



GEF-8 PROJECT IDENTIFICATION FORM (PIF)

GENERAL PROJECT INFORMATION

Project Title:	Enhancing Integrated Watershed Management and Climate Resilience for Vulnerable Communities in the Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng Basins in Lao PDR		
Region:	South-East Asia	GEF Project ID:	
Country(ies):	Lao PDR	Type of Project	Full-sized Project
GEF Agency(ies):	WWF-US	GEF Agency Project ID:	G0052
Anticipated Executing Entity(s) and Type:	TO BE DETERMINED		
GEF Focal Area(s):	Climate Change	Submission Date:	3/19/2024
Type of Trust Fund:	LDCF	Project Duration (Months)	72 months
GEF Project Grant: (a)	6,772,477	GEF Project Non-Grant (b)	
Agency Fee(s) Grant: (c)	609,523	Agency Fee(s) Non-Grant: (d)	
Total GEF Financing: (a+b+c+d)	7,382,000	Total Co-financing:	1,614,636
PPG Amount (e):	200,000	PPG Agency Fee(s) (f):	18,000
Total GEF Resources (a+b+c+d+e+f)	7,600,000		
Project Tags:	<input type="checkbox"/> CBIT <input type="checkbox"/> NGI <input type="checkbox"/> SGP <input type="checkbox"/> Innovation		
Project Sector (CCM only)	(select)		

Project Summary***

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? (iii) how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B "project description". (max. 250 words, approximately 1/2 page)

1. The project targets six highly vulnerable districts in the Nam-Poui, Nam-Poun, Nam-Lay, and Nam-Houng basins in Lao PDR. This area was selected due to high vulnerability based on climate hazards (floods, drought), high sensitivity (subsistence agriculture communities in mountainous terrain), and limited access to resources and opportunities for climate change adaptation (CCA).
2. The key problem that the project will address is impacts of climate change on crops, specifically crop losses due to floods and reduced crop yield due to changes in the onset of seasons, drought and decreased availability of freshwater. Interviews with communities in the target districts identified that communities are experiencing reduced crop yields and increased poverty due to floods, droughts, seasonal onset changes and uneven access to

freshwater; a situation further exacerbated by deteriorating ecosystem services. Protecting highly vulnerable subsistence and shifting agriculture from climate-induced hazards, that are expected to worsen under future climate projections, is vital for sustaining rural agricultural livelihoods and poverty alleviation, especially among upland and mid-slope ethnic groups and smallholder farmers¹. The objective of the proposed GEF-8 LDCF project, therefore, is to enhance adaptation capacity of agriculture-dependent communities to floods, droughts, seasonal variations and uneven access to freshwater in key river basins in Sayaboury province. The project will do this through bottom-up and climate-informed Integrated water resource management (IWRM) policy, planning and implementation, and climate-resilient agriculture support.

3. This will be achieved by (i) mainstreaming climate change adaptation measures into provincial integrated water resource management (IWRM) and provincial river basin management plans (RBMP), including relevant strategies, policies, and local planning frameworks; (ii) implementing community-driven, co-designed and co-implemented IWRM and RBMP to address impacts of floods, droughts, seasonal variations and decreased access to freshwater on crops; (iii) catalyzing communities' resilience through climate-smart agriculture and by diversifying livelihood options that prioritize women identified as a particularly vulnerable group considering their high reliance on agriculture as a main source of livelihood; and (iv) widely consolidating and disseminating lessons, experiences, and information from the project's implementation through knowledge management and communication. A cross-cutting M&E system will foster adaptive learning and knowledge management for the project.
4. The preliminary adaptation benefit targets include: 25,000 direct beneficiaries (including 5,000 having increased awareness through training, and including an estimated 3,000 households engaged in climate change adaptation and resilience actions); 15,000 ha area of land and 1,000 ha of river basin managed for climate resilience; and at least 13 policies , plans, and frameworks that mainstream climate resilience (1 policy and plan per district for 6 districts, as well as a single overarching framework). These targets will be revisited during the PPG phase.

¹ Climate Crowd survey report in Sayaboury province. WWF Laos Country Office. January 2024.

Indicative Project Overview

Project Objective:	Enhance adaptation capacity of agriculture-dependent communities to floods, droughts, seasonal variations, and uneven access to freshwater in key river basins in Sayaboury province.					
Project Components	Component Type	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Mainstreaming climate change adaptation in IWRM	Technical Assistance	1.1 CCA integrated into IWRM/RBMP policies and process at the provincial/district/basin level	<p>1.1.1 Scenario-based framework for CCA and DRM to strengthen IWRM/RBMP planning, policies, programs, and their financing, based on a participatory and gender-responsive decision-making approach</p> <p>1.1.2 TA, training, workshops and community consultations to integrate gender-responsive CCA into IWRM/river basin management plans</p> <p>1.1.3 Forum for community and gender-responsive voices into planning</p>	LDCF	1,000,000	200,000
1 IWRM implementation	Investment	2.1 Bottom-up community-driven and local government IWRM interventions to reduce climate impacts, with due consideration to women's needs as a particular vulnerable group	2.1.1 Local government and community-identified gender-responsive IWRM interventions to reduce the impact of floods, drought, seasonal variation and reduced water access on small	LDCF	2,000,000	200,000

			scale and subsistence agriculture.			
2 Community resilience	Investment	3.1 Strengthened adaptative capacity of local communities to mitigate flood and drought, seasonal variations risk and reduced water availability to crop yield and livestock	3.1.1 TA, tools, materials, and supplies for gender responsive, climate adaptive agriculture and livestock practices 3.1.2 Gender-informed livelihood enhancement and diversification 3.1.3 Locally appropriate climate information, forecasts and early warning systems.	LDCF	2,777,479	200,000
3 Knowledge Management and Communications	Technical Assistance	4.1 Increased knowledge and lessons (and dissemination) of climate change in IWRM	4.1.1 Gender-informed knowledge management, communications, visibility and outreach products. 4.1.2 Project benefits and climate change adaptation practices are documented and disseminated to local communities through learning, using innovative and locally adapted means.	LDCF	350,000	100,000

M&E	Technical Assistance	Project implemented according to Results-Based Management principles	<p>ME1 Project M&E system designed, operational and able to collect and curate lessons learned from project activities.</p> <p>ME2 Project evaluations completed on time to support project delivery and knowledge sharing</p> <p>ME3 Monitoring Reports submitted on time to the GEF Agency and GEFSEC</p> <p>ME4 Project implementation coordinated and measured through a proactive steering committee and governance, inclusive monitoring and evaluation, and an operational environmental and social management mechanism.</p> <p>ME5 Monitoring of Gender Action Plan and Environmental and Social Safeguards Plan(s)</p>	LDCF	322,499	101,939
Subtotal				LDCF	3,449,978	801,939
Project Management Cost (PMC) (if this is an MTF project, please report separate PMC lines for each TF). ***If amount requested is above limits, a pop-up menu should open for the Agency to provide an explanation***				LDCF	322,499	812,697
Total Project Cost					6,772,477	1,614,636

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it.

(Approximately 3-5 pages) see guidance here***

Geographic, Economic and Cultural Context of the Project Area

1. The proposed project is focused on a vulnerable, naturally flood-prone, mountainous area of Lao PDR, the Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng basins in Sayaboury Province; selected due to its high vulnerability to climate change impact based on a combination of factors: a highly rural and agriculture-dependent population; numerous marginalized upland ethnic groups, many of which are dependent on subsistence and shifting agriculture; higher than national average poverty levels; susceptibility to and high risk of floods in the low areas of the basins, as well as both droughts and climate-induced disruption to annual seasonal variation; and limited resources and infrastructure to adapt to and recover from climate risks.
2. Sayaboury province is situated in northwestern Lao PDR. It has an area of 1,553,800 ha divided into 11 districts, and a total population of 381,376 people (see Annex 1 for project area description). The province is characterized by mountainous terrain and significant elevation variations². It is part of the Luang Prabang Range montane rainforest ecoregion straddling northwestern Lao PDR and Northern Thailand, of which over 50% of the ecoregion's natural forests remain unprotected^{3,4}. This geography and mountainous topography plays a crucial role in the province's climatic conditions. The climate of Sayaboury province is predominantly tropical, influenced by the monsoon season and prone to severe mountain rain shadow effects. The region experiences a clear division between the rainy and dry seasons. The rainy season, lasting from May to October, but with a later onset in more recent years, brings substantial precipitation, crucial for the agricultural practices in the area. The dry season, from November to April, is marked by lower precipitation and can involve higher temperatures. The average temperatures in Sayaboury varies, with the cooler months seeing average lows around 14.8°C and the warmer months reaching highs of up to 33.9°C⁵. Situated along the Mekong River and its tributaries, the low land areas of Sayaboury is inherently susceptible to flooding. This geographic reality makes the province already prone to the impacts of extreme weather events, which are exacerbated by climate change.
3. The economy of Sayaboury is primarily based on agriculture, with rice farming being the dominant activity. Other agricultural products include maize, cassava, and other vegetables, and livestock farming, including cattle, pigs, and poultry. Sayaboury faces challenges such as limited investment, infrastructure development and access to markets, which impact its overall growth potential and risk profile.
4. There are diverse ethnic groups in Sayaboury. Lao Loum are the dominant ethnic group and typically reside in the lowland areas and are primarily engaged in agriculture, including rice farming. The Lao Theung are a significant ethnic group in Sayaboury and live in upland areas, and many practice subsistence farming and rely on forest resources for their livelihoods. Lao Soung are ethnic minority groups that live in higher upland areas, and includes groups like Hmong, Yao, and Akha. These communities often practice shifting cultivation. The reliance on agriculture and natural resources, and the small scale, subsistence or shifting agriculture practices in Sayaboury intersects with climate vulnerability in the area.

Climate Rationale

Climate Change Trends

² Jean-Richard Laffort et Marc Dufumier, "From Slash-and-burn to Disk Ploughing: The Land Policy and Tractors Behind Erosion and Forest Pioneer Farming in Southern Sayaboury Province (Laos)", Moussons, 9-10 | 2006, 109-130.

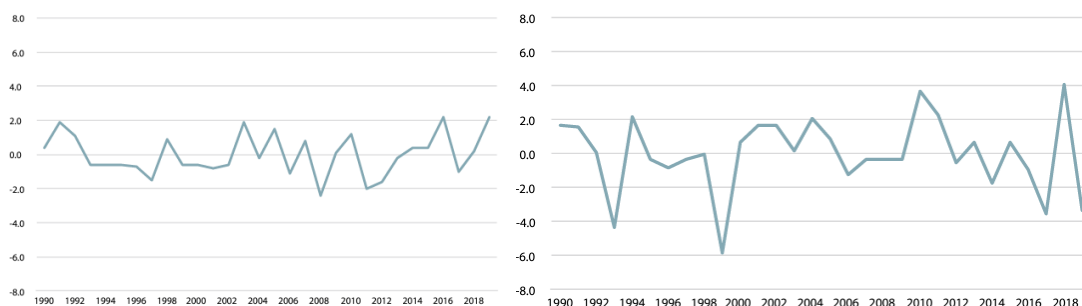
³ Greater Mekong Subregion Atlas of the Environment. 2nd ed. Asian Development Bank. 2012. <https://www.adb.org/sites/default/files/publication/30074/gms-atlas-environment-2nd-edition.pdf>.

⁴ <https://www.oneearth.org/ecoregions/luang-prabang-montane-rainforests/>

⁵ Ibid.

5. Mean temperatures across Laos have increased over the past century, accelerating to a rate of 0.1 to 0.3 °C increase per decade over the last 50 years. The trends in rainfall over the same period have not been as clear. Changes in the onset of seasons have been observed, including delayed monsoon onset dates in 13 out of the 18 provinces in Laos. Climate hazards such as storms, floods, and droughts have increased in frequency, magnitude, and impact in Lao PDR, with floods being the most common and disastrous. Floods induced by tropical storms are frequent and severe; 20 extreme floods occurred between 1960 and 2012, affecting 3.5 million people⁶. Floods occurred more frequently in the last decade, resulting in an accumulated economic loss of approximately eight billion USD.
6. Sayaboury faces moderate levels of climate hazards (droughts, storms, floods) and has a high vulnerability based on high sensitivity, with a high proportion of ethnic groups practicing shifting cultivation and subsistence agriculture in a mountainous terrain, with currently low adaptive capacity. On average, precipitation levels have increased significantly by 12 mm per year over the past 30 years; outpacing the national average. Sayaboury’s topography results in a severe rain shadow effect particularly on steep upstream and downstream areas where marginalized ethnic communities live. These areas are naturally prone to flooding, with small changes having a disproportionate impact on vulnerable subsistence and shifting cultivation. Minimum temperatures have remained relatively stable over the past 30 years, ranging from 14.88 °C to 24.45 °C. Maximum temperatures have increased with values ranging from 27.17 °C to 34.14 °C. As indicated by Figure 1 (with the y-axis representing degrees Celsius above and below the norm and the x-axis showing the trend in years), heatwave risks have increased as well, with the number of days exceeding 40 °C having increased since 2003. The number of days above 37 °C reached a high of 38 days in 2016. From an agroclimatology perspective, heat accumulation has increased significantly over the past 30 years (1990–2019), which has adversely impacted growing degree days and on the development cycle of crops, pests and diseases.

