



Climate Adaptive River Basin in Sayaboury Province (CARBS)

Environmental and Social Management Framework & Process Framework & Indigenous Peoples Planning Framework

Executive Summary

Final Draft

November 2025

Project Overview

The WWF-GEF8 Laos LDCF project titled **“Climate Adaptive River Basins of Sayaboury Province (CARBS)”** seeks to address the growing environmental and social challenges driven by climate change in the Sayaboury Province. This 6.77 million USD initiative, funded under the Global Environment Facility (GEF) Least Developed Country Fund (LDCF-8), is jointly implemented by the Department of Water Resources (DWR) under the Ministry of Agriculture and Environment (MOAE), WWF-Laos as Executing Agency, and WWF-US as the Implementing Agency.

The project aims to enhance climate adaptation and the resilience of upstream and downstream communities in Sayaboury province, through integrated water resource management (IWRM), nature-based solutions (NbS), traditional grey infrastructure, and local livelihood diversification in the Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng Basins of Lao PDR. The project will operate across four key river basins—Nam-Poui, Nam-Poun, Nam-Lay, and Nam-Houng—covering six climate-vulnerable districts in Sayaboury Province. Its main objective is to build ecosystem and community resilience to floods, droughts, and climate variability while promoting sustainable land use and biodiversity conservation.

1. Mainstreaming climate change adaptation into provincial and river basin planning frameworks.
2. Promoting community-driven interventions using Nature-based Solutions (NbS) and small-scale grey infrastructure.
3. Supporting co-design climate-smart agriculture and diversified, resilient livelihoods.
4. Strengthening knowledge management, communication, and policy learning for climate adaptation.

The project consists of four components which discussed below.

Component 1 – Mainstreaming Climate Change Adaptation (CCA) into Planning and Policy – Strengthens institutional capacity and integrates CCA into provincial water resource and river basin plans through scenario-based planning, mapping, and knowledge sharing.

Component 2 – Community-Driven Interventions to Improve Climate Resilience – Implements gender-responsive and community-identified Nature-based Solutions (NbS) such as riparian restoration, wetland protection, and small-scale grey infrastructure.

Component 3 – Enhancing Resilience through Climate-Smart Agriculture and Livelihood Diversification – Promotes adaptive agricultural practices, climate information services, and alternative livelihoods for women and vulnerable groups.

Component 4 – Knowledge Management and Communication – Focuses on capturing and disseminating lessons learned to foster adaptive learning, scale innovations, and strengthen gender-responsive knowledge exchange.

The project is indicated category B under WWF Environmental and Social Safeguards Screening due to moderate-risk activities. In line with WWF's Safeguards Integrated Policies and Procedure (SIPP) (2019) and GEF safeguard requirements and the WWF's Environmental and Social Safeguards Framework (ESSF), Environmental and Social Management Framework (ESMF) is required and was prepared to address risks and impacts identified during Environmental and Social Screening. This ensures alignment with key standards, including biodiversity conservation, climate resilience, and stakeholder engagement. The ESMF and its supplementary documents such as Process framework and indigenous People framework provide a safeguard structure ensuring environmental protection, social inclusiveness, and transparent grievance handling during implementation.

Project Area Profile

The project area consists of four river basins: Nam-Poui, Nam-Poun, Nam-Lay and Nam-Houng located in Sayaboury Province of Lao PDR, covering lowland and mountainous topographical landscape. Production and protection forests are a dominant area of the basins (see Figure 1). Particularly, the Nam Phoui National Protected Area (NPA) covers some parts of Nam Phoui and Nam Lay basins and majority of the Nam Phoun basin. The project area is characterized by mountainous terrain and significant elevation variations. 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. This geography and mountainous topography play a crucial role in the province's climatic conditions. The climate of Sayaboury province is predominantly tropical, influenced by the monsoon season and prone to severe mountain rain shadow effects. Situated along the Mekong River and its tributaries, the lowland areas of Sayaboury are inherently susceptible to flooding.

Besides, the project is located in a climate vulnerable, naturally flood-prone and mountainous area. It was selected due to its high vulnerability to climate change impacts. The impacts are largely attributed to highly rural and agriculture-dependent population and economy, including numerous marginalized upland ethnic groups, many of whom are dependent on subsistence and shifting agriculture; higher than national average poverty levels; susceptibility to and high risk of floods in the lower-lying areas of the basins, as well as both droughts and climate-induced disruption to annual seasonal variation; and limited resources and infrastructure to adapt to and recover from climate risks.

