate appropriately when project activities impact indigenous people's rights, regard-less of whether there is a legal recognition of land titles, resources and territories.</li> <li>Application of FPIC throughout project implementation (3 phases)</li> <li>EGDP developed for the project to promote social inclusion, provide a targeted approach for ethnic groups to benefit from the project activities, and ensure the project does no harm (see ESMP in Annex 6b).</li> </ul>
PS 8: Cultural heritage	During project preparation and consultation, no cultural heritage places, building or monuments were identified in the project area. Nonetheless, residual uncertainty remains.	<ul style="list-style-type: none"> <li>If objects of cultural heritage are uncovered by the project, the procedures described in the World Bank ESMF Annex 12, 'Chance Finds Procedure', will be followed (as outlined in World Bank ESMF included as Annex 6c)</li> </ul>

## G.2. Gender assessment and action plan (max. 500 words, approximately 1 page)

312. The project's Gender Assessment (GA) is provided in Annex 8a and the Gender Action Plan (GAP) is provided in Annex 8b. The GA builds on the assessment conducted for FP117, but has been revised to ensure the GAP is 'fit-for-purpose' reflecting the adjusted design and expanded area under Project 2. The revisions of the GA and GAP have updated the baseline information, including adjustments to changes in the legal, regulatory and policy frameworks, discussions with the Project 1 team on lessons learned and implementation experiences, and have further been informed by stakeholder consultations with CSOs, Lao Women's Union, the Lao National Front for Construction, government staff at the national, provincial and district level, and local men and women at the village level in the project area (for more information refer to the GA in Annex 8a and the Stakeholder Engagement Plan in Annex 7).

313. As mentioned in Section D.3, women in the project area are disproportionately vulnerable to climate change. At the same time they still face discrimination in many aspects of their lives despite government policy to promote gender equality and protect women's and children's rights. This discrimination, in turn, results in ongoing barriers for them

to participate in public life and to access many of the services to which they have a right, and further exacerbates their vulnerability to climate change. The project design addresses the identified gender gaps (see Annex 8a for an extended list):

**Table 14: Overview of gender gaps and recommendations integrated into the design of Project 2**

Gender Gap	Recommendation
The current capacities of Government staff at all levels to actively integrate gender and ethnic considerations into their management and implementation approaches are very limited, and the majority of field staff are male.	The project will train all concerned Government staff, including Lao Women's Union (LWU) on gender, climate resilient and deforestation free sustainable land management and social inclusion. It will further implement targeted trainings to support the capacity development of female staff for all implementing Government agencies.
The consultations showed that women are considered the main users of forest resources, but rarely participate in forest management and monitoring due to lack of education and traditional norms.	The project ensures that village forest management committees are accessible for women, including a quota of at least 30% of female members. LWU will support consultation processes to help strengthen gender equality in programme implementation.
The consultations at village level showed that environmental awareness is still very limited, especially women have limited or no access to information related to environment and climate change.	The project will promote awareness-raising campaigns through the use of interactive tools and gender-/ethnic-sensitive communication materials and extension support. A specific focus will be on raising awareness on climate change impacts and mainstreaming adaptation across project activities. As men and women are impacted differently by climate change impacts, these activities will be gender responsive and will pay attention to the differentiated needs and priorities of men and women.
Forest monitoring and law enforcement efforts often do not explicitly consider gender aspects, and thus may overlook women's role in forest use and protection	The programme will continue to support inclusion of women in law enforcement measures (e.g. patrolling) and ensure consistent monitoring. Early experiences with gender-sensitive "good practices" of female-led patrolling groups will be used for scaling up activities in the three new provinces.
Legally, women and men have the same rights to land. Reality shows that women's land tenure is less secure than men's. Women are often not actively included in decision-making steps of land use planning. The subsequent forest management plan and agricultural activities are then seen as a specialized step which women are even less part of.	PLUP processes supported by the project will be vigilant in actively including all women and men in the target villages (e.g. separate meetings). Quotas will to be set to encourage women's inclusion meetings, project measures (e.g. business skill training), and in village management committees (at least 30%). Again, LWU will function as a facilitator and skills developer for village women, if budget is allocated accordingly. Best practices for gender equality and social inclusion (GESI) will be mainstreamed through all trainings for government and programme staff.
Women are often excluded from economic activities and markets. Their access is limited by safety concerns, traditional norms and higher workload (time poverty)	All training modules and materials will be gender-sensitive, with GESI considerations mainstreamed. All extension agents and trainers will be trained by the safeguard, gender and M&E specialist on GESI. For participatory processes (PLUP, PSAP, VFAG and VFM), special attention will be paid to setting meetings at suitable times to ensure women's participation, and facilitation staff will ensure the differentiated needs and specific challenges faced by men and women (e.g. time poverty) inform the measures integrated into PLUPs, PSAP investment plans, NPA, ViFoCA and VFM plans. Female headed households are given priority in the selection of PSAP participants. Gender-responsive monitoring will be conducted that permits active management and learning throughout programme implementation. Budget will be provided for the provision of translators and the translation of materials into local languages, as necessary.
Women are often less able to access loans from larger financial institutions (e.g. may not have land titles), and may be more reluctant to take loans.	The project will ensure the participation of women in VFAG committees (30% quota), thereby attaining financial management capacities and gaining access to financial resources. The participation of female owned Agri-MSMEs will be promoted. In addition, women-only business skills courses will be conducted for village clusters to strengthen the establishment and management of women-led and/ or owned agri-MSMEs. Targeted support to develop and strengthen business plans will further support female entrepreneurs to access finance.