FIGURE 1: 30 YEAR MAXIMUM TEMPERATURES (LEFT-HAND SIDE) AND MINIMUM TEMPERATURES (RIGHT-HAND SIDE) IN SAYABOURY PROVINCE



Source: FAO, MONRE and MAF. 2022. [Climatology and agroclimatology atlas of the Lao People’s Democratic Republic](#). Vientiane.

Climate change projections

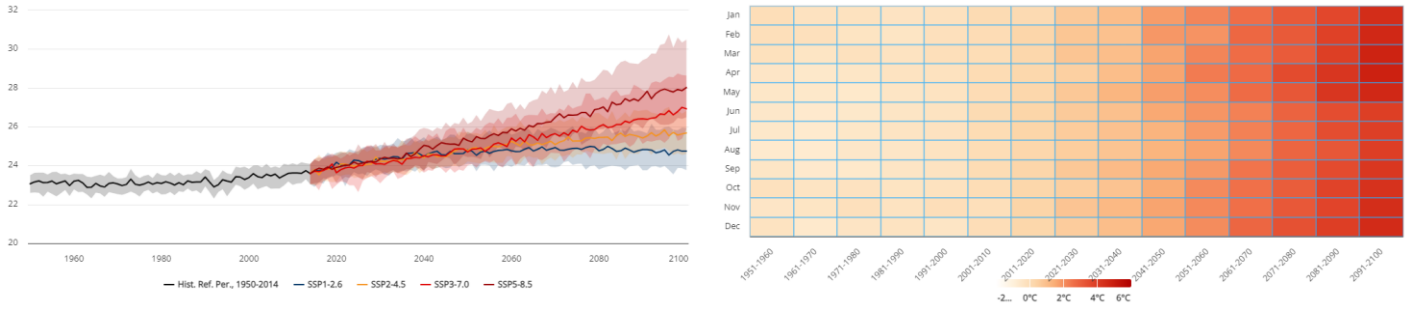
7. **Temperature:** The climate assessment conducted in 2016 for Laos (Figure 2) indicates that both short-term (2021-2050) and long-term (2070-2099) temperature increases are expected, under both RCP 4.5 and RCP 8.5 scenarios⁷. In the short-term, average maximum temperatures are projected to increase by 0.98 to 1.35 °C under RCP 4.5 and 1.2 to 1.6 °C under RCP 8.5, with greater increases in the northern regions compared to the south. Minimum temperatures are also expected to rise, with projections indicating increases ranging from 1.05 °C to 2.5 °C for the short-term, depending on the region and emission scenario. Additionally, it is forecasted that the number of days

⁶ Storm Xangsane in 2006 caused severe floods in central and southern Lao PDR, storm Ketsana in 2009 caused an estimated damage of US\$ 58 million, and a severe flood in 2011 caused by typhoons Haima and Nokten affected 12 provinces.

⁷ Third National Communication on Climate Change - https://unfccc.int/sites/default/files/resource/Laos%20NC3_%20EngV.pdf

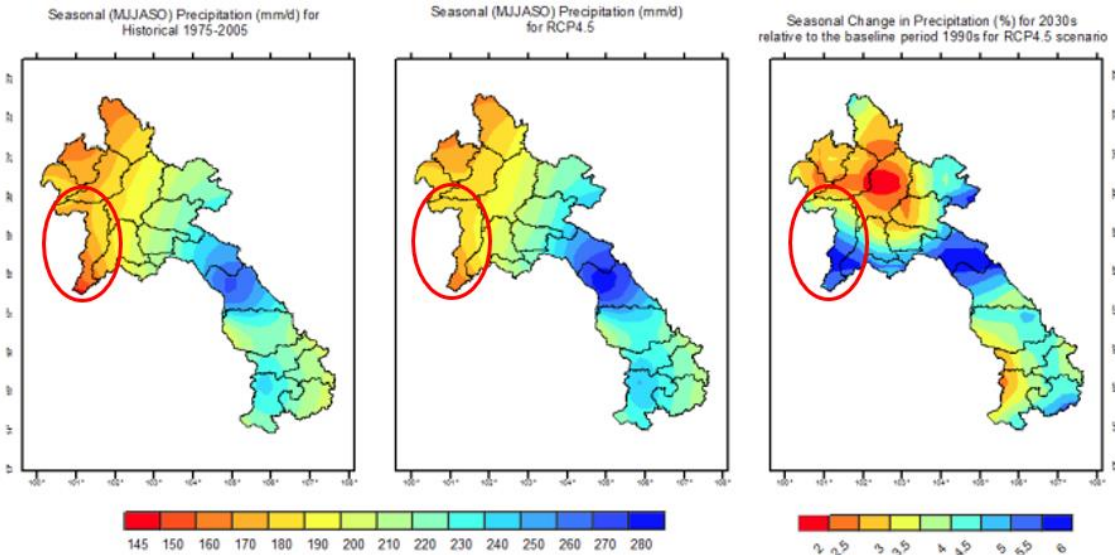
with ambient temperatures exceeding 35°C will increase, potentially leading to a rise in heat-related deaths without adequate adaptation measures.

FIGURE 2: PROJECTED AVERAGE MEAN SURFACE AIR TEMPERATURE FOR LAO PDR UNDER DIFFERENT PATHWAY SCENARIOS



8. **Rainfall:** The climate assessment for Laos indicates various trends in rainfall patterns over different time periods and scenarios. Overall, there has been an increase in seasonal and annual rainfall, with higher intensity rainfall events becoming more frequent. However, the number of rainy days, particularly those with heavy rainfall, has tended to decrease. Despite these general trends, there is significant regional variation in rainfall patterns, with some areas experiencing higher precipitation while others face drier conditions. Rainfall is expected to increase for Sayaboury (Figure 3).

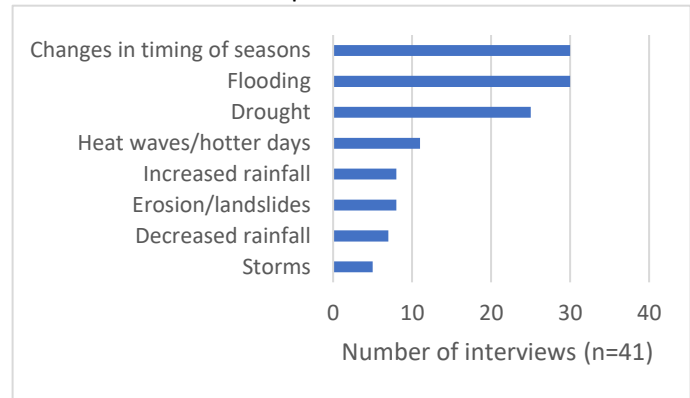
FIGURE 3: RAINFALL IN LAO PDR WITH SAYABOURY PROVINCE CIRCLED



Community observations and trend analysis

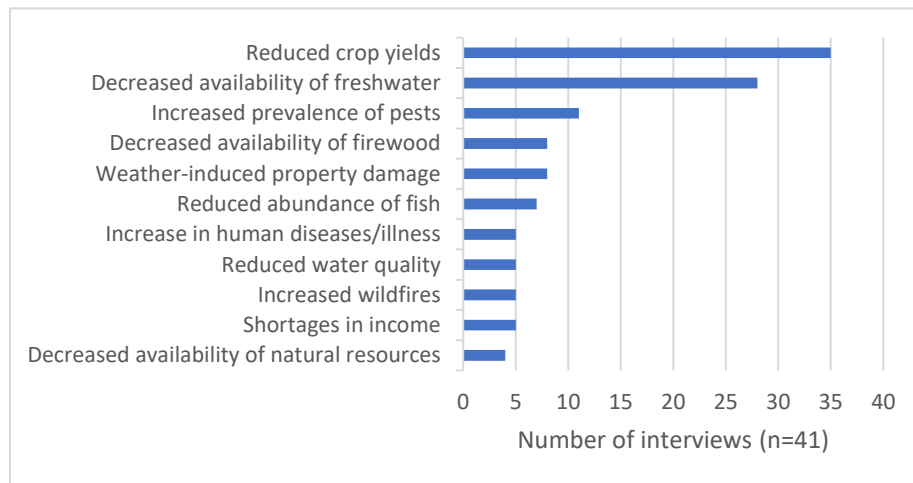
Reported changes in weather and climate

9. Consultations undertaken in January 2024 with communities from both the upland and lowland areas of the basin reveal that climate change is already negatively impacting local communities in Sayaboury province and suggests communities are currently ill-equipped to address the disruption to their livelihoods (see Annex 2 for Climate Crowd survey summary). When asked about what the most significant changes in weather and climate were, a majority of respondents pointed towards changes in the timing of the seasons and increased occurrences of floods especially impacting communities located in the lowland of the basin (73%). Increased flooding is substantiated by increases in rainfall and storms during the rainy season (20% and 12%, respectively). Many respondents also reported increased drought during the dry season (61%), brought upon by an increase in heat waves and hotter days (27%) and decreased rainfall (17%). 20% of those interviewed also reported an increase in erosion and landslides.



Impacts on community livelihoods

10. These changes in weather and climate have had impacts on local communities’ livelihoods, with reductions in crop yields being the most significant, as reported by 85% of those interviewed. Many of those that reported this noted that floods have been destroying their crop fields and, at times, their personal property as well (20%).

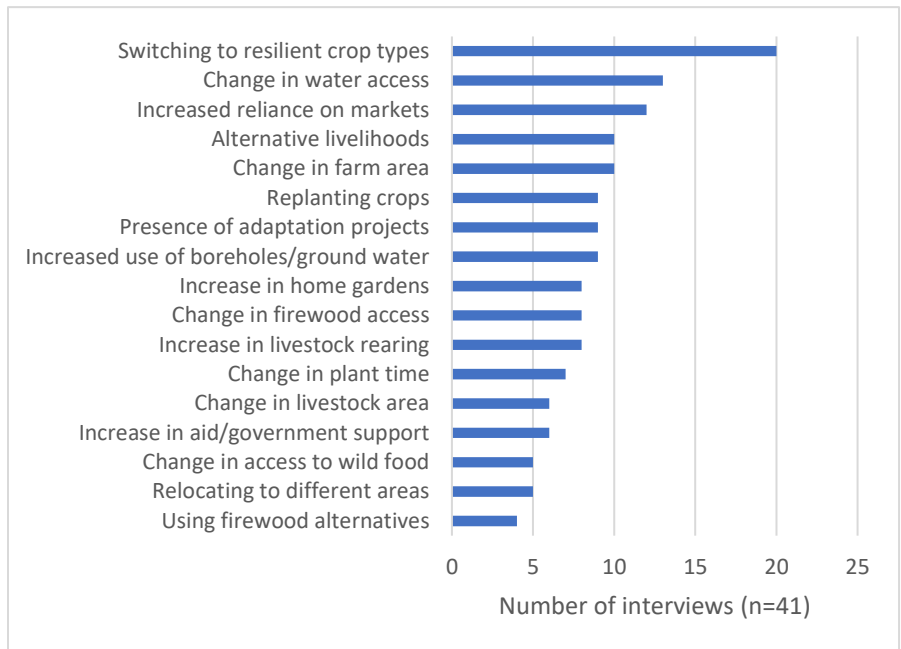


that floods have been destroying their crop fields and, at times, their personal property as well (20%). Reduced crop yields have resulted in shortages in income for some community members (12%) as agricultural production is one of the main livelihoods in the area. A majority of respondents also reported a decreased availability of freshwater (68%), which also has contributed to declining crop yields, along with an increased prevalence of pests (27%). Declines

in other resources were also observed, including firewood (20%), fish (17%), and unspecified natural resources (10%). In addition to decreased availability of freshwater, several interviewees reported reduced water quality (12%), leading to increases in illness and disease (12%). 12% of respondents also reported that there have been more wildfires.

Community responses to climate change

11. In response to failing agriculture, 49% of respondents reported changing the types of crops they plant to species that are more drought resistant, like cassava. To further increase crop yields, people have changed the areas where they farm (24%), replanted crops that failed (22%), and changed the time of season in which they plant crops (17%). Some interviewees switched from agriculture to a different livelihood (24%), with 20% of those interviewed reporting that they've begun rearing livestock instead. For those who already had livestock, 15% reported changing where they keep and raise their livestock due to declining productivity.



