GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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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	GEF Project ID
Lao PDR	11573
Country(ies)	Type of Project
Lao PDR	FSP
GEF Agency(ies):	GEF Agency ID
WWF-US	G0052
Executing Partner	Executing Partner Type
Department of Water Resources, MONRE WWF-Laos	Government CSO
GEF Focal Area (s)	Submission Date
Climate Change	3/20/2024
Project Sector (CCM Only)	
Climate Change Adaptation Sector	
Taxonomy	
Focal Areas, Climate Change, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, Climate Change Adaptation, National Adaptation Programme of Action, Least Developed Countries, Ecosystem-based Adaptation, Disaster risk management, Community-based adaptation, National Adaptation Plan, Mainstreaming adaptation, Climate resilience, Livelihoods, Land Degradation, Sustainable Land Management, Ecosystem Approach, Drought Mitigation, Sustainable Agriculture, Improved Soil and Water Management Techniques, Influencing models, Deploy innovative financial instruments, Transform policy and regulatory environments, Stakeholders, Local Communities, Private Sector, SMEs, Financial intermediaries and market facilitators, Type of Engagement, Consultation, Partnership, Communications, Education, Awareness Raising, Indigenous Peoples, Beneficiaries, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Sex-disaggregated indicators, Women groups, Gender results areas, Capacity Development, Access to benefits and services, Capacity, Knowledge and Research, Enabling Activities, Learning, Theory of change, Indicators to measure change, Adaptive management, Knowledge Generation, Training	
Type of Trust Fund	Project Duration (Months)
LDCF	72
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
6,772,477.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)
609,523.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing

7,382,000.00	1,614,636.00
PPG Amount: (e) 200,000.00	PPG Agency Fee(s): (f) 18,000.00
PPG total amount: (e+f) 218,000.00	Total GEF Resources: (a+b+c+d+e+f) 7,600,000.00
Project Tags CBIT: No NGI: No SGP: No Innovation: No	

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 the highly vulnerable Nam-Poui, Nam-Poun, Nam-Lay, and Nam-Houng basins in Lao PDR, chosen for their rural agriculture-dependent communities, susceptibility to floods, droughts and climate-induced seasonal disruptions, as well as limited resources and opportunities for climate risk management and adaptation.

2. Key informant interviews have confirmed impacts of changes in climate and extreme weather on local livelihoods. Communities in the proposed project area are already experiencing floods, droughts and seasonal onset changes, resulting in reduced crop yields, loss of income and property, decreased access to freshwater and an increased prevalence of pests. This challenge is further exacerbated by concomitant diminishing access to ecosystem services. Protecting agriculture from climate-induced hazards, expected to worsen under future climate projections, is thus vital for sustaining rural livelihoods, especially among smallholder farmers[1][1]. The objective of the proposed GEF-8 LDCF project therefore, is to enhance climate resilience of local communities in key watersheds in Sayaboury province through IWRM and community-driven livelihood support.

3. This will be achieved by (i) mainstreaming climate change adaptation into provincial integrated water resource management (IWRM) and provincial river basin management plans (RBMP), including relevant strategies, policies, and local planning frameworks; (ii) facilitating implementation of community-driven, co-designed and co-implemented IWRM, including nature-based solutions and small-scale grey infrastructure; (iii) catalyzing resilience through climate-smart agriculture and by diversifying livelihoods; and (iv) widely consolidating and disseminating lessons, experiences, and information from the project's implementation through communication and knowledge management. A robust 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

To enhance climate adaptation and resilience of upstream and downstream communities in Sayaboury province, through integrated water resource management (IWRM), nature-based solutions (NbS), small-scale grey infrastructure and local livelihood diversification.

Project Components

1. Mainstreaming climate change adaptation in IWRM

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing ($)	Co-financing ($)
1,000,000.00	200,000.00

Outcome:

1.1 Improved planning and capacities for CCA at the provincial/district/basin level

Output:

1.1.1 Scenario-based framework for CCA and DRM to strengthen local planning, policies, programs, and their financing.

1.1.2 TA, training, workshops and bottom-up community consultations to integrate CCA, NbS and small-scale solutions into IWRM/river basin management plans

1.1.3 Forum for community voice into planning

2. IWRM implementation

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing ($)	Co-financing ($)
2,000,000.00	200,000.00

Outcome:

2.1 Community-driven and local government interventions to reduce climate impacts

Output:

2.1.1 Local government and community-based NbS and small-scale grey solutions, to reduce the impact of floods and drought.

3. Community resilience

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing ($)	Co-financing ($)
2,777,479.00	200,000.00

Outcome:

3.1 Strengthened adaptation capacity of local communities to floods and drought

Output:

3.1.1 Climate resilience built into livelihoods, such as climate resilient agriculture and livestock practices, value chains and water access

3.1.2 Livelihood enhancement and diversification

3.1.3 Locally appropriate climate information, forecasts and early warning systems

4. Knowledge Management and Communications

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing ($)	Co-financing ($)
350,000.00	100,000.00

Outcome:

4.1 Increased knowledge and lessons (and dissemination) of climate change in IWRM

Output:

4.1.1 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.

M&E

Component Type	Trust Fund

Technical Assistance	LDCF
GEF Project Financing ($)	Co-financing ($)
322,499.00	101,939.00

Outcome:

Project implemented according to Results-Based Management principles

Output:

ME1 Project M&E system designed, operational and able to collect and curate lessons learned from project activities.