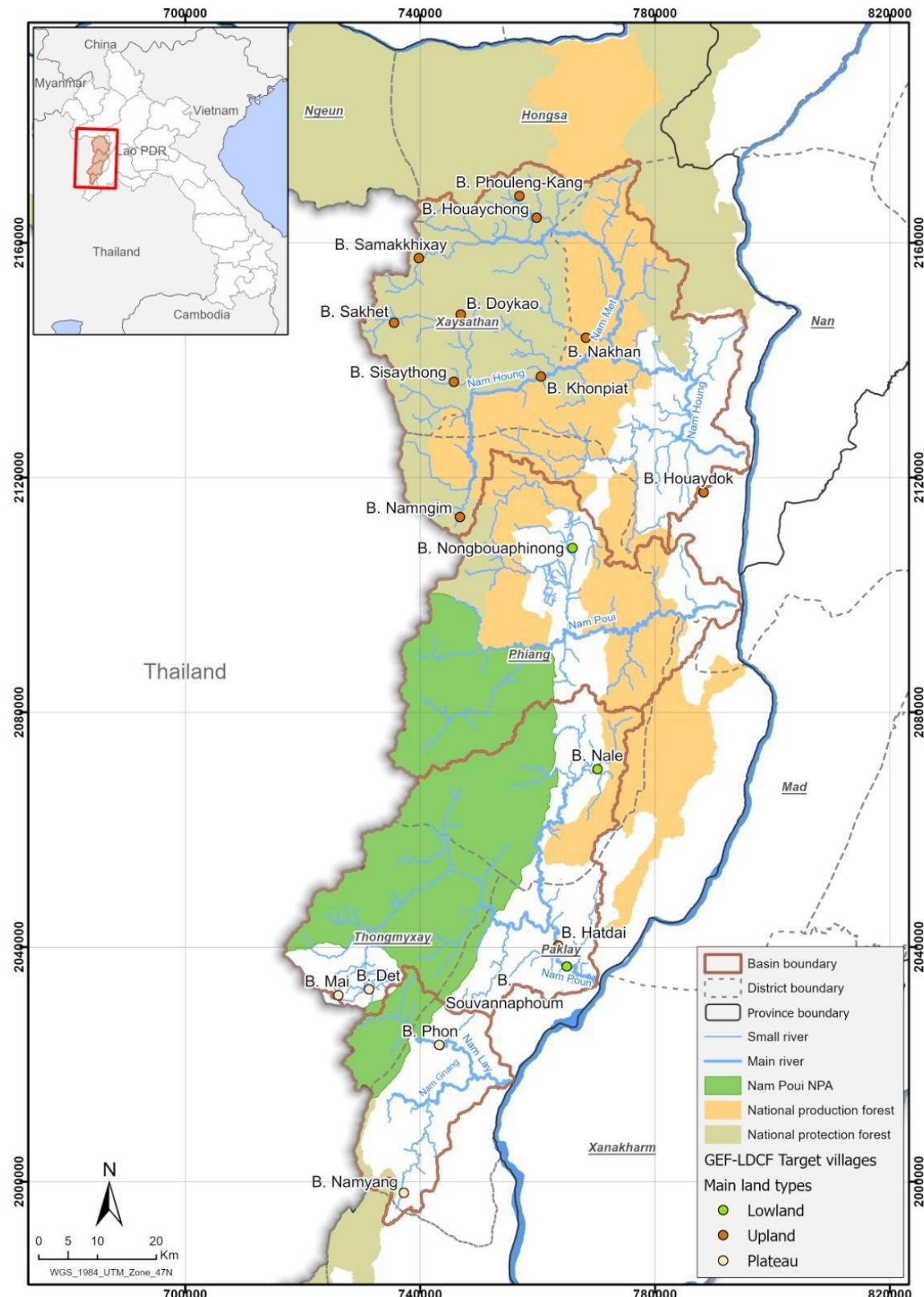


Figure 1: Map of project location

Ethnic people in the project area

Lao PDR is the most ethnically diverse country in mainland Southeast Asia. The ethnic Lao comprise 62% of the population and are the dominant cultural and economic group. In several provinces and districts, ethnic minorities form the majority, and their artistic practices are prominent. The Lao government officially recognizes 49 ethnic groups, categorized into four ethno-linguistic families: Lao-Tai, Mon-Khmer, Hmong-Mien, and Sino-Tibetan. Overall, ethnic minorities comprise around 37% of Lao PDR's population. However, rather than categorizing as indigenous and ethnic minority people, the official terminology used in the Lao Constitution for describing the diverse population of the Lao PDR is "Bunda Chon Phao" or "all ethnic communities", while the name of the groups is normally used to classify the ethnic group. Most ethnic groups in Lao PDR are poor and marginalized and many of them still lag behind other Lao mainstream groups, especially in terms of poverty rates, literacy, and health