Interviewees noted that they have had to travel further distances to access water sources (32%), firewood (20%), and wild food (12%). This is supplemented by an increased reliance on markets for food (29%), an increase in home gardens for household food (20%), an increase in boreholes and groundwater usage (22%), and an increase in using firewood alternatives like charcoal or gas stoves (10%). Current adaptive capacities are mixed, and 22% of respondents reported that organizations have implemented adaptation projects in the villages and 15% reported an increase in external aid and government support. There was a call for more assistance, with 46% of those interviewed making suggestions for future projects, half of which suggested projects surrounding water availability like new boreholes and improved irrigation systems for agriculture.

12. **In summary**, the target area of the project - six districts across the four priority river basins - was selected based on high vulnerability and the significant impact that climate change is having, and will increasingly have, on crop yields and the ability to maintain a subsistence livelihood or an agriculture-based income. **Climate trends** over the past 30 years in Sayaboury have included drought and storms, increased average precipitation by 12 mm per year, and increased maximum temperatures. The **climate projections** suggest that these changes and impacts will worsen in the near future, with average maximum temperatures expected to rise by 0.98 to 1.35 °C under RCP 4.5 and 1.2 to 1.6 °C under RCP 8.5, in the short term (2021-2050), along with a corresponding increase in minimum temperatures. Changes in the timing and intensity of rainfall is expected, and overall, rainfall is expected to increase for Sayaboury, and drought is also expected to increase. These trends are supported by **community observations**, with 30 of the 41 community respondents noting changes in the timing of seasons, increased occurrences of floods, and rises in rainfall and storms during the rainy season. Many reported increased drought during the dry season, attributed to heat waves, hotter days, and decreased rainfall. In terms of **impacts on livelihoods**, most notable was reductions in crop yields due to a late onset monsoon, drought, and a reduced availability of water, as well as destruction of crop fields due to floods, leading to income shortages for some community members. Current **community responses** include changing agricultural practice, especially crop types, and communities suggested a need for more external assistance for adaptation capacity, especially water availability for agriculture.

Key Baseline Initiatives and Investments

National IWRM Baseline

13. Integrated Water Resource Management (IWRM) in Lao PDR is overseen by the Department of Water Resources under the Ministry of Natural Resources and Environment (MoNRE), with a mandate to “ensure nationwide coordinated, optimized and sustainable development and use of water resources, protection of the environment and improvement of social well being” at priority basin and sub-basins. This national entity operates under a legislative framework established by the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (1995) and the Water & Water Resources Law (1996, revised in 2017). Nationally, IWRM is also guided by the National Water Resources Strategy 2020, along with additional policies such as Decree No. 20 on Reservoir and Reservoir Management, National Water Resources Strategy 2025, and the Action Plan 2016-2020. Collectively, these laws and strategies form the backbone of water resource management in the country.
14. The IWRM framework is intersectoral, requiring coordination across various ministries and departments. Ministry of Natural Resources and Environment (MoNRE) primarily coordinates with the Ministry of Agriculture and Forestry, among others. Derivative initiatives and projects may also involve collaboration with the Ministry of Energy and Mines, especially for those related to infrastructure or hydropower. This collaboration also extends from the central government to local and basin levels, ensuring the inclusion of comprehensive and integrated management of the country’s water resources.

Provincial and district-level IWRM Baseline

15. At the provincial, district, and basin-level, River Basin Management Plans (RBMP) are developed and implemented through a structured governance mechanism. A provincial steering committee, led by the deputy governor and comprising representatives from various provincial offices, is responsible for disseminating and overseeing the plan at the district level. In turn, district-level committees, chaired by the Provincial office of Natural Resource and Environment (PoNRE), lead on-the-ground implementation with local stakeholders, including the Provincial office of Agriculture and forestry (PAFO), Provincial office of Planning and Investment (PPI), relevant civil society organizations (e.g., Lao Women Union), Provincial office of Public Work and Transportation (PPWT), and district governors.
16. The Nam-Poun basin already has a RBMP plan incorporating climate change adaptation measures, but there is weak capacity and insufficient resources to implement it. For the other river basins, Nam-Houng, Nam-Poui, and Nam-Lay, management plans are still under development or altogether absent, and provide an opportunity for integration of climate change adaptation.
17. At the provincial and district-level, bottom-up river basin planning and management is critical, requiring the above-mentioned cross-sectoral provincial steering committee and district level committees to collect on-the-ground information, relay community needs, views, and expectations, and integrate these insights into the broader river basin management planning process. This bottom-up aspect of planning not only captures the nuances of local needs and challenges but also ensures that strategies are locally relevant, community-driven and effective. Furthermore, this approach fosters community engagement and ownership, leading to more sustainable and effective management of water resources. These bottom-up mechanisms are not mature in the Nam-Poun basin and do not exist within the Nam-Poui, Nam-Lay and Nam-Houng basins.

National Climate Change Adaptation Baseline

18. Lao PDR has put in place several key strategies to support action to address the risks outlined above to livelihoods in the target areas. The Nationally Determined Contribution (NDC) outlines long-term agricultural adaptation targets include the promotion of climate resilient farming systems, agriculture infrastructure and technology as well as targets to manage surface water, groundwater, and wetlands for climate change resilience. The NDC also

highlights priorities to increase water resource infrastructure resilience to climate change through nature-based solutions and strengthen early warning systems⁸.

19. The National Strategy on Climate Change (2010) and National Climate Change Action Plan (2013-2020) prioritize sector-specific projects on agriculture and water. As part of these projects the government intends to conduct assessments of climate impacts on agriculture; strengthen water resources information, enhance knowledge, advisory services and technology transfer to farmers and enhance capacity for the implementation of adaptation plans. Specifically on water, the government also prioritizes Integrated Water Resources Management (IWRM), adopting river basin approach, management of surface and ground water and wetlands for climate resilience and strengthening early warning systems to manage flood and drought risks. The 9th National Socio-Economic Development Plan 2021-2025 outlines programs of work to enhance adaptation to climate change and reducing risks of natural disasters.⁹
20. Several projects across Lao PDR are being designed and implemented to support the government's effort to give effect to these strategies and strengthen climate change resilience of agricultural livelihoods, including projects in Sayaboury supported by the World Bank, Adaptation Without Borders, Asian Development Bank, the Food and Agriculture Organization and the International Fund for Agricultural Development (see Annex 3). This LDCF project will learn from, and build upon, this baseline of investment.
21. The proposed project will coordinate with other ongoing relevant initiatives and projects in the landscape (see Annex 3). Nam Poui NPA is a priority WWF-Laos site since 2010 and WWF-Laos has a team of 4 staff working from the Nam Poui NPA office under an annual Memorandum of Agreement (MOA) concluded with the Ministry of Forestry and Agriculture. This support includes PA management, community engagement, and institutional capacity strengthening with NPA staff, the Province and District Agriculture and Forestry Office (PAFO/DAFO) and local communities. WWF-Laos collaborates with CARE International Laos to conduct research on the nexus between gender-based violence and climate change. More recently, WWF-Laos supports GoL in mainstreaming nature-based solutions, including ecosystem-based solutions, in WWF-GoL priority landscapes, to increase the resilience of those most vulnerable to climate change, while maintaining or enhancing the ecosystem services which they and the country's economy depend on, including through a site-based project in the Siphandone wetland in Champasak province. This LDCF project will build off the WWF-GoL collaboration in Sayaboury and will also draw on the experience and lessons learned from the Siphandone wetland project.

Barriers to action

22. Despite these baseline investments, realizing the government of Lao PDR's vision for strengthening climate adaptation measures and resilient agricultural livelihoods nationally and in the northwestern part of the country, Sayaboury province faces a number of interconnected barriers.

Barrier 1: Weak institutional capacity at the provincial and local level to mainstream climate adaptation and resilience into river basin management and development plans, and translate them into actionable measures in Sayaboury province. While Lao PDR has placed a high priority and governance measures to ensure climate change adaptation actions flow down and are reflected and implemented within river basin management plans, there have been capacity constraints that limit the development of evidence-based approaches to planning and mainstreaming climate change into policies and plans, especially at the provincial and local district levels. Particularly, a lack of reliable information and data, including the absence of Climate Change Vulnerability Assessments or detailed community consultations at the local level, limits the local understanding of climate impacts on agricultural

⁸ <https://unfccc.int/sites/default/files/NDC/2022-06/NDC%202020%20of%20Lao%20PDR%20%28English%29%2C%2009%20April%202021%20%281%29.pdf>

⁹ https://rtm.org.la/wp-content/uploads/2021/11/PPT_NREP2021-2025_10-November-2021-10.11.21-1.pdf

livelihoods and under different scenarios, often leading to inadequate unsustainable development trajectories. While Laos has national to provincial to district level IWRM/RBMP coordination in place, there is still a need to enhance cross-sector coordination at the provincial and district level to facilitate a coherent and comprehensive CCA approach. In addition, legislation and guidelines to support climate change adaptation programs must be implemented to help ensure efforts are aligned across all levels of stakeholders. Without an increased institutional capacity, it will be difficult to thoroughly assess and prioritize trade-offs in climate risks and vulnerabilities and move forward with the most effective climate change adaptation measures in Sayaboury province.

Barrier 2: Insufficient or uneven adaptation capacity across local communities. The climate crowd surveys found that there was some implementation of climate change adaptation by communities already, for example, almost half the respondents had tried switching to resilient crop strains. However, there was not a deep application of a broader spectrum of adaptation solutions, and especially as it related to water access for crops. There is a need to co-identify the specific localized problems and solutions, and scale up what is working, in this vulnerable area of Sayaboury. There is also a need to strengthen the capacity and knowledge level of local government staff, who assist local communities with sharing information and experience of climate adaptation measures. In the absence of tried and tested adaptation measures, water security and agricultural productivity are likely to decline further, threatening the income and food security of these already impoverished communities. Without a community-driven bottom-up needs-based process for RBMP, the vulnerability of these communities to climate change will increase due to insufficient ownership of solutions, and will reduce their capacity to adapt in the future.

Barrier 3: Lack of access to appropriate technologies and approaches to promote community resilience, such as climate-smart agriculture, resilient value chains and livelihood diversification. Laos has experience on various facets of supporting climate change adaptation at community level, but there is inadequate experience and expertise to test these and scale up the most promising actions at landscape/ river basin levels to address some of the key climate change challenges and related disaster risk reduction and mitigation measures to keep pace with changes in population, increasing urbanization in lowlands and also more unpredictability related to climate change related impacts. A desktop analysis revealed that previous projects did not focus on integrating adaptation measures with the agricultural practices and methods used by the local communities. If the PPG phase uncovers new information on the challenges of upscaling and expanding past investments, the PPG Team will assess its significance and decide if it should be included in the scope of this project. Communities and households require technical assistance and lack access to appropriate supplies, technologies and equipment to promote effective adaptation measures in their river basin management plans and actions. There is also limited learning and sharing of know-how amongst communities that is happening organically and limited experience to absorb and act on meteorological and hydrological advisories, forecasting and early warning related to possible hazards.

Barrier 4: Poor integrated knowledge management, use of decision support tools and accessible climate information in Sayaboury province. Without effective knowledge management, decisions on farming activities for climate change adaptation and disaster risk management are impaired, which results in ineffective planning and coordination as well as suboptimal and unsustainable solutions and the inefficient use of limited capital and resources. Furthermore, the unavailability of timely, accurate and integrated information on water resource management hinders effective and efficient decision making on adapting farming activities. Increased national and global knowledge on likely impacts of climate change to both upstream and downstream communities and infrastructure have not been appropriately democratized and used to inform on climate change related impacts such as increased flood risks, or severe droughts, nor to implement nature based and climate risk informed land-use development planning at the basin level. Local communities do not have sufficient access to the knowledge, tools and information required to adopt climate resilient practices and technologies to agricultural systems. Such knowledge gaps will impede the implementation of climate change adaptation and resilience in Sayaboury province.