ME2 Project evaluations completed on time to support project delivery and knowledge sharing

ME3 Monitoring Reports submitted on time to the GEF Agency and GEFSEC

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.

ME5 Monitoring of Gender Action Plan and Environmental and Social Safeguards Plan(s)

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
1. Mainstreaming climate change adaptation in IWRM	1,000,000.00	200,000.00
2. IWRM implementation	2,000,000.00	200,000.00
3. Community resilience	2,777,479.00	200,000.00
4. Knowledge Management and Communications	350,000.00	100,000.00
M&E	322,499.00	101,939.00
Subtotal	**6,449,978.00**	**801,939.00**
Project Management Cost	322,499.00	812,697.00
Total Project Cost ($)	**6,772,477.00**	**1,614,636.00**

Please provide justification

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, upland area of Lao PDR, the Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng basins in Sayaboury Province; selected due to high vulnerability based on a combination of: 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 lowland areas of the basin, as well as both droughts and climate-induced disruption to annual seasonal variation; limited resources and infrastructure to effectively prepare for, respond to, and recover from climate risks; and currently uneven and limited adaptation capacity.

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 variations[1][2]. 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[2][3],[3][4]. This geography plays a crucial role in the province's climatic conditions. The climate of Sayaboury province is predominantly tropical, influenced by the monsoon season. The region experiences a clear division between the rainy and dry seasons. The rainy season, lasting from May to October, 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°C[4][5]. Situated along the Mekong River and its tributaries, 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 vegetables, and livestock farming, including cattle, pigs, and poultry. Sayaboury faces challenges such as limited infrastructure development and access to markets, which impact its overall growth potential.

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

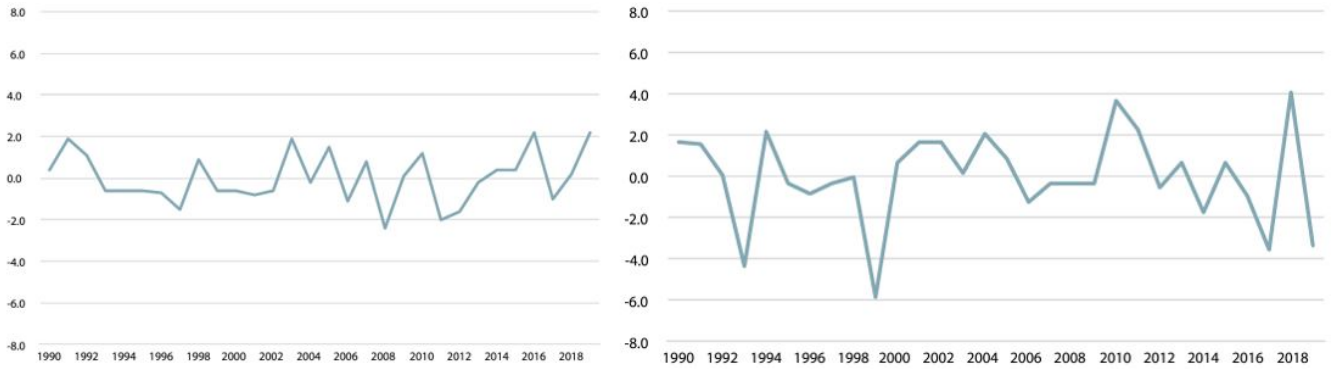
Climate Change Trends

5. Between 1901 and 2020, Lao PDR has experienced increased mean temperatures across the country, with the temperature increase accelerating to a rate of 0.1 to 0.3° per decade over the last 50 years. The trends on rainfall over the same period have not been as clear. Change in the onset of seasons has been observed, including monsoon onset dates delayed in 13 out of the 18 provinces in Laos. During 1970 to 2010, Lao experienced 33 globally recorded natural hazards, mostly floods and droughts, affecting approximately 9 million people[5][6]. Reported annual losses from disasters are mostly due to flooding. Floods induced by tropical storms are frequent and severe; 20 extreme floods occurred between 1960 and 2012, affecting 3.5 million people[6][7].

6. Sayaboury has been moderately impacted by climate change and climate related hazards with droughts affecting roughly 90,000 people in 4 of the 11 districts (Xienghone, Phiang, Parklai and Thongmyxay), followed by storms, distributed across the province. On average, precipitation levels have increased by 12 mm per year over the past 30 years. 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 below, heatwave risks have increased as well, with the number of days where temperatures exceeded 40 °C have increased since 2003. The number of days above 37 °C reached a high of 38 days in 2016. From an agroclimatology perspective, looking at the growing degree days (GDDs) over 10°C, reveals that heat accumulation has increased significantly over the 30 years (1990–2019) which has had a significant impact on the development cycle of crops, pests and diseases in the province.

7. 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. From 1966 to 2020, the country experienced over 45 floods, with significant economic losses. Floods occurred more frequently in the last decade, resulting in an accumulated economic loss of approximately eight billion USD.