In the targeted villages of the CARBS Project, most of the population in the project area belongs to Lao linguistic ethnic groups; however, several ethnic minority groups, including the Prai, Khmou, Hmong, and Iumien, Nhoaun, are also present.

Environmental and Social Policy, regulations and Guidelines

Many laws and regulations of Lao PDR and the WWF's ESSF and SIPP are applicable to the CARBS project. Key relevant Laos laws and regulations and GEF and WWF's policies are indicated in Table 2 below.

Table 1: key laws, regulations and policies

Principles	Lao laws and regulations	GEF and WWF
Laws on Environmental Protection and Biodiversity Conservation	The Law on Environmental Protection (2012)	1) Standard on Environment and Social Risk Management
	Law on Forestry (amended 2019)	2) Standard on Protection of Natural Habitats
	Law on Wildlife and Aquatic Animals (2008)	3) Standard on Restriction of Access and Resettlement
	Law on Water and Water Resources (amended 2017):	4) Standard on Community Health, Safety and Security
Laws on Labor and Working Conditions	Lao Labour Law (2013)	5) Standard on Indigenous Peoples
	The Decree on Occupational Health and Safety (2019)	6) Standard on Pest Management
	Law on Hygiene, Disease Prevention and Health Promotion (2019)	7) Standard on Cultural Resources
Indigenous Peoples	The Constitution of the Lao PDR (amended 2015):	8) Standard on Grievance Mechanisms
	Decree on Ethnic Affairs (2020)	9) Standard on Public Consultation and Disclosure
	Resolution on Ethnic Affairs in the New Era (1992)	

Gender, Gender-Based Violence, and Sexual Harassment	Law on Preventing and Combating Violence against Women and Children (2014)	10) Standard on Stakeholder Engagement 11) Guidance Note on Gender-based Violence and Sexual Exploitation, Abuse and Harassment 12) Guidance Note on Labor and Working Conditions 13) Guidance Note on Projects Relating to Dams 14) Guidance Note on Ranger Principles
	The Law on the Development and Protection of Women and Children (2004)	
	The Law on Anti-Trafficking in Persons (2015)	
Community Engagement	The Agreement on the Approval and Enforcement of Guidelines on Public Involvement in Project Environmental Impact Assessment Process (2013)	
	Law on Handling of Petitions (2015)	
	Guideline on Ethnic Group Consultation (2012)	

For the purposes of the CARBS, the provisions of the WWF's ESSF and SIPP shall prevail over Lao relevant laws and regulations in all cases of discrepancy.

Environmental and Social Risks

The ESMF identifies the project as Category B due to moderate risks associated with small-scale (or grey) infrastructure development, resource access restrictions, and potential gender-based or Indigenous Peoples' vulnerabilities. Key risks include habitat disturbance, sedimentation, inequitable access to project benefits, and risks of Sexual Exploitation, Abuse, and Harassment (SEAH).

Environmental risks and mitigation measures

The project consists of four components, and the potential negative environmental impacts will vary, depending on activities proposed in each component. Based on the project design, it can be noted that anticipated environmental risks are mostly associated with small-scale or grey infrastructure development under Component 2 while environmental risks from other components are expected to be minimal because they are non-civil activities. Summary of activities anticipated environmental risks and mitigation measures are described in Table 2 below.

Table 2: Summary of key environmental risks, mitigation measures, and monitoring

Safeguard Standard	Key risk	Mitigation measure	Monitoring indicator
Natural habitats	Grey infrastructure such as small weirs for irrigation systems and groundwater extraction for some target villages could potentially negatively affect natural habitats when not planned carefully.	Requires rapid environmental assessment of the impacts of planned grey infrastructure and any potentially adverse impact(s) on natural habitats needs to be mitigated during project implementation.	Rapid Environmental Assessments per grey infrastructure.