Without the GEF Scenario

23. The project is justified by its low risk and high reward potential to deliver improved crop yields and increased livelihood options to impoverished, subsistence-oriented and agricultural-based vulnerable communities in northwestern Lao PDR who lack sufficient capacity to address the challenges of the flood- and drought-prone landscape in which they live, in a changing climate. Investments to date have stopped short of addressing climate change adaptation and built-in resilience livelihood options within IWRM and RBMP policies, plans and process in Sayaboury province. Sayaboury province, like many other parts of Laos, is highly dependent on subsistence and shifting agriculture. Climate change and erratic weather patterns, such as increased rainfall or prolonged droughts, are already severely impacting crop yields and disrupting the livelihoods of local farmers. River basins are naturally prone to flooding, especially during the rainy season. With climate change, these risks increase. Building CCA into IWRM/RBM, flood prevention, control, and early warning systems, will be critical for the safety and economic stability of agriculture-dependent communities. Without action, northwestern Lao PDR and the target priority districts of Sayaboury province will continue to be subject to increasing and unmitigated impacts from climate change including changes to growing season conditions due to climate-induced disruption to seasonal variation and larger scale extreme climate events such as floods and droughts. Serious typhoon-related floods are increasing in frequency and severity in Lao PDR and are most likely already beyond the scope of traditional engineered flood control. Communities will continue to be ill-equipped and suffer because of limited capacity to anticipate and adapt to extremes, particularly floods, and manage water resources to maintain ecosystem services. In agriculture-dependent and poor communities, the impacts of climate change can threaten food security and livelihoods. Including climate adaptation in river basin management can reduce these risks by promoting climate-adaptive agricultural practices, diversifying income sources, and improving resilience to extreme weather events.
24. In the absence of technical assistance, it is also likely that domestic and external investment priorities will favor climate change infrastructure that may not reflect diverse bottom-up community needs and may still be susceptible to climate extremes and risk of displacement of communities to more ecologically fragile and disaster-prone areas. It is therefore time to adapt land use, development, and agricultural systems in the vulnerable mountainous watersheds of Sayaboury province to work in concert with nature, leverage traditional ecological knowledge where appropriate and maximize the benefits of floodwaters and forested landscapes. This approach would allow expenditures related to engineered flood control to be reduced, and its negative impacts on ecosystem services and associated water resources, food systems, and ecosystems minimized. Communities will also continue to lack actionable decision support tools, climate information and critical capacity to manage risks to productive activities and extreme events. Finally, good practices will remain undocumented and will not inform improved management and investment in adaptation.
25. This baseline future scenario reinforces the business case to invest in climate resilience through the LDCF window in northwestern Lao PDR in Sayaboury province at key watersheds to demonstrate and scale adaptation approaches that will support progress toward achieving Lao PDR's NDC and climate change policy targets related to the agriculture and water sectors. These investments need to prioritize upstream and downstream communities alike, that are subject to regular inundation, precipitation anomalies and seasonal disruption. Without intervention and long-term investment in river basin management plans, the degradation of agroecological systems in the Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng watersheds will continue. This will result in decreased ecosystem services, with impacts on water availability and quality. In turn, there will be impacts to the local economy and exacerbate poverty, particularly through the decline in agricultural yields and other natural resource-based livelihoods, as well as threaten local cultural heritage if communities abandon their livelihoods and/or the target area altogether.
26. The project will be robust for future climate change, as it addresses the climate impacts that are anticipated to increase, namely floods and drought causing loss of and/or reduced yield of crops. The project will integrate climate change adaptation into IWRM processes and plans at the provincial level, and filter this down to ground

level IWRM interventions and interventions with communities to mitigate the impacts of climate change on crops. An underlying principle of the project is to enable local communities to transition from the current reactive approach to a more proactive approach that anticipates and accelerates the implementation of future climate change adaptation measures.

27. **Relevant stakeholders** include government agencies at both provincial and local levels (targeting those with environmental, infrastructure and health mandates), civil society organizations and Indigenous Peoples and Local Communities (IPLCs) including women. The government implementation of the project with involvement of local agricultural communities for food production and may also involve private sector value chain SMEs and will be determined during the PPG stage. The capacity of non-state actors and value-chain entities - where appropriate - will be enhanced through multi-stakeholder and sectoral dialogues for collaborative planning and knowledge sharing. The project also aims to build adaptive capacity and resilience of key natural, social and economic sectors vulnerable to and at risk of climate change; proposes a programme to build the capacity of local upstream and downstream communities and local governments to cope with climate risks; and aims to create an enabling environment that promotes system-wide whole-of-government transformation. Overall, the proposed GEF-8 LDCF project will benefit the most vulnerable agricultural communities in northwestern Lao PDR, especially those living in rural settlements, which are highly dependent on natural resources, and will be a testbed of the enabling conditions towards targeting investment and interventions that can reduce vulnerability to climate change in the medium and long term.

TABLE 1: LIST OF POTENTIAL KEY STAKEHOLDERS AND ROLES IN THE PROPOSED PROJECT

Stakeholder type	Stakeholder list	Possible contributions and roles in the project
Government ministries (at central and provincial levels)	<ol style="list-style-type: none"> 1. MoNRE 2. MOF 3. MAF 4. MoLSW 5. MCWT 6. MoFA 	Beneficiary of capacity-building; development of project relevant plans; delivery of technical components of the programmes according to sectoral expertise; coordination with local authorities; mobilization of human and financial resources;
Intergovernmental Organization	<ol style="list-style-type: none"> 1. The Mekong River Commission (MRC) 	The MRC jointly manages shared water resources and promotes sustainable development of the Lower Mekong River Basin.
International Organizations	<ol style="list-style-type: none"> 1. UNDP 	Support the implementation of projects to implement and improve climate and disaster resilience.
National Organizations	<ol style="list-style-type: none"> 1. Department of Water Resources (DWR) in MONRE 2. Department of Meteorology and Hydrology (DMH) in MONRE 3. Department of Climate Change (DCC) in MONRE 4. Department of Forestry (DOF) in MAF 5. Department of Planning and Cooperation in MAF 6. Department of Agriculture Land Management (DALaM) in DAF 7. Department of Agricultural Extension and Cooperatives (DAEC), (MAF) 	Provision of technical advice; provision of specialist service, project delivery.

	<ol style="list-style-type: none"> 8. Department of Social Welfare, (MLSW) 9. National Women's Union (NWU) 10. Department of International Organization (DIO) 11. The National Integrated Water Resources Management Special Programme (NIWRMSP) lead by DWR. 	
Regional and local administration	<ol style="list-style-type: none"> 1. Sayaboury Department of Planning and Investment 2. Provincial Office of Natural Resources and Environment (PONRE) 3. District Offices of Natural Resources and Environment (DONREs) 4. Provincial Agriculture and Forest Office (PAFO) 5. District Agriculture and Forest Offices (DAFOs) 6. Provincial Labour and Social Welfare Department 7. Provincial Department of International organization 	Beneficiaries of capacity-building; local coordination of activities; issuance of any relevant authorizations and permits
Community-level stakeholders	<ol style="list-style-type: none"> 1. Village Development Committees 2. Village leaders 3. Natural resource user groups 4. Women's groups 5. Other vulnerable or marginalized groups 6. CBOs 	Community mobilization; selection of appropriate interventions; delivery of programme components; beneficiaries of capacity-building and on-the-ground interventions
NGO/CSO	<ol style="list-style-type: none"> 1. GIZ 2. RECOFTC 3. LWCA (Lao Wildlife Conservation Association) 4. CARE 	Provision of technical advice; delivery of training and assets; social mobilization; monitoring of ecological conditions
Research Institutes	<ol style="list-style-type: none"> 1. National University of Laos (NUoL) 2. National Agriculture and Forestry Research Institute (NAFRI) 3. Center for Statistics and Information in MAF 4. National Economic Research Institute in the Prime Minister's Office (NERI) 	Provision of scientific support; the undertaking of research activities
Private Sectors	<ol style="list-style-type: none"> 1. Xayaburi Power Company Limited 2. Pak Lay Power Company Limited 3. Xingyuan Trading Company 4. Tienhongtex agricultural technology Company. 	Water resource management data (From 1 1 and 2) Provision of goods and services; consultation for market information (From 3 to 4)

B. PROJECT DESCRIPTION

Project Description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements¹⁰ of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here***

28. A systematic and bottom-up approach to climate adaptation is required to build adaptation capacity of local stakeholders to address key climate change impacts in the project area, such as drought, flood and change in seasonal onset. The project will take a systems-based approach, accounting for the key transformational levers of governance (policies and plans), innovation and learning and multi-stakeholder collaboration (people) to co-design appropriate solutions grounded in community needs at the local level. When underpinned by a strong foundation of knowledge and learning, an approach built on these pillars will facilitate the appropriate enabling environment created for lasting and scalable impact. This approach will help ensure that the coterie of climate adaptation risks and water resources are managed in an integrated manner, considering the spatial interlinkages and dependencies between land use, ecosystem health and underlying causes of vulnerability to climate change. Incentivizing community restoration of important upstream ecosystems will improve the provision of ecosystem goods and services and reduce the risk of droughts, floods and their impacts on local downstream communities, thereby increasing their resilience to the impacts of climate change. This requires a needs-driving approach and working with local communities to co-design adaptation solutions for maintaining resilient livelihoods, with co-benefits of addressing the drivers of degradation and incentivizing sustainable practices.

29. The proposed GEF-8 LDCF project in the Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng Basins of Lao PDR, will take a bottom-up and community-oriented approach to address the impacts of flooding, droughts and seasonal variations in these key watersheds of Sayaboury by mainstreaming climate change adaptation in IWRM planning and interventions and identifying and implementing strategies with communities to buffer livelihoods from climate change impacts. The project's Theory of Change (ToC) and transformation logic articulated in Figure 4 is grounded on the premise that: **if** the project can create a forum for surfacing community needs and leverage it to mainstream climate change adaptation and climate-informed disaster risk reduction into local river basin management plans and policies, together with building the requisite institutional and professional capacity (**Outcome 1.1**) uniformly across all six districts in Sayaboury province, and; **if** community-identified and implemented upstream and downstream IWRM and RBMP actions are informed by further climate crowd consultations and widely tested and collectively appreciated (**Outcome 2.1**) at the watershed level, and; **if** the project can set up the conditions for the uptake of diversified climate-proof and gender-informed livelihood opportunities and locally-appropriate climate information (**Outcome 3.1**), and; **if** knowledge and lessons in IWRM and RBMP, along with decision support tools and climate information are democratized and disseminated widely through gender-responsive communications, visibility and outreach products (**Outcome 4.1**); **then** the project will be able to overcome the barriers preventing local climate adaptation and resilience, and the threats to agricultural livelihoods and those particularly faced by local and highly vulnerable ethnic populations will be reduced to enable sustainable economic benefits and the lasting well-being of communities in the project area.

¹⁰ Enabling Elements for Good Project Design: A synthesis of STAP guidance for GEF project investment: <https://stapgef.org/resources/advisory-documents/enabling-elements-good-project-design-synthesis-stap-guidance-gef>

30. Against this backdrop, the LDCF project will build climate adaptation and climate resilience capabilities of vulnerable communities in the “at risk” and nationally prioritized watersheds of the Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng Basin in Sayaboury, and, while contributing to national efforts (and priorities) of the vision of the National Water Resources Policy, to restore watershed ecosystems and their services in the Sayaboury province. The project will particularly target marginalized and rural agriculture-dependent communities who rely on natural resources (including water, land and forests) for their livelihoods, while also being highly exposed to flood, drought and landslides with limited capacity to adapt to these climate events without external support. The project will support sustainable livelihoods that indirectly incentivize restoration and conservation efforts, while contributing to the country’s National Green Growth Strategy. On-the-ground efforts and testing of appropriate community-identified protective solutions, as well as locally tailored national IWRM actions will provide critical evidence, which can then be scaled across Lao PDR and beyond using the transformative enablers created through the mainstreaming, governance, capacity and knowledge pillars of the project.
31. Based on the climate rationale outlined in the sections above, the project will specifically target six districts (Thongmyxay, Paklay, Phiang, Xaysathan, Xayabury, and Hongsa districts) in Sayaboury province that are most susceptible and vulnerable to climate change. The project’s long-term goal is to support the adaptation targets outlined by the government of Lao PDR in its most recent NDC to promote (i) climate resilience in farming systems and agriculture infrastructure; and ii) appropriate technologies for climate change adaptation, including nature-based and circular economy solutions. Water adaptation targets include i) managing surface water and groundwater for climate change resilience; ii) increasing water resource infrastructure resilience to climate change, including through nature-based solutions; and iii) strengthening early warning systems.
32. There are two main preconditions to the GEF Alternative:
- The local branches of government of Lao PDR are able to break silos and create the enabling conditions for a truly integrated and sectoral approach through enhanced policies and comprehensive framework allowing for collaboration and cross-sectoral dialogue, a forum for community voice in planning and information sharing to thrive between key actors on climate adaptation and disaster risk management;
 - More sustainable and locally appropriate IWRM strategies and RBMP actions are tested and developed in tandem with community-level ownership, with an appreciation and respect for traditional knowledge and gender responsiveness, for vulnerable watersheds and agricultural practices and livelihoods.
33. This integrated approach aims to reduce the risk of climate change impacts over time by addressing the exposure, and sensitivity of agricultural livelihoods in vulnerable districts and increasing the adaptive capacity of communities. Each output addresses one or more barriers to the further promotion of climate change adaptation. Ultimate achievement of the project’s objective is influenced by a number of assumptions regarding the willingness and capacity of government at different levels to engage in integrated planning exercises addressing flood and other climate-risks as part of a landscape or watershed level approach, the capacity of key sector and value chain actors to invest in climate-smart agricultural practices and nature-based solutions and the continuing access to climate information services and decision support tools. The ToC assumes the following:

Component 1:

- **Assumption No. 1:** Myriad local stakeholders willing to work cooperatively and engage in integrated watershed management in Sayaboury Province;
- **Assumption No. 2:** Key partners commit to a whole of government approach to mainstream climate adaptation into IWRM and RBMP;
- **Assumption No. 3:** Willingness to recognize and internalize future risks and the consequences of inaction.