314. Based on the identified gender gaps and recommendations, the following are some of the measures and targets that are integrated in the project's GAP (for more detailed information, refer to Annex 8b):

- The Lao Women's Union is part of the Project Steering Committee and joins key village level activities
- '*Climate resilient and deforestation free sustainable land management and Gender*' workshops held for DAFO, DOFI, and LWU staff – each in a different province
- Target established for 40% participation of women in community meetings
- Target established for 50% of women in target communities state that they felt actively included in project-related village meetings.<sup>270</sup>
- Training courses related to gender-based violence (GBV), sexual harassment (SEH) and violence against women and children (VAWC) delivered by the project to its own staff. Where possible, the project will also support gender sensitization for men and women, and disseminate resources to participating communities related to combatting GBV, SHE and VAWC.
- Facilitating the establishment and monitoring of women-led village patrolling groups, and disseminating best practices and lessons learned
- All training modules developed by the programme are reviewed by the programme's gender specialist prior to implementation to ensure mainstreaming of GESI
- Village forest management committee guidelines (developed under Project 1) will be followed, which set standards of accessibility for women, with a quota of at least 30% female committee members
- Major communication materials and awareness raising campaigns are reviewed by the project's safeguard/gender specialist
- Gender consideration is explicitly integrated in the business partner screening, and targets are established to support women-owned or -led agri-MSMEs.

### G.3. Financial management and procurement (max. 500 words, approximately 1 page)

#### G.3.1 Financial Management

315. The financial management of the project 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 the GCF project but will ensure that all funds provided are clearly identifiable and distinguishable 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 recipients in accordance with the progress of the project. The Executing Entities (GIZ Laos, the Government of Lao PDR) have to report on the proper use of funds and defined progress as a prerequisite for any further disbursement. Independent external auditors will perform annual financial audits of the project in line with International Auditing Standards.

316. At the beginning of each year, an annual plan is prepared, which expresses which activities are to be implemented by the project owners (NPMU, PPMU, DPMU) in the coming year. These annual plans are divided into quarterly plans at the beginning of each quarter. From these quarterly plans, a quarterly budget is then prepared for each Project Owner, which is paid to the respective Project Owner after approval by the Project Owner, the Project Director and the NPMU by the EPF. Each Project Owner reports on the use of these quarterly budgets to the EPF on a monthly basis. This reporting (Excel-based) is then read into the EPF's central accounting system (ACCPAC). In addition, these monthly financial reports form the basis of the EPF's financial reporting to GIZ. In addition to the disbursement of budgets to the Project Owners (NPMU, PPMU, DPMU), funds are disbursed annually to the partner villages as Village Forest Agriculture Grant (VFAG). For this purpose, each partner village prepares an annual budget, which is transferred to the villages by the EPF.

