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Ministry of Public Works and Transport

Environmental and Social Management Framework

Preparation of Environmental and Social Framework Instruments

for the Lao PDR Climate Resilient Road Connectivity Improvement Project (CRRCIP)

Prepared by:

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ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Materials
AH	Affected Households
ARAP	Abbreviated resettlement action plan
BD	Bidding document
CD	Contractor document
CERC	Contingency Emergency Response Component
CHSP	Community Health and Safety Plan
COI	Corridor of Impact
COVID19	Corona Virus 19
DAFO	District Agriculture and Forestry Office
DPWT	Provincial Offices of Department of Public Works and Transport
DOLSW	Provincial Department of Labour and Social Welfare
DOR	Department of Road
DWR	Department of Water Resources
C-ESMP	Contractor's Environment and Social Management Plan
ECC	Environmental Compliance Certificate
EDPD	Environmental Research and Disaster Prevention Division
EG	Ethnic Groups
EGEP	Ethnic Group Engagement Plan
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESIA	Environment and Social Impact Assessment
ESMF	Environment and Social Management Framework
ESMP	Environment and Social Management Plan
ESMWG	Environment and Social Monitoring Working Group
ESRS	Environmental and Social Review Summary
ESS	Environmental and Social Standards
FGD	Focused Group Discussion
FPIC	Free Prior and Informed Consent
GAP	Gender Action Plan
GBV	Gender Based Violence
GDP	Gross Domestic Product
GOL	Government of Lao PDR
GRM	Grievance Redress Mechanism
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome
IUCN	International Union for Conservation of Nature
KBA	Key Biodiversity Area
KM	Khammouan Province
LFND	Lao Front for National Development
LMP	Labour Management Procedures
LWU	Lao Women’s Union
MAF	Ministry of Agriculture and Forestry
MICT	Ministry of Information Culture and Tourism
MOF	Ministry of Finance
MONRE	Ministry of Natural Resource and Environment
MPWT	Ministry of Public Works and Transport
NCAW	National Commission for the Advancement of Women
NGO	Non Government Organization
NTFP	Non-timber forest product
NUOL	National University of Laos
OHS	Occupational Health and Safety
OPBC	Output and Performance-Based Contracts
OPRC	Output and Performance-based Road Contracts
PA	Provincial Assembly
PAH	Project Affected Households
PAP	Project affected people
PAFO	Provincial Agriculture and Forestry Offices

PIU	Project Implementation Unit
PMU	Project Management Unit
PONRE	Provincial Offices of Natural Resource and Environment
PPE	Personal Protective Equipment
PRC	Provincial Resettlement Committee
PTI	Public Works and Transport Institute
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SEA/SH	Sexual Exploitation and Abuse and Sexual Harassment
SEP	Stakeholder Engagement Plan
SMWG	Safeguards Monitoring Working Group
SPS	Sanitary and Phytosanitary
SRV	Saravan Province
SS-BMP	Site Specific Biodiversity Management Plan
SS-ESMP	Site Specific Environmental and Social Management Plan
STD	Sexually Transmitted Disease
SVK	Savannakhet Province
UNICEF	United Nations Children's Fund
UNPD	United Nations Development Programme
UXO	Unexploded Ordnance
VAWC	Violence Against Women and their Children
VAC	Violence Against Children
WB	The World Bank
WHO	World Health Organization

EXECUTIVE SUMMARY

1. The World Bank (WB) will be supporting Ministry of Public Works and Transport (MPWT) in implementing the Lao PDR Climate Resilient Road Connectivity Improvement Project (CRRCIP). The CRRCIP comprises the following four components:

- **Component 1: Climate Resilient Road Access** - supports the improvement of about 300 km of District Roads and Rural Roads while addressing climate and disaster resilience aspects. The proposed project roads are located in the following provinces:
  a) Khammouan (three sub-project roads totaling approximately 87km)
  b) Savannakhet (six sub-project roads totaling approximately 124km)
  c) Saravan (four sub-project roads totaling approximately 84km)
- **Component 2 - Project Management:** support (i) financial audit, (ii) technical audit of the project road improvement works during construction, (iii) environmental and social monitoring, (iv) road safety audit of the project road designs, (v) road user satisfaction surveys carried out at the start of implementation, at mid-term, and at the close of the project, (vi) incremental operating costs, (vii) technical and operational assistance for the day-to-day management, monitoring and evaluation of the Project, and (viii) land acquisition, resettlement, and rehabilitation.
- **Component 3: Institutional Development** - supports MPWT in capacity building, e.g., training on cross-cutting issues including road safety, gender, citizen engagement, and climate disaster risk.
- **Component 4: Contingent Emergency Response Component:** supports MPWT in case of an Eligible Crisis or Emergency in responding promptly and effectively to it as per the Contingent Emergency Response Manual..

2. The project aims to provide improved connectivity to national roads and access to the east west economic corridor between Vietnam and Thailand thus increasing market linkages and contributing towards greater economic gains to the local communities.

3. This Environmental and Social Management Framework (ESMF) has been prepared to ensure the project meets the environmental and social requirements of the WB, by identifying the potential environmental and social risks and impacts of the Project and proposing suitable mitigation measures to manage these risks and impacts. The ESMF maps out the Lao PDR laws and regulations and the WB policies applicable to the Project, and describes the principles, approaches, implementation arrangements, and environmental and social mitigation measures to be followed.

4. Currently the roads proposed for upgrading are portions of existing roads connecting to other portions of existing roads. At this stage of the Project no other new, or planned road construction projects have come to light that may link only to the Project roads proposed for upgrading. As such no 'associated facilities' have been identified.

Impacts and Mitigation

5. Whilst the project is expected to deliver a wide range of positive impacts, the project causes some unintended adverse impacts that are associated with improvement of the roads. These adverse impacts, and risks, are considered moderate and will be mostly temporary, local, and manageable through proposed mitigation measures. The key potential adverse environmental and social risks for project activities identified to date as part of the preparation of this ESMF are summarized as follows:

- General construction related **environmental impacts** such as earthworks, soil erosion, impacts on water flow and river biology, noise, dust, hazardous and non-hazardous wastes, exhaust from engines and fuel leak of earth moving vehicles, traffic disturbance during construction, occupational health and safety of the contracted workers, clearing of land beyond road corridors

for worker camps, encounter of unexploded ordnance (UXO), and intentional or accidental introduction of non-native flora species. Potential indirect impacts may involve additional encroachment of agricultural farms and infrastructure to the road-side forests when the road conditions are improved. Road upgrading and the increased connectivity of road network may amplify illegal trades of timber and wildlife products from nearby Conservation Forests/Protected Areas and Protection Forests.

- General construction related **social impacts** such as; 1) risks of the exclusion and discrimination, particularly of ethnic minorities, women and vulnerable groups from project planning, consultation, implementation and benefit, 2) risks related to the labor and working conditions of project workers, e.g. occupational health and safety (OHS) risks, Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH), child labor and forced labors, 3) risks related to community health and safety including road safety during and after road construction, transmission of communicable and respiratory diseases, Sexual Transmitted diseases (STDs, HIV/AID), COVID-19 from contractor's workers and migrant workers and SEA/SH, and 4) temporary economic displacement, small-scale land acquisition and relocation of minor structures and/or access restrictions during the construction period.

6. Preliminary environmental and social (E&S) site screening completed as part of the preparation of this ESMF also identified sensitive receptors close to the sub-project roads, including schools, hospitals and community markets. Screening also identified that natural disasters are a reoccurring theme in many locations, including floods and landslides particularly in Saravan. Some roads are also located close to conservation forests and protection forests, although not in them, however some do pass through production forests. Further, some roads are located close to key biodiversity areas (KBAs), although not in them. According to the consultation and focus group discussion (FGD) with local communities, human trafficking has occurred within the project area in the past 3 years.