Component 2:

- **Assumption No. 4:** Compelling business case to the Department of Water Resources for investment in local government and community co-developed, climate adaptive IWRM/RBM solutions as cost effective alternatives to prevailing landscape and watershed investment and practices;
- **Assumption No. 5:** Communities and farmers have models of upstream and downstream measures and how to apply them.

Component 3:

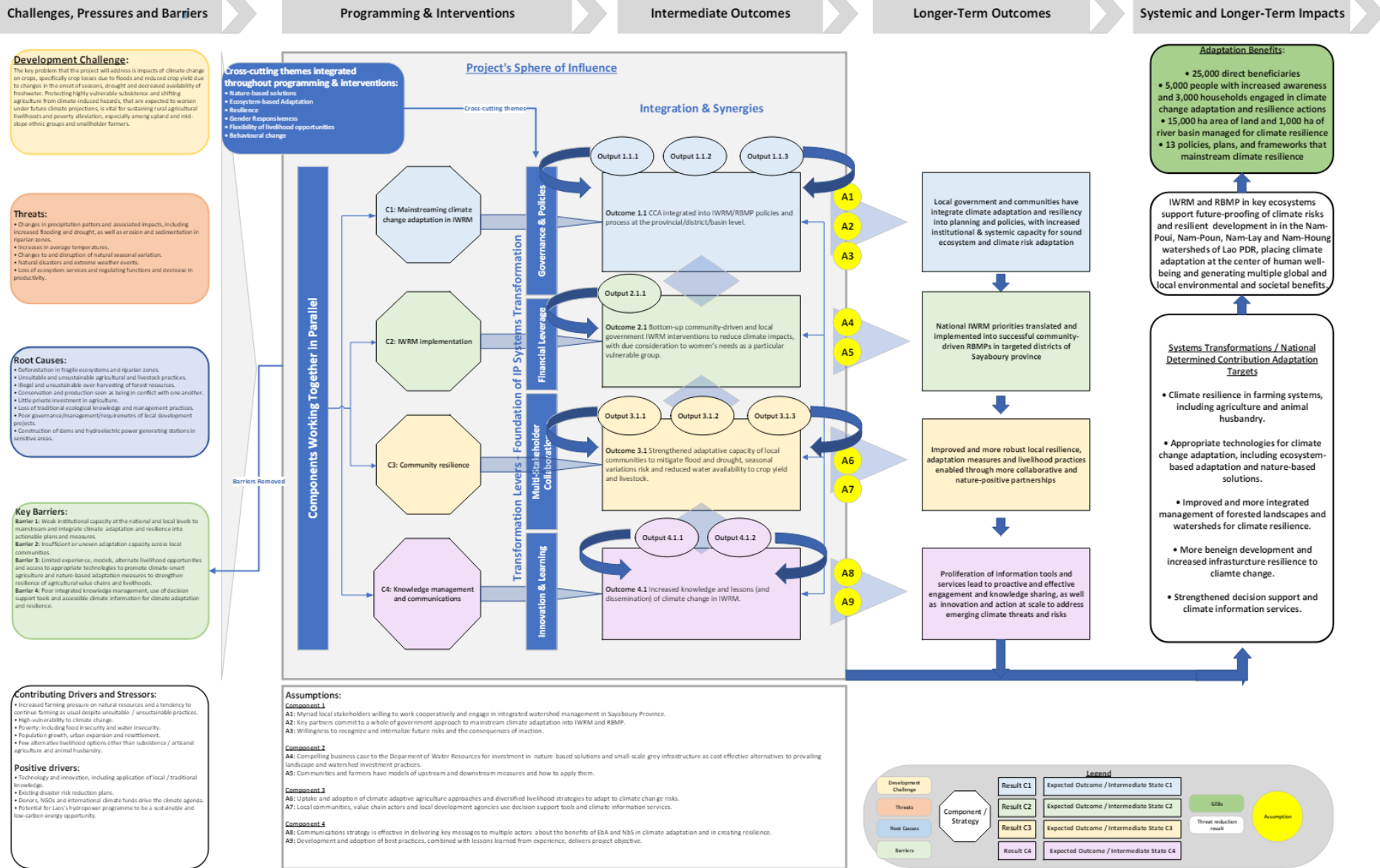
- **Assumption No. 6:** Uptake and adoption of climate adaptive agriculture approaches and diversified livelihood strategies to adapt to climate change risks.
- **Assumption 7:** Local communities, value chain actors and local development agencies use climate information, forecasts and early warning systems;

Component 4:

- **Assumption 8:** Communications strategy is effective in delivering key messages to multiple actors about the benefits and models of climate adaptation and in creating resilience;
- **Assumption 9:** Development and adoption of best practices, combined with lessons learned from experience, delivers project objective.

34. The project outcomes are ambitious, as they aim to address changes at three levels simultaneously. Nonetheless, the targeted changes are undergirded by a logical flow and inter-connection between them. Thus, when implemented effectively, the outputs can be mutually reinforcing, which can in turn contribute to improved potential for the success of the project overall. Conversely, if dependencies are not adhered to the transformation potential of the project can break down altogether.
35. Across all components, the project will leverage the transformational levers of (i) innovation and learning; (ii) multi-stakeholder collaboration; (iii) financial leverage; and (iv) governance and policies. It will also consider as well positive drivers of change as they each apply to the causal pathways to achieve these outcomes and systems transformation, and through this intervention logic the barriers will be removed and the baseline will change. Taken together the transformational objective will be achieved, the project will address vulnerable livelihoods through increased resilience, adaptation and food security, and global environmental benefits will accrue.

FIGURE 4: THEORY OF CHANGE



Component 1: Mainstreaming climate change adaptation in IWRM.

36. This component will create an enabling environment for a scenario-based framework on sustainable climate change adaptation and resilience in northwestern Lao PDR through (i) climate risk-informed, integrated planning and mapping, with a particular emphasis on flood, drought and seasonal variation risks; (ii) strengthened policies, institutional coordination and cross-sectoral problem-solving, capacities for improved land use planning and adoption of IWRM and nature-based solutions in managing fragile upstream and downstream landscapes; and (iii) enhanced tools and knowledge sharing for policy support and to facilitate actions at scale.
37. As a precursor to the project's mainstreaming efforts, it will establish a provincial framework for scenario-based policies grounded on climate change adaptation and disaster risk management principles (**Output 1.1.1**) and supported by data-driven and traditional decision-making tools, while playing close attention to gender considerations. It will establish comprehensive strategies - anchored to the national IWRM framework - to tackle climate-related challenges and natural disasters, while developing tailored policies, programs, and projects that can be effectively integrated into local governance structures and financial systems. By focusing on a provincial framework for scenario planning and action, northwestern Lao PDR can anticipate various climate and disaster scenarios, allowing for proactive and effective responses at local levels, thereby minimizing risks and maximizing the protection of its communities and natural resources.
38. The project will provide gender-responsive technical assistance through a suite of facilitated thematic workshops and planning sessions as an input to emphasizing climate change adaptation and disaster risk management in both district/provincial river basin management plans (**Output 1.1.2**). As part of Output 1.1.2, capacity building activities will be developed in parallel aimed at supporting provincial and local government personnel, as well as water-based public works departments with the requisite knowledge on integrating climate change adaptation into IWRM and RBMPs. This will be coupled with a suite of climate crowd community consultations to ensure a bottom-up perspective and provide a detailed understanding of how climate change is experienced at the local level and how communities are adapting. A detailed analysis of climate trends and likely impacts at priority upstream and downstream districts in Sayaboury province, and socioeconomic trends relevant to northwestern Lao PDR will be undertaken, with the aim to provide robust climate-informed input for resilience planning and identification of climate change adaptation measures. As part of this exercise, the project will map historical extreme drought (duration, min/max temperatures) and flood patterns (upstream and downstream flood areas, depths, and duration of inundation). This will support the revision of the spatial definition of drought and flood risk in land use and development planning. The rapid assessment will be validated by layering in social mapping and in-depth survey data expanding on the climate crowd consultation process undertaken during the PIF development at critical mass of upstream and downstream villages across the six priority districts in the Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng Basin. To support planning processes, the project will establish a range of adaptive management decision-making tools and models focused on future climate risk and response options. Spatial data and mapping will be used as an input developing needs-based, data-driven decision support tools and climate information (**also as part of Output 1.1.1**) that will also leveraging traditional environmental knowledge. These will build on existing information management tools, as well as other existing decision-making and assessment tools/software that support enabling coherent climate-resilient integrated water resources and river basin management and monitoring. Community ownership of and the bottom-up needs-driven approach, including gender-inclusive mechanisms, will be made possible and enabled through a district and provincial forum (**Output 1.1.3**) for community and local delivery of climate risk management and adaptation.

Component 2: IWRM implementation.

39. With strong dependencies on and drawing from Component 1, this component focuses on field-level demonstration and implementation of bottom-up and community-driven IWRM adaptation solutions to droughts, floods, reduced water availability, and seasonal variations at upstream and downstream landscapes, to help manage the impacts on agriculture, and with a focus on implementing priority climate adaptation measures emanating from climate crowd

consultations and priority actions from RBMPs in the targeted watersheds. Field level upstream and downstream measures adopted will also draw upon lessons learned from other agriculture resilience and adaptation projects, to combine ecosystem and disaster risk management through a community-based bottom-up approach. This second component will build upon the enabling environment and scenario-based framework provided by Component 1, through the implementation of on-the-ground interventions, including gender-responsive ones, across the six priority districts.

40. The outcome under Component 2 will build capacity for and demonstrate gender-informed community identified and delivered upstream and downstream (Output 2.1.1) IWRM interventions to reduce the impact of floods, drought and reduced water access on small scale and subsistence agriculture in the Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng watersheds to reduce flood and drought impacts to local communities. Depending on the prioritization process, indicatively this might include interventions to allow for flood water retention, aquifer recharge and shallow water storage, or small-scale infrastructure and nature-based solutions to mitigate floods and droughts and enhance ecosystem health across the entire Basin area. In project sites that are less prone to floods, activities could focus on increasing resilience to drought, including through investments in solutions that enhance water supply reliability, indicatively this could include nature-based solutions for capture and storage (e.g., shallow natural water storage in floodplain lakes and ponds, etc.) and conservation measures (e.g. dry season water use agreements for both groundwater and surface water, and agro-met services that allow farmers to make better on-farm water management decisions). The selection, design and distribution of these activities will be determined through the watershed and basin-level planning and prioritization conducted under mainstreaming activities in Component 1. Interventions will be supported by hands-on workshops and training to maintain and replicate upstream and downstream investments.
41. Identification of intervention sites/villages will be based on the following preliminary criteria:
- Current and expected flood risk (to be confirmed through mapping activities under Output 1.1.1)
 - Size and risk exposure of climate-vulnerable populations
 - Economic vulnerability of communities (e.g. subsistence and shifting agriculture)
 - Incidence of repeat climate hazards and disasters (droughts, floods, storms etc.)
 - Upstream and downstream areas which provide significant ecosystem goods and services to local communities
 - Prevalence of agriculture and priority food systems of strategic and national importance
 - National government priorities
 - Local government and community interest
 - Areas with unique local heritage.

Component 3: Community resilience.

42. This component will focus on testing out climate adaptive and gender-responsive agriculture and livestock practices and livelihood diversification across the target project area where agriculture dependent communities are at risk - to be confirmed through Output 1.1.1. The project will also work to enhance local capacities for the production, dissemination and use of decision support tools, climate information, forecasts and early warnings.
43. Under Component 3, activities to improve adaptation capacity will include ensuring gender-informed climate resilience is built into livelihoods, by promoting a shift towards modifying current agriculture practices to become more climate smart and promoting context appropriate livelihood diversification, products, methods and practices (Output 3.1.1). These strategies could indicatively include but are not limited to: i) climate-smart agriculture (e.g. agroforestry, intercropping, minimum-tillage, integrated soil fertility management, water harvesting and

management); ii) silvopasture to support subsistence animal husbandry; iii) cultivation and sale of NTFPs; iv) seed banks and seedling stocks; and v) other similar climate adaptation and resilient livelihood practices that will be identified during the PPG phase. In upstream locations, an underlying focus of the project will be to purposefully select diverse, high-value tree species that benefit agricultural livelihoods, restore ecosystem services and enhance carbon stocks, thereby prioritizing solutions that delivery landscape management and restoration co-benefits in parallel. Importantly, the project will audit and future-proof local value chains and adapt them in a manner that helps get commodities to market.