Social and cultural risks and mitigation measures

Implementation of project activities, including community driven water and land use planning, nature-based interventions and restoration of ecosystems may restrict local people in access to land, water and forest resources. Besides, development of grey infrastructure may result in new land and water use practices, erupting traditional systems or creating an equity in access. Summary of activities main anticipated social risks and impacts and mitigation measures are described in Table 3 below.

Table 3: Summary of key social risks, mitigation measures, and monitoring

Safeguard Standard	Key risks	Mitigation/enhancement measures	Monitoring indicator
Indigenous Peoples	Disregard or violation of the rights of ethnic people in decision making processes	Develop an IPPF, including a process for applying Free, Prior and Informed Consent (FPIC) to any activity that could affect the rights of Indigenous Peoples in accordance with ILO Convention 169 and UNDRIP.	# of consents (quantitative) and qualitative feedback about the process.
Gender Equality and Women's Rights	Exclusion of women from decision-making processes.	Apply gender-responsive and culturally appropriate consultation methods; ensure diverse representation.	% of participants from target groups; qualitative feedback

Restriction of Access and resettlement	Restriction of access to land, forests, or water due to forest plans or nature-based solutions.	Develop a Process Framework. Conduct participatory land/resource mapping, apply FPIC, and develop benefit-sharing agreements. Identify customary rights, analyze impacts on livelihoods, and develop agreements on mitigation and, if needed, compensation.	% of FPIC processes completed; grievances resolved
Community Health, Safety and Security:	<ul style="list-style-type: none"> Grey infrastructure and water management activities upstream can affect communities, including communities downstream, and their health, safety and security. Human-wildlife conflict affecting community members while implementing grey infrastructure. 	Implementing mitigation measures described above in table 3.	
Physical and Cultural Resources	Possible implementation of activities in areas with physical and cultural resources. To be defined in the Stakeholder Engagement (SE) and the FPIC processes.	To be defined.	To be defined.
Conflict Sensitivity	Unequal access to training, tools, or markets, especially for remote or marginalized groups.	Utilize inclusive targeting, tailor training to local contexts, and offer ongoing support to vulnerable groups.	% of women/ethnic participants trained; satisfaction surveys
Stakeholder Engagement (SE)	Climate forecasts and early warning tools are not reaching remote or low-literacy communities.	Utilize local languages, visual aids, and trusted community channels for effective dissemination.	% of target HHs reached; user feedback on usefulness

Process Framework

A Process Framework (PF) is prepared when the CARBS Project may cause restrictions in access to natural resources in legally designated parks and protected areas. The purpose of the process framework is to establish a process by which members of potentially affected communities participate in the design of project components, determination of measures necessary to address the requirements of ESSF and SIPP, and implementation and monitoring of relevant project activities. Any change in and impact on land use and displacement of people due to project components and their activities should be based on free, prior, and informed consultations of the affected communities and relevant authorities, which should be carried out prior to finalizing any usage changes.

The level of detail of the Process Framework may vary depending on project activities, characteristics of restrictions and their impacts, and the number of people affected. The Process Framework supplements the project's environmental and social assessment with a participatory framework focused on the potential impacts of access restrictions. The project shall ensure PF covers elements:

- Project background
- Participatory implementation
- Potential impacts
- Eligibility criteria
- Measures to assist affected persons to improve their livelihoods
- Conflict resolution and grievance mechanism
- Implementation and monitoring arrangements

Indigenous Peoples Planning Framework (IPPF)

As aforementioned, most of the population in the project area belongs to Lao linguistic ethnic groups; however, several ethnic minority groups, including the Prai, Khmou, Hmong, and Iumien, are also present, as also indicated in Table 2 above. Although CARBS project aims to benefit local stakeholders and communities, including the ethnic minority groups, the Project could also bring about or reinforce a number of adverse social impacts that can be mitigated. These impacts include unequal opportunities of vulnerable groups in decision making process and engagement in activities of the project and access to resources restriction, affecting customary land rights and economic displacement due to land tenure arrangement for conservation.

Thus, the project will identify measures and actions in accordance with the mitigation hierarchy that avoid, or if avoidance is not possible, reduce potentially significant adverse social and environmental impacts to acceptable levels by (a) identifying and summarizing all anticipated significant adverse social and environmental impacts; (b) describing technical details for each mitigation measure; (c) estimating any potential social and environmental

impacts of these measures and any residual impacts following mitigation; and (d) taking into account, and is consistent with, other required mitigation plans.