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.*

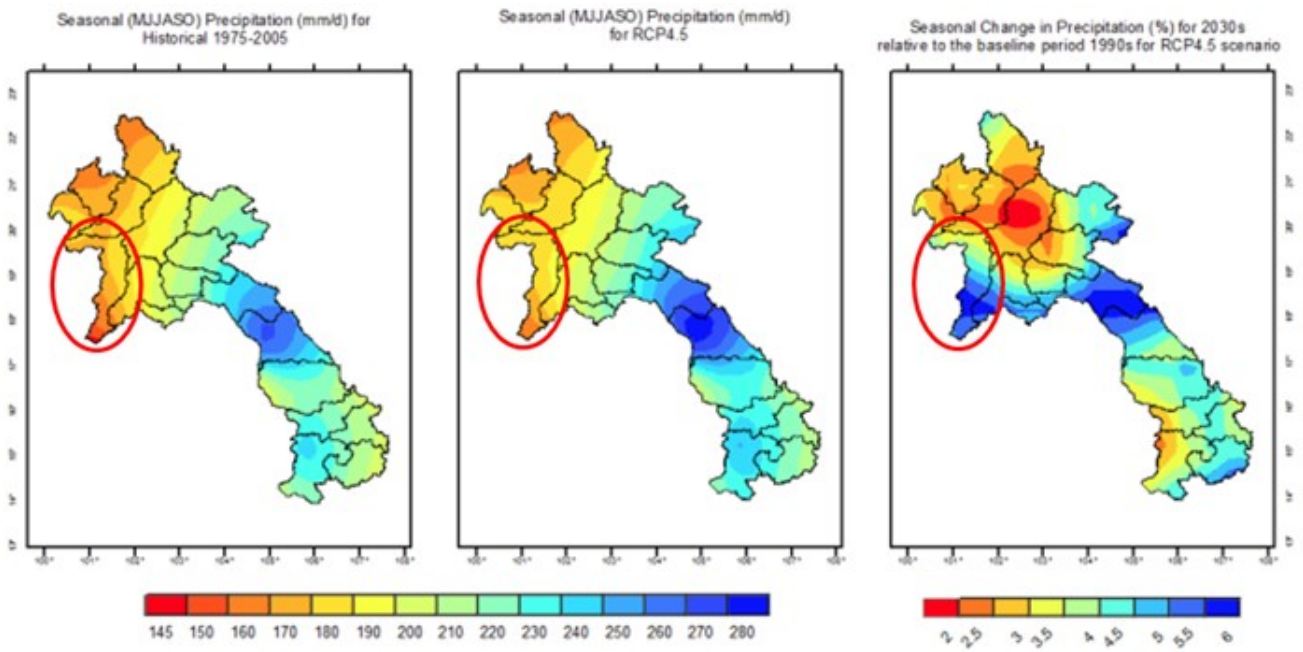
Source: *FAO, MONRE and MAF. 2022. Climatology and agroclimatology atlas of the Lao People's Democratic Republic. Vientiane.*

Climate change projections

8. ***Temperature***: The climate assessment conducted in 2016 for Laos 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 scenarios[7][8]. 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's forecasted that the number of days with ambient temperatures exceeding 35°C will increase, potentially leading to a rise in heat-related deaths without adequate adaptation measures.

9. ***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 2).

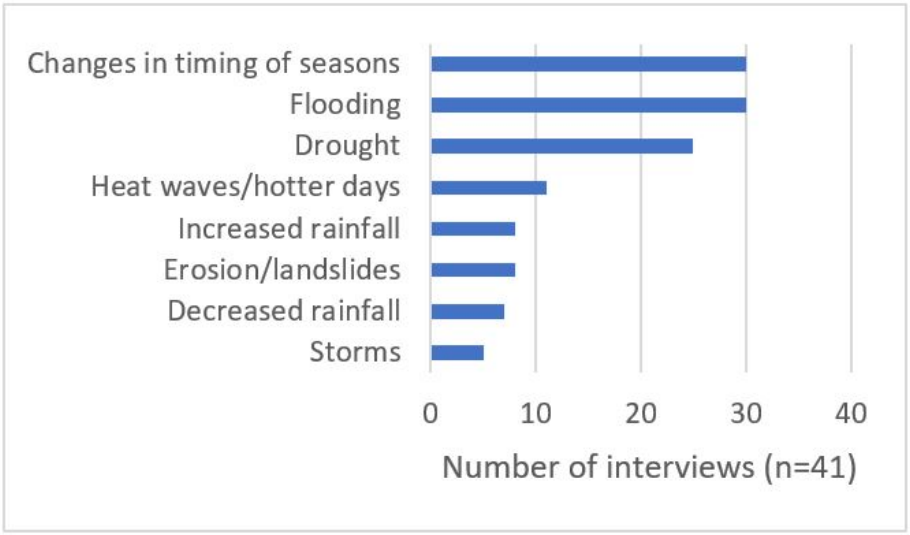
FIGURE 2: RAINFALL IN LAO PDR WITH SAYABOURY PROVINCE CIRCLED



10. Overall, Lao PDR is vulnerable to climate change and associated hazards. Vulnerability assessments using sensitivity and exposure indices reveal that Sayaboury faces risk of drought. Projections based on climate scenarios suggest a medium level of vulnerability on average. Lao PDR ranks relatively high in terms of disaster risk, particularly concerning exposure to flooding and tropical cyclones, indicating low adaptive capacity and high vulnerability to climate hazards in the Southeast Asia region.