44. Output 3.1.1 will be made possible through hands-on workshops, technical assistance and training, field-school sessions and the provision of essential tools and equipment, all of which will be sensitive to gender considerations. Lessons from the past will also be used to inform livelihood enhancement activities. The project will explore, test out and implement diversified livelihood options (Output 3.1.2) to augment farmers' income for periods when they cannot rely on farming. These will be further explored and defined during the PPG through evidence-based studies and consultations.
45. As part of this Component's third output, the project will work with local communities to build capacity (Output 3.1.3) on the use of climate information, forecasts and early warning systems (including those which draw from traditional environmental knowledge), developed under Output 1.1.1 to further enhance risk management and preparedness. The project will build on the results of GEF SAMIS and its follow-up project, expected to be funded by the Green Climate Fund, which produce and disseminate agro-climate information services, to ensure that information and warnings reach the 'last mile' and that vulnerable farmers and communities are equipped to prepare for floods and droughts, and able to mitigate their impacts. As part of this output, the project will regulate and formalize the use of these tools and systems by developing operating procedures that will be included in updates to the RBMPs plans for the Nam-Poui, Nam- Poun, Nam-Lay and Nam-Houng basins, envisaged under Output 1.1.1 and Output 1.1.2.

Component 4: Knowledge management and communications.

46. Under this component, the project will document, curate and catalogue the information and experiences generated throughout its implementation to ensure that lessons learned are used to inform future adaptation planning and implementation efforts in other districts of Sayaboury not included in the target area, within other basins in the province, and across other provinces with similar conditions, threats and barriers. Underpinning this component will be a knowledge management strategy and communications plan (Output 4.1.1), cognizant of gender considerations. Communications materials (publications, videos etc.) will be produced to align messaging, increase visibility and exposure at events, and data sharing facilitated. The project will also develop a knowledge management system and engagement strategy to share information on approaches to further promote nature-based adaptation approaches at national levels as well as regionally and globally and will establish knowledge management vehicles (people, process and technology) to enable the transformation of information in know-how. As a part of outreach efforts, as well as to ensure their strong involvement in decision making and equitable benefit from the project, the project will develop a strong gender action plan as well as FPIC with indigenous communities. Benefits, lessons learned and information generated by the project will also be disseminated widely (Output 4.1.2) and used to inform future planning exercises and efforts to better mainstream nature-based adaptation, as well as undertaking planning towards future replication and scaling. Learning from the project will also be used to inform regional and global work on adaptation and resilience through engagement with other GEF and related adaptation projects and programmes such as the Sustainable Rice Landscapes Initiative (SRLI).

Implementation Arrangements

47. Relevant Government entities will implement the activities of the project; primarily the Department of Water Resources (DWR) in Ministry of Natural Resources and Environment (MoNRE) and their associated lines at the Provincial and District level, and the Ministry of Agriculture and Forestry (MAF) and their Provincial and District offices, supported by the WWF-Laos Country Office. Relevant departments under each Ministry will lead delivery of project outputs based on their respective mandates and areas of expertise. Additional partners will be identified during the PPG stage. Agency roles, as well as the project's organization structure and the project coordinating staff roles and responsibilities, will be defined during the PPG phase.

Adaptation Benefits

48. The project contributes to the Climate Change Adaptation programming strategy of GEF-8 by facilitating transformational adaptation towards achieving the Paris Agreement's global goal on adaptation. The project will directly benefit 25,000 members of the rural population, of which 5,000 will be trained, belonging to 3,000 households across the six target districts (female 12,500 male 12,500). The project will also improve climate resilient management of 15,000 hectares of agricultural land, including 7,500 hectares of natural and production forests and of 1,000 hectares of river basin. The project will drive additional delivery of planning processes at district and village level and through the dissemination of project guidance, analysis and approaches across the upland regions of northwestern Lao PDR. Under Component 3 of the project, outreach to foster additional adaptation benefits will be encouraged through engagement in regional and global networks and broader GEF and GCF ecosystem of parallel projects.

Innovation and scalability toward broader transformation

49. The project will promote innovation through the adoption of anticipatory, agile, and adaptive management practices and non-linear learning in living laboratory settings, co-developing ground-up interventions together with communities. The design and scaling of low-cost, community-led, climate adaptation solutions, rather than hard engineering solutions to facilitate adaptation to climate risks that will draw upon a mix of local knowledge and advanced assessment and analysis developed under Component 1 of the project.
50. The project will also foster transformation because by aiming to change the trajectory of development in upstream and downstream catchments of northwestern Lao PDR from one of increased flood damage, degradation of forest and mountain ecosystems, and biodiversity loss to one of nature-based livelihoods, reduced flood damage, stronger preparedness and maximization of the benefits of seasonal climate patterns, and improved forest landscape health resulting in enhanced ecosystem services. Its transformative impact is further enhanced by the sharing of methodologies and results with interested stakeholders in lowland areas in other parts of the country and beyond.
51. The additionality of GEF funding arises from the fact that the business case for adaptation and resilience planning is missing from the current-state response strategies and the value-proposition for investing in adaptation projects benefiting vulnerable populations is not well-reflected in current approaches. Therefore, without GEF funding, these interventions would not be implemented, despite their cost-effectiveness, proven long-term sustainability, positive impacts on biodiversity conservation and wetland health, and the economic benefits they generate for some of the world's most climate-vulnerable communities.

Coordination and Cooperation with Ongoing Initiatives and Project.

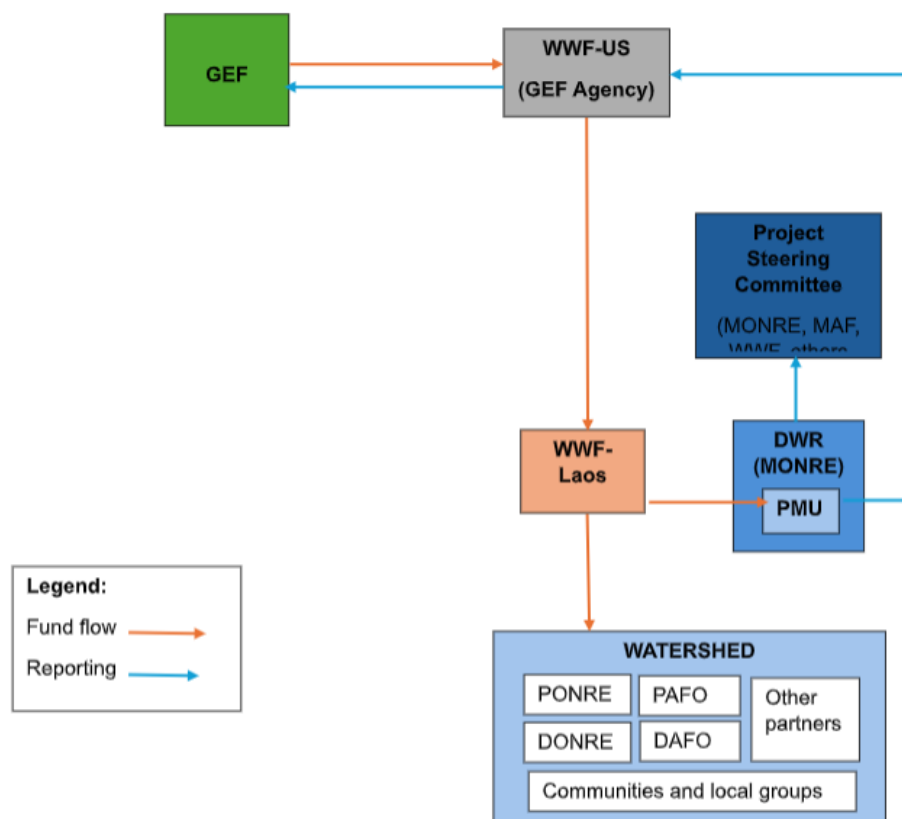
Does the GEF Agency expect to play an execution role on this project?

Yes No

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (*max. 500 words, approximately 1 page*)

52. The executing entity is the Department of Water Resources (DWR) in the Ministry of Natural Resources and Environment (MONRE). A Project Management Unit (PMU) will be established and hosted in DWR (Figure 4). The PMU will coordinate and deliver the project activities in close cooperation with key partners, including Department of Meteorology and Hydrology (DMH) in MONRE, the Provincial and District DWR offices (PONRE, DONRE) and Provincial and District Agriculture and Forestry (PAFO and DAFO).
53. Discussion among DWR, WWF-Laos and WWF-US (GEF Agency) indicate a role for WWF-Laos to provide execution support to DWR (see Annex 4). The scope of this support has been discussed among DWR, WWF-Laos and WWF-US (GEF Agency), and indicatively includes WWF-Laos undertaking the following tasks for the project:
- Financial management and preparation of financial reports for the project
 - Sub-grant assessments, awards and management
 - Procurement (based on plans developed with the PMU)
 - PMU Staff recruitment (recruited by WWF-Laos on behalf of government but hosted at DWR offices)
 - Technical assistance to support government and sub-grantee delivery of the project.
54. The execution services to be provided by Department of Water Resources (MONRE) and partners (government and non-government, to be identified) are expected to include:
- Hosting the PMU
 - Preparation of procurement plans
 - Preparation of terms of references (with WWF-Laos)
 - Management of consultant activities
 - Management of output deliverables
 - Maintenance of records of all project-related documentation
 - Management and administration of the Knowledge Management Plan
 - Preparation of technical progress reports
 - Consultation with project stakeholders
 - Coordination with project partners, including sub-grantees.
55. Synergies and areas for collaboration with ongoing WWF and GoL initiatives will be identified in more detail during project preparation phase, including identification of cost-sharing and staff-sharing possibilities.

FIGURE 5: INDICATIVE IMPLEMENTATION ARRANGEMENTS AND LINES OF REPORTING



Core Indicators

Core Indicators	Core Indicator Target Expected at PIF	Sub-Indicator Target Expected at PIF	Note/Assumption	Sub-Indicators
1. Number of direct beneficiaries (sex disaggregated)	25,000 (50% women)	12,500 (50% women)	Only 1% of the rural farming population of the target districts in Sayaboury province have access to diversified livelihood opportunities to cushion against climate shocks (50% women)	1.1. Number of direct beneficiaries with diversified and strengthened livelihoods and sources of income (sex disaggregated)
		12,500 (50% women)	The project assumes at the PIF stage that less than 2 % of the target district population are able to access improved last mile climate information services, encompassing Sub-indicator 1.1 (50% women)	1.2. Number of direct beneficiaries from the new or improved climate information services including early warning systems (sex disaggregated)
2. Area of land managed for climate resilience (hectares)	15,000	7,500	Target upstream and downstream agricultural land representing 1% of the total hectares within the target districts.	2.1. Hectares of agricultural land
		7,500	1% of natural and production forests	2.2. Hectares of forests

3. Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation	13	1,000	5% of freshwater bodies through protection and restoration, erosion control and DRM measures.	2.3. Hectares of freshwater area
		20	TBD during PPG	2.5. Number of new adaptation technologies supported
		4	District adaptation investment plans only (others at village level TBD during PPG)	3.1. Number of policies/plans developed and strengthened that will mainstream climate resilience (regional, national, sub-national)
		1	one project level M&E framework with key performance indicators under Outcome 4	3.2. Number of systems and frameworks established for continuous monitoring, reporting and review of climate adaptation impacts
		4	District level (others at village level TBD during PPG)	3.3. Number of institutional partnerships or coordination mechanisms established or strengthened
		4	District Governments (others at village level TBD during PPG)	3.4. Number of institutions with increased capacity to plan, implement, monitor, and report for climate adaptation
		TBD	TBD during PPG	3.5. Number of local community organizations benefitting from and/or engaged in institution strengthening, partnerships, or financing
4. Number of people trained or with awareness raised (sex disaggregated)	162 (50% women)	150 (50% women)	25 per target district (specific village selection TBD during PPG)	4.1. Number of local government officials trained or made aware of climate change impacts and appropriate adaptation responses (sex disaggregated)
		TBD	TBD during PPG	4.2. Local community organizations trained or made aware of climate change impacts and appropriate adaptation responses (sex disaggregated)
		12	2 hydro-met and DRM officers per target district.	4.4. Hydro-met and disaster risk management officers trained or made aware of climate change impacts and appropriate adaptation responses (sex disaggregated)

META-INFORMATION FOR THE LDCF AND SCCF (2022-2026)

Meta-Information Category	Response	Note
LDCF	Yes	
LDCF Challenge window	No	
This project involves at least one Small Island Developing State (SIDS)	No	
This project involves at least one fragile and conflict affected state	No	
This project will provide direct adaptation benefits to the private sector	No	

Meta-Information Category	Response	Note
This project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs)	Yes	
This project will collaborate with activities being supported by other adaptation funds.	NO	
This project has an urban focus	No	
This project will directly engage local communities in project design and implementation	Yes	
This project will support South-South knowledge exchange	Yes	The project could potentially facilitate knowledge exchange between other countries engaged in the sustainable rice landscapes initiative. This will be explored further during the PPG.
This project covers the following sector(s) (the total should be 100%):		
Agriculture	30	%
Nature-based solutions	30	%
Climate information services	5	%
Coastal zone management	0	%
Water resources management	30	%
Disaster risk management	5	%
Other infrastructure	0	%
Tourism	0	%
Health	0	%
Others	0	%
Total	100	%
This project targets the following climate change exacerbated/introduced challenges		
Sea level rise	no	
Change in mean temperature	Yes	
Increased climate variability	Yes	
Natural hazards	Yes	
Land degradation	Yes	
Coastal and/or coral reef degradation	No	
Ground water quality/quantity	Yes	Only indirectly through catchment protection

NGI (only): Justification of Financial Structure ¹¹

N/A

Risks to Achieving Outcomes

Summarize risks that might affect the achievement of desired outcomes and the mitigation measures which are planned or already undertaken to address these. The risk rating should reflect the *residual* risk to achieving outcomes after considering the implementation of mitigation measures. The rating scale is: High, Substantial, Moderate, Low. See the *GEF Risk Appetite* document ([GEF/C.66/13](#)) for more information and its Annex B for a description of each risk category. Note that the rating for the “Environment and Social” category should be the same as the risk rating for Safeguards.