In addition, CARBS shall develop an indigenous People Plan (IPP), based on the following steps:

- Identification of IP groups through screening;
- Assessment of project impacts;
- Consultations with affected IP communities following FPIC principles and obtain their broad community support;
- Development of sites specific IPP to avoid adverse impacts and provide culturally appropriate benefits; and
- In activities with no impacts, the requirements could be limited to consultations during implementation to keep Indigenous Peoples and local communities informed about project activities and documentation of all consultations held.

The content of the IPP shall include the following information:

- Description of the IPs affected by the proposed activity;
- Summary of the proposed activity;
- Detailed description of IPs' participation and consultation process during implementation;
- Description of how the project will ensure culturally appropriate benefits and avoid or mitigate adverse impacts;
- Budget;
- Mechanism for complaints and conflict resolution; and
- Monitoring and evaluation system that includes monitoring of particular issues and measures concerning indigenous communities.

Free, Prior and Informed Consent Framework (FPIC)

The processes of consultation and obtaining FPIC will be applied to all the aspects of the project (financed under WWF) that may negatively affect the rights of ethnic people. FPIC will be required on any matters that may negatively affect the rights and interests, water areas, lands, resources, territories (whether titled or untitled to the people in question) and traditional livelihoods of ethnic people concerned.

Thus, FPIC is integral to the execution of the CARBS project, as the project areas include diverse ethnic communities. WWF recognizes the strong cultural and spiritual ties many ethnic groups have to respect their lands and territories and committed to strengthen these ties in all WWF/GEF/GCF funded projects. FPIC gives ethnic people the freedom to determine their own development path and biodiversity conservation.

The Department of Water Resources (DWR) of MONRE and provincial stakeholders shall ensure adequate flow of funds for consultation and facilitation of planned activities within the IPP. Project brochures and pamphlet with infographic containing basic information such as sub-project location, impact estimates, and mitigation measures proposed, and implementation schedule will be prepared, translated into a language understandable to ethnic people, and distributed among them.

Institutional Arrangement

The DWR under MONRE (now Ministry of Agriculture and Environment, MoAE) serves as the lead executing agency, coordinating through a Project Management Unit (PMU) supported by WWF-Laos. WWF-US provides fiduciary oversight and safeguards compliance assurance. A Project Steering Committee (PSC) ensures policy alignment and stakeholder coordination. The PSC will be composed of government representatives from the central (Ministry and Departments) and local (provincial and district) levels together with WWF in an observer role meanwhile the MPU will act as the secretariat for the PSC as illustrated in Figure 2 below.