Community observations and trend analysis

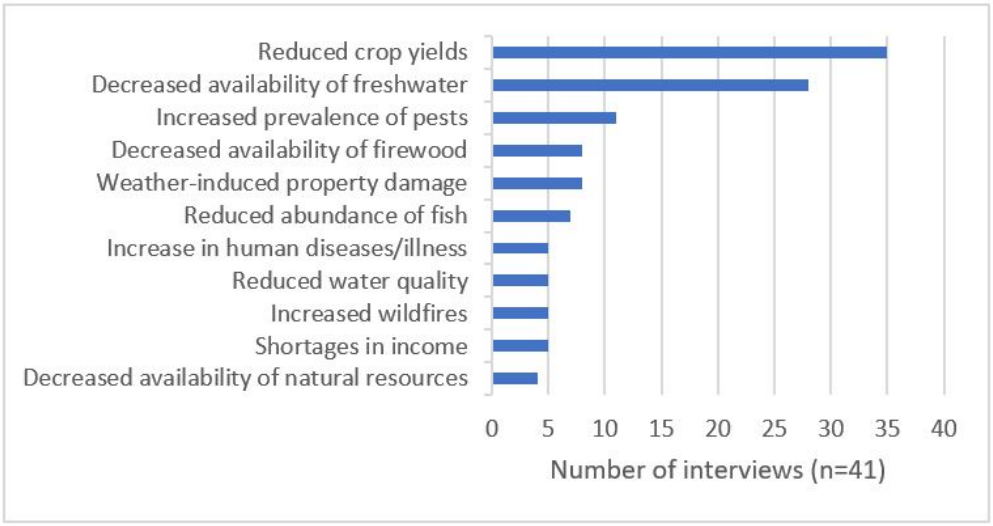
Reported changes in weather and climate



11. Community consultations undertaken in January 2024 for PIF development 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 (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



12. 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%). 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.

13. **In summary, 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 is so is drought. 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,** reductions in crop yields was the most notable, including destruction of crop fields due to floods, and leading to income shortages for some community members. Decreased availability of freshwater has

contributed to declining crop yields and increased prevalence of pests, while declines in other resources such as firewood, fish, and unspecified natural resources were also observed.

Key Baseline Initiatives and Investments

National IWRM Baseline

14. 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.

15. 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

16. 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 PoNRE, lead on-the-ground implementation with local stakeholders.

17. 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.

18. At the provincial and district-level, bottom-up river basin planning and management is critical, requiring a sub-mechanism that can 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

19. 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 systems[8][9].

20. 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][10]

21. 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 experience from, and build upon, this baseline of investment.

22. 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. 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 at Siphandone wetlands 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

23. 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 trickle 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. There are also insufficient sub-mechanisms in place at the district level to gather on-the-ground needs and information while ensuring these feed into the river basin management planning process. In addition, legislation and guidelines created to support climate change adaptation programs must be implemented and enforced to help ensure efforts are aligned across all levels of stakeholders. There is also a need to enhance cross-sector coordination at the provincial and district level to facilitate a coherent and comprehensive approach to the implementation of projects to achieve the desired outcomes. Without this 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. Furthermore, a lack of reliable information and data, including the absence of Climate Change Vulnerability Assessments at the local level limiting the local understanding of the current state of agricultural livelihoods and their climate change context under different scenarios, often leading to inadequate project and unsustainable development trajectories. Also relevant to this barrier is the dearth of high-quality data and institutional mechanisms to enable spatial and cross-sectoral planning.

Barrier 2: Insufficient knowledge and incentives for local communities to introduce integrated water resource management measures or re-orient land management practices in favour of climate adaptation and resilience. Local communities in the Sayaboury province may lack a complete understanding and appreciation of the effects of climate change on the ecosystems they depend upon, although they have experienced these impacts in their daily lives. 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 increased due to insufficient ownership and buy-in, 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 to keep pace with changes in population, increasing urbanization in lowlands and also more unpredictability related to climate change related impacts. 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. This lack of knowledge management weakens decision making on farming activities for climate change adaptation and disaster risk management and can potentially lead to inefficient planning and coordination, as well as suboptimal and unsustainable solutions and the inefficient use of scarce 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

24. Without action, northwestern Lao PDR and the target districts of Sayaboury province will continue to be subject to increasing and unmitigated impacts from climate change including changes to growing season conditions from disruption to seasonal variation and larger scale extreme climate events. 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.

25. In the absence of technical assistance, it is also likely that 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.

26. 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 livehoods and/or the target area altogether.

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)	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	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	1. UNDP	Support the implementation of projects to implement and improve climate and disaster resilience.
National Organizations	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	Provision of technical advice; provision of specialist service, project delivery.

	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) 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	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	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	1. GIZ 2. RECOFTC	Provision of technical advice; delivery of training and assets; social mobilization; monitoring of ecological conditions

	3. LWCA (Lao Wildlife Conservation Association) 4. CARE	
Research Institutes	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	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)

[1] 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.

[2] 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.

[3] https://www.oneearth.org/ecoregions/luang-prabang-montane-rainforests/

[4] Ibid.

[5] World Bank and ADB (2021), Climate Risk Country Profile: Lao PDR.

[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

[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

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 elements 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

1. A systematic and bottom-up approach to climate adaptation is required to build adaptation capacity to the key climate change impacts in the project area, 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.

2. 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 and droughts 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 3 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 landscape and watershed level, and; **if** the project can set up the conditions for the uptake of diversified climate-proof 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 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 faced by local populations will be kept at bay to enable sustainable economic benefits and the lasting well-being of communities in the project area.