¹¹ Note: Make this into a pop-up which appears only if “NGI” was selected in the “General project Information”

RISK CATEGORIES	RATINGS	ASSESSMENT AND MITIGATION MEASURES
CONTEXT		
Climate	Moderate	<p>Extreme weather events could hamper project implementation, but also provide further justification and impetus for the planned interventions.</p> <p>All project activities are designed for climate resilience, so that results are highly unlikely to be undone by climate-related extreme weather events.</p>
Environment and Social	Moderate	<p>An Environmental and Social Management Framework (ESMF), either a section on IPs in the ESMF or possibly a separate Indigenous Peoples Process Framework (IPPF) depending on the full screening, a Gender Action Plan (GAP), and a protocol and plan for the work and activities with children will be developed during project preparation to ensure any risks to the environment and local communities are managed appropriately. The project will have a Grievance Redress Mechanism set up.</p>
Political and Governance	Low	<p>Comprehensive and detailed consultations among national and sub-national stakeholders will be undertaken throughout project preparation and implementation.</p> <p>Government priorities could change – this risk is mitigated by the involvement of all stakeholders in project planning from the beginning and ongoing planned engagement and consultations throughout the project.</p>
INNOVATION		
Institutional and Policy	Low	<p>The project is aligned with existing relevant strategies and policies in the country.</p>
Technological	Low	<p>The project will manage the risk through an upfront effort to develop an evidence-based approach for managing climate risks, local planning and mainstreaming of climate resilience in policies in Sayaboury province. Furthermore, the project delivery relies on extensive engagement with the local community to ensure the design of the IWRM and NBS solutions are fit for purpose, viable and tailored to the availability of local communities.</p>
Financial and Business Model	Low	<p>The project adopts a standard approach to adaptation without any innovative financial and business models. No risks foreseen on this parameter.</p>
EXECUTION		
Capacity for Implementation	Moderate	<p>Comprehensive and detailed consultations among relevant institutions will be undertaken throughout the project's development and implementation. The project will identify the capacity gaps and actively strengthen the capacity of stakeholders involved to lead/participate in relevant activities and continue these beyond the project's duration.</p> <p>With respect to absorptive capacity, partners with the ability</p>

		to deliver parts of the project, with government, will be sought out during PPG phase.
Fiduciary	Low	Government has requested WWF-Laos to support project administration, including financial management and procurement, for more efficient delivery. If this is approved, the residual risk is low.
Stakeholder	Low	Extensive stakeholder engagement will continue to be undertaken during project preparation and implementation, with special focus on inclusive engagement processes for ethnic groups, women, youth and other vulnerable groups. This will be informed by the development of detailed stakeholder engagement plans.
Other	< Select rating >	< Insert text >
Overall Risk Rating	Moderate	

Safeguards Rating (PIF level):

Category B

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements. Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

(max. 500 words, approximately 1 page)

56. The project is aligned to two CCA Objectives, CCA-2, Mainstream climate adaptation and resilience for systemic impact, and CCA-3, Foster enabling conditions for effective and integrated climate change adaptation, as it will build an enabling environment for increased climate adaptation, including provincial and district government capacity, and will mainstream CCA into IWRM policies, plans and process for 4 river basins in a highly vulnerable context, and will build increased community capacities and experience for climate adaptive agriculture.
57. The project addresses all four pillars highlighted in the GEF8 LDCF programming directions in an integrated manner for the lowlands of Lao PDR:
 - **Agriculture, Food Security, (and indirectly health):** The project will support investment in climate-smart and nature-based agrifood production and value chains targeting enhanced agricultural livelihoods and food security.
 - **Water:** Project measures will include support community-led and district technical agency-guided efforts to adopt climate resilient agro-ecological practices that reduce encroachment, environmental and water use impacts on freshwater ecosystems and lower floodplains;
 - **Nature-Based Solutions:** The project will promote nature-based infrastructure to mitigate floods and droughts, improve fish migration and enhance ecosystem health across the entire sub-basin;

- **Early Warning and Climate Information Systems:** The project will promote use of agro-hydrometeorological forecasting and information and related institutional capacity building.
58. In terms of scale, the primary approach of the project will be to work at landscape based approaches; whilst integrating spatial planning, ecosystems and nature-based solutions as far as possible, and focusing on rural communities as a priority.
59. The project will support policy coherence and mainstreaming of climate adaptation at wider landscape/ watershed/ scale, as well as in local community and local government planning and actions. Component 1 primarily focuses on adaptation planning and investments at a systems scale through mainstreaming, cutting across different sectors, local districts, and governance levels, requiring enhanced vertical (across governance) and horizontal (across sectors) institutional integration. The project will have strong focus on knowledge management and sharing and ensuring effective arrangements for long-term collaboration among different stakeholders to ensure “whole-of-society” and “whole-of-government” approach, and may consider including private sector engagement during subsequent due diligence during the PPG based on further consultations and project planning.

Alignment of the project with national plans, policies, and strategies

60. In terms of national priorities, the project will, the project addresses the majority of the barriers to climate change adaptation in Lao PDR identified in the country’s latest NDC. It is aligned with priorities and contributes to activities identified in Lao PDR’s NBSAP, Natural Resources and Environment Five Year Plan 2021-2025, and National Strategy on Climate Change. More specifically the project will contribute to the following national plans, policies, and strategies.
61. **Nationally Determined Contribution (NDC):** Long-term agricultural adaptation targets include the promotion of : i) climate resilience in farming systems and agriculture infrastructure and ii) appropriate technologies for climate change adaptation, including nature-based and grey infrastructure solutions. Water adaptation targets include i) managing surface water, groundwater, and wetlands for climate change resilience; ii) increasing water resource infrastructure resilience to climate change, including through nature-based solutions; and iii) strengthening early warning systems¹².
62. **National Strategy on Climate Change:** The project is aligned with the strategic actions related to climate adaptation, particularly those referring to data management and reporting, capacity strengthening, enhancing access to information, and developing adaptive infrastructure, production systems and value chains. It will also support capacity development in government for climate monitoring, horizontal and vertical coordination, and the development and implementation of adaptation plans. It will contribute to the following sector-specific projects actions:
- **Agriculture:** Conduct assessments of climate impacts on agriculture; enhance knowledge transfer, advisory services and technology transfer to farmers; enhance capacity to manage water supply systems; enhance capacity for the implementation of adaptation plans.
 - **Water:** Enhance climate change adaptation and resilience, including in watersheds and wetlands; implement measures for adaptation, resilience, water resources use, and mitigation of conflicts and impacts, especially in the event of drought and floods.
 - **Rural development and settlement:** Conduct assessments of climate impacts on settlements and rural development; develop and implement climate adaptation plans; identify and relocate communities that settle in climate and disaster risky areas¹³.

¹² <https://unfccc.int/sites/default/files/NDC/2022-06/NDC%202020%20of%20Lao%20PDR%20%28English%29%2C%2009%20April%202021%20%281%29.pdf>

¹³ https://www.undp.org/sites/g/files/zskgke326/files/migration/la/UNDP_LA_National_Strategy-on-Climate-Change_Lao-PDR_2010.pdf

63. The 2009 National Adaptation Programme of Action (NAPA), identifies supplementary activities and recommends that the Government of Laos: (i) strengthen the capacity of the National Disaster Management Committee to deal with likely future adverse impacts; (ii) strengthen the Climate Change Office; (iii) install an early-warning system for flood-prone areas and improve existing flood protection systems; (iv) initiate in-depth studies of the impacts of climate change; (v) formulate a strategy on climate change; and (vi) increase protection measures of watersheds and the reduction of erosion in areas vulnerable to floods and droughts. The proposed project is aligned with the adaptation priorities set out in the NAPA, particularly improving flood and drought resilience. This will be done through improving early-warning systems (Output 1.1.1), on-the-ground protection measures (Output 2.1.1) and enhancing climate-resilient livelihoods (Output 3.1.1). The project will also contribute to building national and province capacity for adaptation planning and building the climate resilience of water resources.
64. **National Strategy on Disaster Risk Reduction 2021-2030:** The project will contribute to the priority actions of this strategy, primarily (i) understanding risks, vulnerability and risk assessment; (ii) strengthening risk governance; (iii) reducing vulnerabilities and building resilience and (iv) strengthening disaster preparedness for more effective response and recovery to build back better (BBB)¹⁴.
65. **National Biodiversity Strategy and Action Plan (NBSAP):** Lao PDR’s National Biodiversity Strategy and Action Plan (NBSAP) 2016-2025 identifies the importance of other freshwater ecosystems to biodiversity, as well as rivers, waterways and marshlands. Among the planned activities, the NBSAP lists the management water resources as a priority in comprehensive alignment with principles on integrated water resource management, particularly at sub watershed levels, and their governance through River Basin Organizations (RBOs)¹⁵. Section 9 of the NBSAP focuses on cross-cutting themes, including the ability of natural and semi-natural system to respond to climate change or natural disaster, as well as the adaptation and disaster control services that a given natural or semi-natural system may provide. Furthermore, Section 9.2 identifies conservation and restoration of “natural infrastructure” as an important climate change adaptation and hazard management solution.

D. POLICY REQUIREMENTS

Gender Equality and Women’s Empowerment***:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes No (If –and only if– NO is selected, a pop-up field should open for the Agency to provide an explanation)

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes No (If –and only if– NO is selected, a pop-up field should open for the Agency to provide an explanation)

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities? Yes No

¹⁴ <https://www.preventionweb.net/media/76795/download?startDownload=true>

¹⁵ <https://www.cbd.int/doc/world/la/la-nbsap-v2-en.pdf>

Civil Society Organizations? Yes No
 Private Sector? Yes No

Provide a brief summary and list of names and dates of consultations

TABLE 2: LIST OF CONSULTATIONS UNDERTAKEN DURING THE PIF

Date	Name of event	Discussion on new PIF	Total participants	Key institutions
September 2023	Conceptual planning programming workshop chaired by MONRE	A session on GEF8 and LDCF programming discussed, and the preliminary concept of this project was presented.	15 (TBC)	MONRE, MAF, Ministry of Public Works and Transport, WWF-US and WWF-LAOS
8-13 January 2024	Community consultations and field scoping mission	Field mission led by the Department of Water Resources and WWF-Laos took place in Sayaboury province. The purpose was to (i) conduct a stakeholder consultation meeting to build ownership around the LDCF concept; and (ii) gather climate baseline data for the preparation of the GEF-LDCF PIF.	61 participants (22 women)	MONRE (DWR), WWF-LAOS, PONRE, DONRE
February to March 2024	Three meetings with MONRE, WWF-US, WWF-LAOS	Presentation and consultations on the concept note of this project as an input into the PIF formulation.	8-10 persons each meeting	MONRE, WWF-US, WWF-LAOS

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes No

And if so, has its role been described and justified in the section B project description?

Yes No

Environmental and Social Safeguards

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes No (If –and only if– NO is selected, a pop-up field should open for the Agency to provide an explanation)

66. An initial environmental and social impact assessment has been carried out to screen the project activities and assess possible social and environmental impacts. The proposed project has been indicatively rated as Category B (moderate). An Environmental and Social Management Framework (ESMF) will be prepared outlining the environmental and social safeguard principles, standards and requirements. Project partners, WWF-US as the GEF Agency, and DWR and WWF-Laos as executing partners, will jointly undertake environmental and social safeguard due diligence on the project and various project components following the Government and WWF's Social and Environmental Standards. It will also comply with the relevant policy and legal frameworks of the GEF to ensure full mitigation of any environmental or social impacts of small civil works. The pre-screening has identified potential negative effects on indigenous peoples in isolation, but these risks should be further assessed in the next phase of the project development when the details of the project are clear (including activities, communities involved, and area of work) to determine the necessary actions to mitigate the identified risks. Also, the project may include engagement activities with school children between the ages of 11 to 18 and should therefore have a protocol and/or plan for these activities included in the ESMF to mitigate any potential risks of violation of children's rights. Finally, the project will have a grievance redress mechanism following standard GEF guidelines.