#### G.3.2 Procurement

317. In the 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

<sup>270</sup> A mid-term and end of project survey will be conducted. See Chapter E for more detailed information.

German Regulation on the Award of Public Contracts (VgV) and, if applicable, the Contracting Rules for the Award of Public Service Contracts (VOB, VOL/B and UVgO) when procuring services, construction work and supplies.

318. When awarding contracts for supplies and services (including consultancy services) to be financed in full or in part from the financing contract, the external Executing Entities will observe their own national regulation for public procurement and will in any case comply with the provisions mentioned in the Procurement Guidelines for projects funded by GCF/GIZ.

319. The Procurement Guidelines shall not contradict the applicable national procurement law and/or regulations for public procurement, which apply in the Executing Entities country. In principle, the regulations of the Executing Entities country are to be observed; the procurement procedures mentioned in the Guidelines are obligatory minimum standards (an overview of these minimum standards is available under Annex 10). While implementing a project with public funds the Executing Entities should take reasonable account of economic efficiency as well as ecological and social aspects.

320. The project's procurement plan is available in Annex 10.

#### G.4. Disclosure of funding proposal

No confidential information: The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence.

With confidential information: The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes:

- full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity's disclosure policy, and
- redacted copy for disclosure on the GCF website.

The funding proposal can only be processed upon receipt of the two copies above, if containing confidential information.

## H. ANNEXES

### H.1. Mandatory annexes

- Annex 1 NDA no-objection letter(s) ([template provided](#))
- Annex 2
  - a. Feasibility Study
  - b. Theory of change
  - c. Comparison table of Projects 1 and 2
  - d. Climate Risk and Vulnerability Assessment (excel and word documents)
  - e. Log frame ranking explanation
  - f. VFAG guideline
  - g. PSAP guideline
  - h. PLUP guideline
  - i. District selection
  - j. Market assessment
- Annex 3
  - a. Economic and financial analysis
  - b. Economic and financial valuation summary
- Annex 4 Detailed budget plan ([template provided](#))
- Annex 5 Implementation timetable including key project/programme milestones ([template provided](#))
- Annex 6 E&S document corresponding to the E&S category (A, B or C; or I1, I2 or I3):  
[\(ESS disclosure form provided\)](#)
  - a. Environmental and Social Impact Assessment (ESIA)
  - b. Environmental and Social Management Plan (ESMP)
  - c. Environmental and Social Management Framework for the ER-Programme (ESMF)
  - d. Ethnic Group Development Plan (EGDP)
- Annex 7
  - a. Summary of consultations
  - b. Stakeholder engagement plan
  - c. Transcripts of field consultations
- Annex 8
  - a. Gender Assessment
  - b. Gender Action Plan
- Annex 9 Legal due diligence (regulation, taxation and insurance)
- Annex 10 Procurement plan ([template provided](#))
- Annex 11 Monitoring and evaluation plan ([template provided](#))
- Annex 12 AE fee request ([template provided](#))
- Annex 13 Co-financing commitment letters, if applicable ([template provided](#))
- Annex 14 Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule

### H.2. Other annexes as applicable

- Annex 15 Evidence of internal approval ([template provided](#))
- Annex 16 Map(s) indicating the location of proposed interventions
- Annex 17 Multi-country project/programme information ([template provided](#))
- Annex 18 Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project
  - a. Inception report



- b. Annual performance report 2020
- c. Annual performance report 2021
- Annex 19 Procedures for controlling procurement by third parties or executing entities undertaking projects financed by the entity
- Annex 20 Project 1 Enhanced Due Diligence for the EPF
- Annex 21 Operations manual (Operations and maintenance)
- Annex 22 Assessment of GHG emission reductions and their monitoring and reporting (for mitigation and cross cutting-projects)
  - a. GHG mitigation calculation
  - b. GHG note
- Annex 23 Other Annexes
  - a. FCPF Benefit Sharing Plan

*\* Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.*