3. Against this backdrop, the LDCF project will build climate adaptation and climate resilience capabilities of vulnerable communities in the "at risk" 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 green and small-scale grey 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.

4. 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.

5. 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 - including NbS and grey protective infrastructure solutions - 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.

6. 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 is 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:** Local government willing to re-assess and strengthen production-oriented policies in favour of climate risk reduction ones;
- **Assumption No. 3:** Key partners commit to a whole of government approach to mainstream climate adaptation into IWRM and RBMP;
- **Assumption No. 4:** Willingness to prioritize collective interest over short-term interests, priorities and benefits;
- **Assumption No. 5:** Willingness to recognize and internalize future risks and the consequences of inaction.

Component 2:

- **Assumption No. 6:** Proliferation of, in-depth understanding and acceptance of the risks of climate change, as well as the benefits of NbS among stakeholders, beneficiaries and value-chain actors;
- **Assumption No. 7:** Compelling business case for investment in nature-based solutions and small-scale grey infrastructure as cost effective alternatives to prevailing landscape and watershed investment practices;
- **Assumption No. 8:** Communities and farmers have models of upstream and downstream measures and how to apply nature-based approaches and small-scale grey infrastructure.

Component 3:

- **Assumption No. 9:** Uptake and adoption of alternative livelihood strategies to adapt to climate change risks.

Component 4:

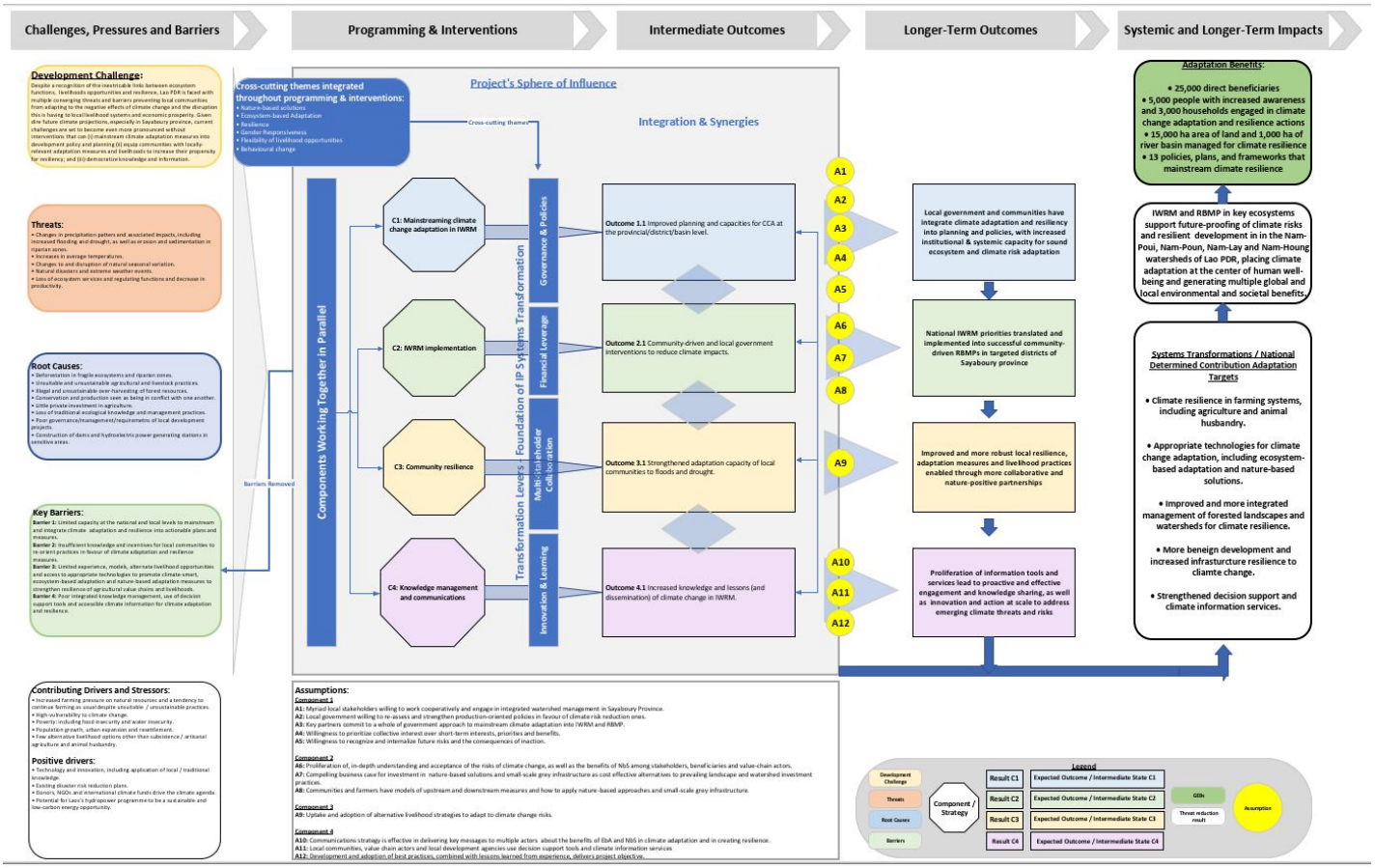
- **Assumption 10:** Communications strategy is effective in delivering key messages to multiple actors about the benefits and models of climate adaptation and in creating resilience;
- **Assumption 11:** Local communities, value chain actors and local development agencies use climate information, forecasts and early warning systems;
- **Assumption 12:** Development and adoption of best practices, combined with lessons learned from experience, delivers project objective.