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

67. Knowledge Management is a key pillar of the project and part of the project's intervention strategy as defined by the Theory of Change (Ref. Figure 4). The project will generate knowledge products to support implementation processes and improvement of its performance. These will also be disseminated to inform policy making and possibly opportunities to support South-South and Triangular Cooperation (to be explored further during the PPG stage). Knowledge products will be generated through three components and will produce training modules, develop strategy and plans, guidelines and protocols for different branches of the public sector on the approaches to climate change adaptation promoted through the project. Learning products from the project will be documented and disseminated through different media and digital channels, and target a range of stakeholders and project beneficiaries. Learning from the project will also be used to inform regional and global work on adaptation and resilience through engagement with other GEF and related adaptation projects and programmes such as the Sustainable Rice Landscapes Initiative (SRLI). The knowledge materials to be generated under the project and mechanisms for dissemination therein, will be clearly defined and articulated during PPG phase.

ANNEX A: FINANCING TABLES

GEF Financing Table

Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/Regional/Global	Focal Area	Programming of Funds	(in \$)			
					Grant/Non-Grant (For NGI Projects Only)	GEF Project Grant	Agency Fee	Total GEF Financing
WWF-US	LDCF	Laos	Climate Change	LDCF Country Allocation		6,772,477	609,523	7,382,000
Total GEF Resources						6,772,477	609,523	7,382,000

Project Preparation Grant (PPG)

Is Project Preparation Grant requested? Yes No

If yes¹⁶: fill in PPG table (incl. PPG fee)

GEF Agency	Trust Fund	Country/Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG	Agency Fee	Total PPG Funding
WWF-US	LDCF	Laos	Climate change	LDCF Country Allocation	200,000	18,000	218,000
Total PPG Amount							

Sources of Funds for Country STAR Allocation

GFEP Agency	Trust Fund	Country/Regional/Global	Focal Area	Source of Funds	Total
(select)	GEF TF		(select)	(select as applicable)	
Total GEF Resources					

Indicative Focal Area Elements

Programming Directions	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
(select) (select)CCA-1.1	LDCF	3,047,615	726,586
CCA-1.2	LDCF	1,354,495	322,927
CCA-1.3	LDCF	2,031,743	484,391
CCA-1.4	LDCF	338,624	80,732
Total Project Cost		6,772,477	1,614,636

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount (\$)
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¹⁶ Note: Make this into a "pop-up" which appears only if PPG was selected, and if amount requested is above limits, they have to justify it

Recipient Country Government	Ministry of Natural Resources and Environment, Department of Planning and Finance	In-kind	Recurrent	331,384
Other	WWF-Laos	In-kind	Recurrent	470,555
GEF Agency	WWF-US	In-Kind	Recurrent	812,697
Total Co-financing				1,614,636

Please provide indicative information regarding the expected amounts, sources and types of Co-Financing, and the subset of such Co-Financing that meets the definition of Investment Mobilized.

ANNEX B: ENDORSEMENTS

Name of GEF Agency Coordinator	GEF Agency Coordinator Contact Information
Renae Stenhouse	Renae.stenhouse@wwfus.org
Name of Agency Project Coordinator	Agency Project Coordinator Contact Information
Renae Stenhouse	Renae.stenhouse@wwfus.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name of GEF OFP	Position	Ministry	Date (MM/dd/yyyy)
Phakkavanh Phissamay	Director General	MONRE	02/16/2024
<i><<additional fields to be added for regional projects or global projects with on the ground investments>></i>			

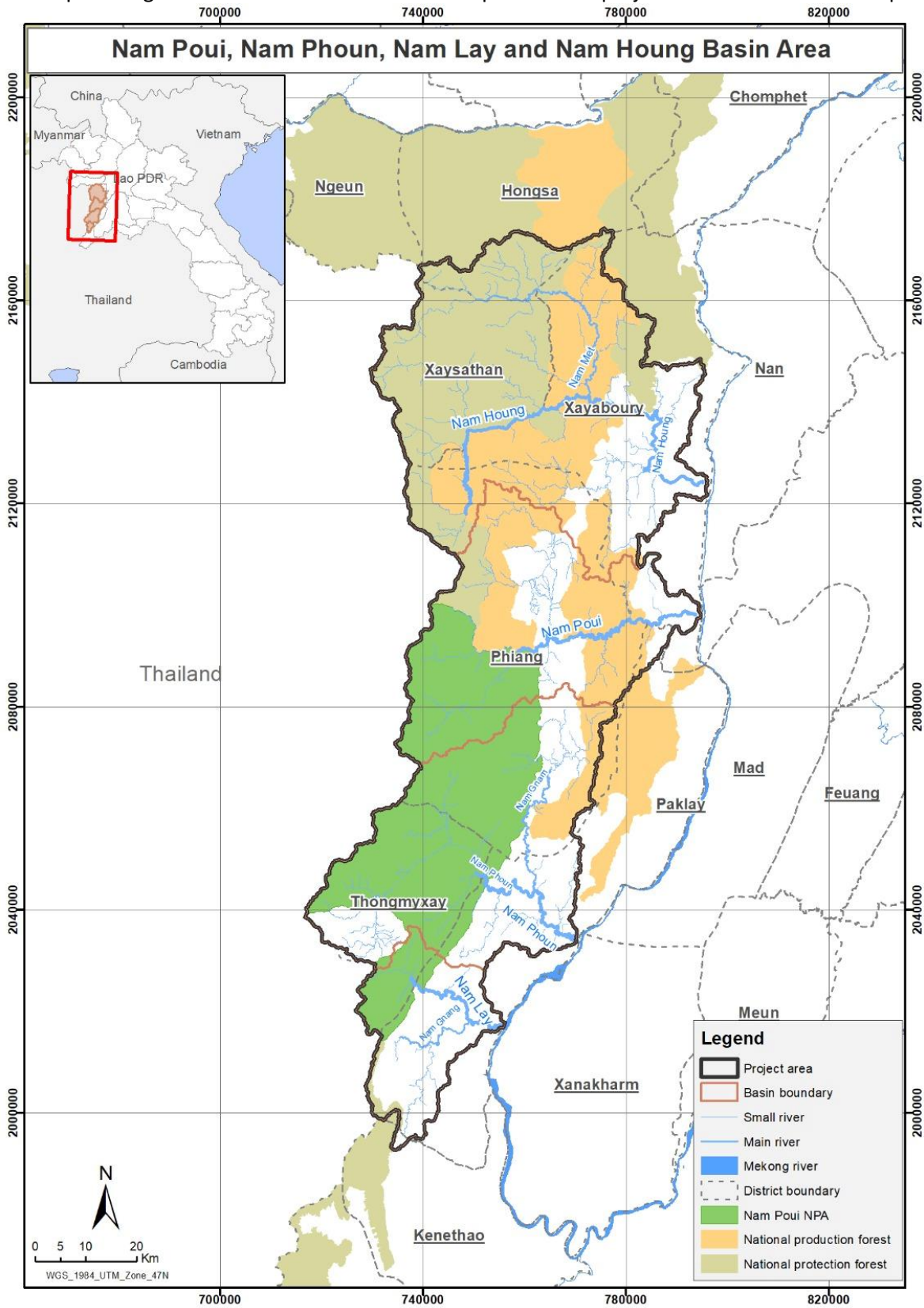
NGIs do not require a Letter of Endorsement if beneficiaries are: i) exclusively private sector actors, or ii) public sector entities in more than one country. However, for NGI projects please confirm that the agency has informed the OFP of the project to be submitted for Council Approval YES

Compilation of Letters of Endorsement

Please attach the Operational Focal Point endorsement letter(s) in this Annex. For SGP, use the SGP OFP endorsement letter format. For regional and global projects (as appropriate): please include a compilation of the signed LOEs in one PDF file in this annex.

ANNEX C: PROJECT LOCATION

Please provide geo-referenced information and map where the project interventions will take place



ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Desertification
(multiple selection) Climate Change Mitigation 2	(multiple selection) Climate Change Adaptation 1	(multiple selection)	(multiple selection)

<< Rio Markers may be expanded in GEF 8 beyond markers for CCM and CCA >>

ANNEX F: TAXONOMY WORKSHEET

<<Table below for now taken from GEF-7 PIF >>

GEF 8 TAXONOMY

Annex F

Please identify the taxonomic information required in Part I, by ticking the most relevant keywords/ topics/themes that best describe the project.

Level 1	Level 2	Level 3	Level 4
Focal Areas/Theme			
	Climate Change		
		Climate Change Adaptation	
			Community-based Adaptation
			Livelihoods
			Disaster Risk Management
			Least Developed Countries
			National Adaptation Plan
			National Adaptation Programme of Action
			Ecosystem-based Adaptation
			Climate Resilience
			Mainstreaming Adaptation
		Climate Change Mitigation	
			Agriculture, Forestry, and Other Land
		Sustainable Land Management	
			Ecosystem Approach
			Drought Mitigation
			Improved Soil and Water Management Techniques
			Sustainable Agriculture
Influencing models			
	Transform policy and regulatory environments		
	Deploy innovative financial instruments		
Stakeholders			
	Private Sector		
		SMEs	
		Financial intermediaries and market facilitators	
	Type of Engagement		
		Partnership	
		Consultation	
	Communications		
		Awareness Raising	
		Education	
	Indigenous Peoples		

	Beneficiaries		
	Local Communities		
Gender Equality			
	Gender Mainstreaming		
		Women groups	
		Sex-disaggregated indicators	
		Gender-sensitive indicators	
	Gender results areas		
		Capacity development	
		Awareness raising	
		Access to benefits and services	
Capacity, Knowledge and Research			
	Enabling Activities		
	Learning		
		Adaptive Management	
		Indicators to Measure Change	
		Theory of Change	
	Knowledge Generation		
		Training	
	Capacity Development		

ANNEX G: NGI RELEVANT ANNEXES

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1. Annex X (currently existing in NGI projects): Template for Indicative Financial Termsheet
2. Annex X (currently existing in NGI projects): Reflow table
3. Annex X (currently existing in NGI projects): GEF Agency Eligibility to Administer Concessional Finance
4. Annex X. Management Capacity of Executing Agency and Governance Structure

LIST OF KEY REQUIREMENTS LEADING TO CEO ENDORSEMENT SUBMISSION

During project design/by endorsement:¹⁸

- **Stakeholders:** provide list of stakeholders, roles in the project and means of engagement; specifically address civil society organizations, vulnerable groups and Indigenous Peoples and Local Communities (IPLCs) (as applicable) and their roles in the project
- **Gender Equality and Women’s Empowerment:** carry out gender analysis and prepare gender action plan; include relevant gender aspects in Theory of change and gender-sensitive indicators in results framework (i.e. including the process to collect sex-disaggregated data and information on gender); include gender equality considerations/gender-responsive measures and actions in relevant activities in project components.
- **Environmental and Social Safeguards (ESS) related documents:** depending on types of ESS risks to be prepared (such as Environmental and Social Impact Assessment, Environmental and Social Management

¹⁷ Annex H: Only if NGI was selected on top

¹⁸ Note: This **a list to remind agencies of key requirements** to address during project **preparation** and include in the endorsement request. No text is, therefore, to be entered here.

Framework/Plan, Indigenous Peoples Plan and Grievance Mechanism) and made public in country/location in relevant language/s (provide publication date and locations)

- **Private sector involvement mechanisms** (for non NGI projects: anticipated roles and type of PS; this will already be central to the project document for NGI projects)
- **Knowledge Management Plan** - develop “Knowledge Management Approach” for the project and how it will contribute to the project’s overall impact, including plans to learn from relevant previous and ongoing projects; proposed tools and methods for knowledge exchange and learning; knowledge outputs; strategic communication plan; and budget and timeline.
- **Results.** Inclusion of final Core Indicator targets, along with a comprehensive results framework with indicator name, units of measurement, and baseline and target data.
- **Monitoring and Evaluation.** Include a budget, along with an explanation of monitoring arrangements and deliverables.
- **Institutional arrangements** (incl. reporting arrangements and flow of funds) and cross-sector integration approaches, as relevant
- **Sustainability:** Post-project financing sustainability plan
- **Co-finance:** Confirm amount and type of co-financing and the definition of investment mobilized
- **To be complemented by new GEF8 policies and requirements.**