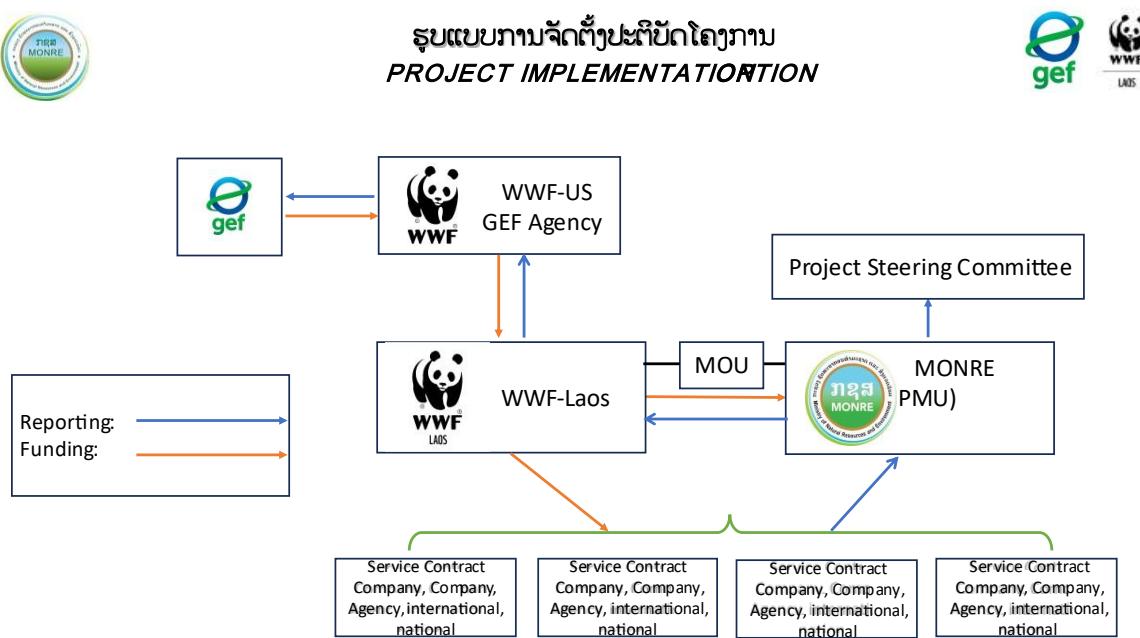


Figure 2: Project Institutional Arrangement

To ensure effective safeguards implementation, the project will engage WWF GEF Implementing Agency in WWF-US to provide general oversight project execution while GEF executing. The PSC will ensure project implementation aligns with national and GEF requirements and standards. GEF Executing Agencies (DWR and provincial Agriculture and Environment) will host the PMU that will (1) ensure project oversight and coordination for effective and timely implementation of safeguard commitments as per Environmental management plan, (2) deliver project results in alignment with WWF/GEF project standards;

and (3) development and management of detailed work plans and timeframes. Safeguards implementation will be supported by safeguards and Gender specialists within the MPU. The specialists will take overall responsibility, including regular monitoring and reporting, for ensuring compliance with ESF Safeguards and associated annexes.

The compliance of Project activities with the ESMF will be thoroughly monitored throughout the project implementation period. The monitoring will take place at three (project, activity and agency) levels to ensure that all activities are aligned with the required standards and guidelines for environmental and social safeguards throughout the project lifecycle.

Stakeholder Engagement

A stand-alone Stakeholder Engagement Plan (SEP) was prepared for the CARBS Project. The SEP provides guidelines on how to engage different stakeholders throughout the life cycle of the project. The main objective of the SEP is to establish a systematic approach to help the project in i) identifying stakeholders and build and maintain a constructive relationship with them; and ii) assessing the level of stakeholder interest and support for the project and to enable stakeholder's views to be taken into account in project design and environmental and social performance.

The SEP was developed and will be implemented in alignment with relevant Lao legal frameworks, including Environmental Protection Law, and the guideline on Consultation with Ethnic Groups, GEF's policy on public involvement in GEF projects and WWF's safeguard requirements.

Based on the SEP, the project stakeholders include government offices at national and local levels, rights holders at community levels in 18 beneficiary villages and potentially affected communities downstream of project activities in the target districts (Hongsa, Saisathan, Phiang, Paklay, Thongmixay, and Sayaboury) of Sayaboury Province, civil society organizations, local consultancy and services providers, and other interest parties. During the preparation of SEP, the project team held series of public consultation to engage stakeholders from government agencies at national and local levels, development partners in Laos, civil society groups, and local communities.

The project ensures inclusive participation of stakeholders, including the target communities through continuous consultations, culturally appropriate communication, and Free, Prior, and Informed Consent (FPIC) throughout the project cycle. The Project shall disclose this summary and other project information to target local communities and stakeholders in simple forms, including a PowerPoint presentation and pamphlet. These materials shall be prepared in the Lao language and presented them to communities and stakeholders in meetings or workshops (interpretation into ethnic minority languages, if needed).

Likewise, translated summary of ESS documents will be left in key locations throughout the project site as well as on the WFF-Lao' website. The summary shall also be accessible for

stakeholders through meetings and workshops to socialize this information and collect feedback.

Grievance Redress Mechanism

The project will have a direct and tangible effect on local communities and individuals residing within or in the vicinity of project sites. There is thus a need for an efficient and effective Grievance Redress Mechanism (GRM) that collects and responds to stakeholders' inquiries, suggestions, concerns, and complaints. GRM allows affected persons to raise complaints related to environmental, social, or ethical issues. The mechanism ensures confidentiality, accessibility, and responsiveness, with provisions for SEAH case management and escalation to WWF's Project Complaints Officer.

In addition to the project-specific GRM, a complainant can submit a grievance to the WWF GEF Agency. A grievance can also be filed with the Project Complaints Officer (PCO), a WWF staff member fully independent from the Project Team, who is responsible for the WWF Accountability and Grievance Mechanism and who can be reached at:

Email: SafeguardsComplaint@wwfus.org Mailing

address:

Project Complaints Officer

Safeguards Complaints,

World Wildlife Fund

1250 24th Street NW

Washington, DC 20037

Stakeholder may also submit a complaint online through an independent third-party platform at <https://secure.ethicspoint.com/domain/media/en/gui/59041/index.html>