7. The project outcomes are ambitious, as they aim to address changes at three levels simultaneously. Nonetheless, the targeted changes at 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.

8. 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 3: THEORY OF CHANGE



Component 1: Mainstreaming climate change adaptation in IWRM.

9. 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.

10. 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. 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.

11. The project will provide 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, NbS and small-scale grey infrastructure 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 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.

<u>Component 2:</u> IWRM implementation.

12. This component focuses on field-level demonstration and implementation of bottom-up and community-driven IWRM adaptation solutions to droughts and floods at upstream and downstream landscapes, 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 across the six priority districts.

13. The outcome under Component 2 will build capacity for and demonstrate community identified and delivered upstream and downstream (Output 2.1.1) nature-based and small-scale grey protective infrastructure solutions in the Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng watersheds to reduce flood and drought impacts to local communities. During the PPG, the project will conduct research and catalogue locally appropriate NbS, technologies and other IWRM adaptation measures, including those incorporated into district-level RBMPs. Innovations will be applied to adjust the standard IWRM approach to ensure nature-based solutions are fully incorporated and allow for flood water retention, aquifer recharge and shallow water storage. Where needed and contingent on the outcomes of community consultations, the project may support new small-scale and nature-based infrastructure 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, such as 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 protective infrastructure options analysis conducted under Component 1. It is anticipated that 'grey' protective infrastructure will mimic the lost ecosystem services for flood management where forest ecosystems are irreparably degraded, non-existent or where NbS is inappropriate given landcover, human settlement or agricultural needs. Additionally, infrastructure to reduce drought risk will build the adaptive capacity of communities to address water insecurity and quality issues related to disruption to the seasons or late onset wet seasons, which are projected to occur more frequently under future climate scenarios. These interventions will be supported by hands-on workshops and training to maintain and replicate upstream and downstream investments.

14. 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, 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.

<u>Component 3:</u> Community resilience.

15. This component will focus on testing out climate-resilience strategies and livelihood diversification across the target project area where agriculturally-dependent livelihoods are at risk - again 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.

16. Under Component 3, activities to improve adaptation capacity will include ensuring resilience is built into livelihoods, by promoting a shift towards modifying current agriculture-dependent livelihoods and promoting context appropriate alternatives, 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.

17. 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. 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.

18. 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.

<u>Component 4:</u> Knowledge management and communications.

19. 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). 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

20. 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

21. 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 and belonging to 3,000 households across the six target districts (female 12,500 male 12,500). The project will also improve climate resilient management on 15,000 hectares of agricultural land, including 7,500 hectares of natural and production forests and at 1,000 hectares of river basin. The project will drive additional delivery of through 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

22. 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, nature-based approaches and grey infrastructure, 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.

23. 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.

24. 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

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

1. 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).

2. 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:

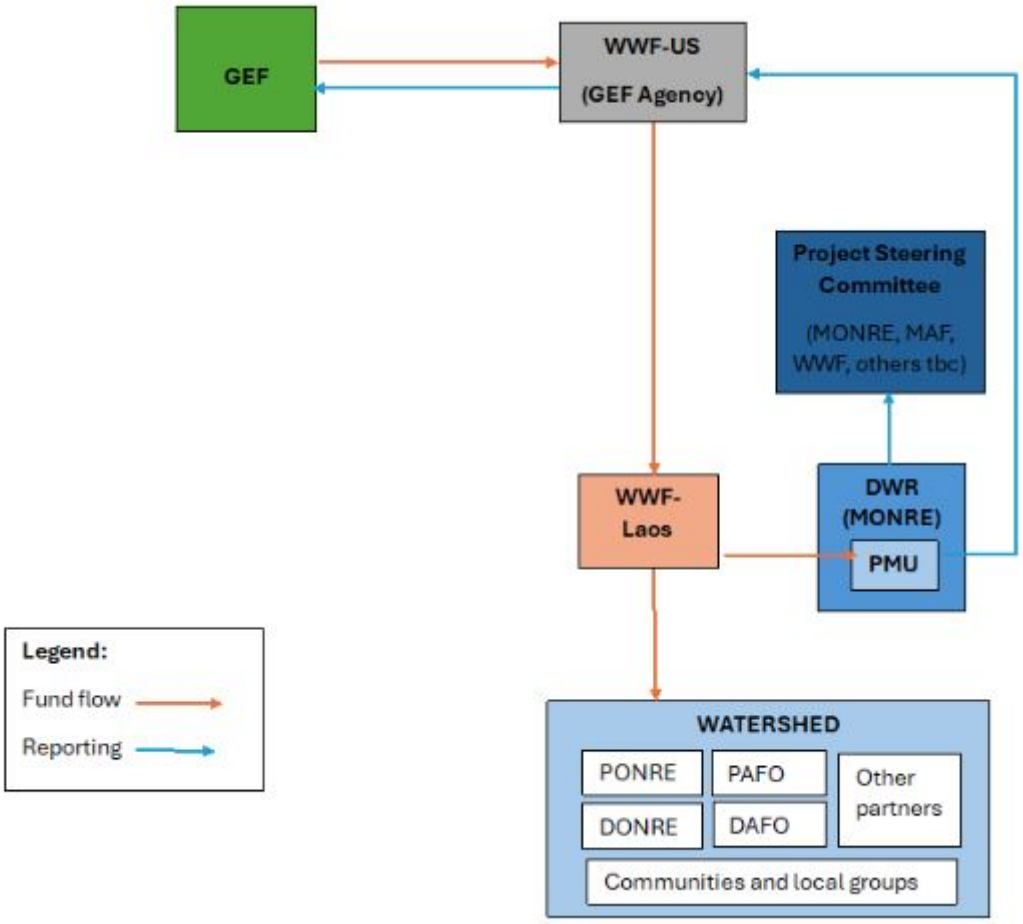
- Financial management and preparation of financial reports for the project
- Sub-grant assessments, awards and management
- Procurement (based on plans developed with the PMU)
- PMU Staff recruitment (recruited by WWF-Laos on behalf of government but hosted at DWR offices)
- Technical assistance to support government and sub-grantee delivery of the project.

3. 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.

4. 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.



Core Indicators

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

META INFORMATION – LDCF

LDCF **true**	SCCF-B (Window B) on technology transfer **false**	SCCF-A (Window-A) on climate Change adaptation **false**

Is this project LDCF SCCF challenge program?

false

This Project involves at least one small island developing State(SIDS).

false

This Project involves at least one fragile and conflict affected state.

false

This Project will provide direct adaptation benefits to the private sector.

false

This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs).

true

This project will collaborate with activities begin supported by other adaptation funds. If yes, please select below

Green Climate Fund **false**	Adaptation Fund **false**	Pilot Program for Climate Resilience (PPCR) **false**

This Project has an urban focus.

false

This project will directly engage local communities in project design and implementation

true

This project will support South-South knowledge exchange

true

This Project covers the following sector(s)[the total should be 100%]: *

Agriculture	30.00%
Nature-based management	30.00%
Climate information services	5.00%
Coastal zone management	0.00%
Water resources management	30.00%
Disaster risk management	5.00%
Other infrastructure	0.00%
Tourism	0.00%
Health	0.00%
Other (Please specify comments)	0.00%
Total	100.00%

This Project targets the following Climate change Exacerbated/introduced challenges:*

Sea level rise **false**	Change in mean temperature **true**	Increased climatic variability **true**	Natural hazards **true**
Land degradation **true**	Coastal and/or Coral reef degradation **false**	Groundwater quality/quantity **true**	

CORE INDICATORS – LDCF

	Total	Male	Female	% for Women
CORE INDICATOR 1 Total number of direct beneficiaries	25,000	12,500.00	12,500.00	50.00%
CORE INDICATOR 2 (a) Area of land managed for climate resilience (ha) (b) Coastal and marine area managed for climate resilience (ha)	15,000.00 0.00			
CORE INDICATOR 3 Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation	13.00			
CORE INDICATOR 4 Number of people trained or with awareness raised	162	81.00	81.00	50.00%
CORE INDICATOR 5 Number of private sector enterprises engaged in climate change adaptation and resilience action	0.00			

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	Extreme weather events could hamper project implementation, but also provide further justification and impetus for the planned interventions. All project activities are designed for climate resilience, so that results are highly unlikely to be undone by climate-related extreme weather events
Environmental and Social	Moderate	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.
Political and Governance	Low	Comprehensive and detailed consultations among national and sub-national stakeholders will be undertaken throughout project preparation and implementation. 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.
INNOVATION		

Institutional and Policy	Low	The project is aligned with existing relevant strategies and policies in the country.
Technological	Low	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.
Financial and Business Model	Low	The project adopts a standard approach to adaptation without any innovative financial and business models. No risks foreseen on this parameter.
EXECUTION		
Capacity	Moderate	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. With respect to absorptive capacity, partners with the ability 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		
Overall Risk Rating	Moderate	

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)

1. 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.

2. 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.

3. 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

4. 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.

5. 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 systems[1][11].

6. 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 areas[2][12].

7. 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 (Outputs 2.1.1 and 2.1.2) and enhancing climate-resilient livelihoods (Output 2.2.3). The project will also contribute to building national and province capacity for adaptation planning and building the climate resilience of water resources.

8. 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)[3][13].

9. 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)[4][14]. 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.

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[1] 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

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

[3] https://www.preventionweb.net/media/76795/download?startDownload=true

[4] https://www.cbd.int/doc/world/la/la-nbsap-v2-en.pdf

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

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

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities: Yes

Civil Society Organizations:

Private Sector:

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

Environmental and Social Safeguards

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.

Knowledge Management

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 13). 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.

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?

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

Environmental and Social Safeguard (ESS) Risks

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

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			
Medium/Moderate			

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

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	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
WWF-US	LDCF	Lao PDR	Climate Change	LDCF Country allocation	Grant	6,772,477.00	609,523.00	7,382,000.00
Total GEF Resources ($)						**6,772,477.00**	**609,523.00**	**7,382,000.00**

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount ($)

200000

PPG Agency Fee ($)

18000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	PPG($)	Agency Fee($)	Total PPG Funding($)
WWF-US	LDCF	Lao PDR	Climate Change	LDCF Country allocation	Grant	200,000.00	18,000.00	218,000.00
Total PPG Amount ($)						**200,000.00**	**18,000.00**	**218,000.00**

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
Total GEF Resources					**0.00**

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
CCA-1-1	LDCF	3,047,615.00	726586
CCA-1-1	LDCF	1,354,495.00	322927
CCA-1-3	LDCF	2,031,743.00	484391
CCA-1-4	LDCF	338,624.00	80732
Total Project Cost		**6,772,477.00**	**1,614,636.00**

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)

Recipient Country Government	Ministry of Natural Resources and Environment, Department of Planning and Finance	In-kind	Recurrent expenditures	331384
Others	WWF-Laos	In-kind	Recurrent expenditures	470555
GEF Agency	WWF-US	In-kind	Recurrent expenditures	812697
Total Co-financing				**1,614,636.00**

Describe how any "Investment Mobilized" was identified

Not Applicable

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

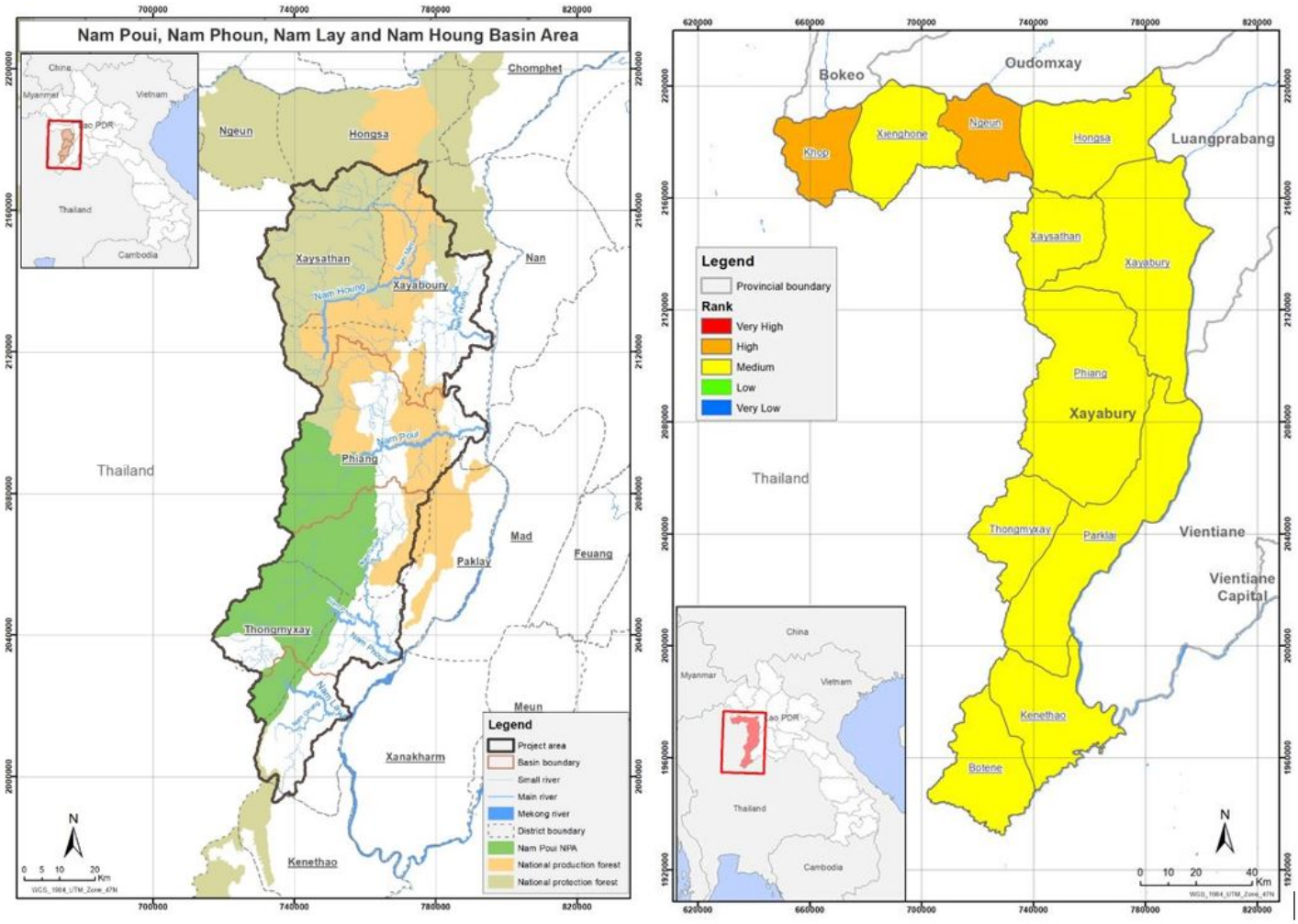
GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Renae Stenhouse		Renae Stenhouse	202-766-9372	RENAE.STENHOUSE@WWFUS.ORG

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

Name	Position	Ministry	Date (MM/DD/YYYY)
Phakkavanh Phissamay	Director General	Ministry Of Natural Resources and Environment Department of planning and Finance	2/16/2024

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.

Title
Annex D_G0052_Laos LDCF_ESSF PIF pre-screen_March 20 2024

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Principal Objective 2	Significant Objective 1	No Contribution 0	No Contribution 0

ANNEX F: TAXONOMY WORKSHEET

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		