7. To minimize the potential E&S risks at the project level the following two measures were applied during road selection:

   - The proposed project will not finance road sections within any Protected Areas with internationally or nationally significant biodiversity value that may cover Conservation Forests and Protection Forests, to avoid risks and impacts on biodiversity of significant value, critical and natural habitats, and ecological functions; and
   - The project will not finance any activities including road sub-projects that cause the resettlement of over 200 affected persons or 40 affected households or cause more than 40 households to be severely affected, i.e., lose 10% or more of their productive assets including land owned by individual households lost.

8. Further, this ESMF includes a range of mitigation and management measures to be applied at the sub-project level that are broadly based on similar local roads projects currently on-going in Lao PDR funded by the WB. These measures are supplemented by further specific recommendations based on the findings of site screening. Development phase mitigation (including design phase) includes measures to ensure the road is designed to account for climate change and includes appropriate road safety measures which will be provided as part of Component 2. Pre-construction mitigation includes requirements for unexploded ordnance (UXO) risk assessments as well as implementation of abbreviated resettlement action plans (ARAPs). Construction phase and O&M phase impacts will be managed through the adoption of standard E&S mitigation procedures which are provided as part of this ESMF.

Implementation Arrangements

9. As a first step, all proposed activities will be screened by the MPWTs Project Management Unit (PMU) to ensure that they are within the boundaries of the Project's eligible activities, and they are not considered as activities listed on an E&S exclusion list included as part of this ESMF.

10. Secondly, Provincial Offices of Department of Public Works and Transport (DPWT) Project Implementation Unit (PIU) and their supervising consultants (Supervision Firm) – both working under the PMU, will use an E&S Screening Form to identify and assess relevant E&S risks specific to the activities, and identify the appropriate management measures. The Screening Form lists the various management measures and plans that may be relevant for the specific activities, such as development of Site Specific Environmental and Social Management Plans (SS-ESMP) (covering a range of topics such as community health and safety and labor management procedures), Site Specific Biodiversity Management Plans (SS-BMP), and ARAPs. The DPWT PIU and Supervision Firm will also identify the documentation, permits, and clearances required under the government's Environmental Regulation.

11. Depending on the findings of the Screening Form, the PMU through an E&S Consulting Firm may develop relevant SS-ESMPs, SS-BMPs and ARAPs based on annexes provided in this ESMF and the Resettlement Policy Framework (RPF). The PMU will review and approve these plans which will also be shared with relevant stakeholders in an accessible manner. Further, consultations will be held with affected communities on the environmental and social risks and mitigation measures in accordance with the Stakeholder Engagement Plan (SEP) which has been prepared for the Project. All SS-ESMPs and SS-BMPs will be submitted to the World Bank for prior review and no objection. The Environmental Research and Disaster Prevention Division/Public Works and Transport Institute (EDPD/PTI) through the E&S Consulting Firm will also prepare an Initial Environmental Examination (IEE) covering all subprojects for each province and obtain clearance from Provincial Offices of Natural Resource and Environment (PONRE) before any subprojects begin.

12. If required, the PMU will prepare and ensure ARAP is implemented in accordance with the Project Resettlement Policy Framework (RFP) before any subprojects, with acquisition of private land and relocation of structures, begin.

Monitoring and Reporting

13. DWPT PIU and the Supervision Firm will oversee daily implementation and monitoring of environmental and social mitigation measures, and report progress and performance to the PMU monthly. Further, DWPT PIU and the Supervision Firm will conduct quarterly compliance monitoring reports of SS-ESMPs, SS-BMPs, ARAPs and SEP. The quarterly reports will be submitted to the PMU, where they will be aggregated and submitted to the World Bank on biannual basis. EDPD/PTI will also ensure that the Project is also in compliance with national requirements regarding E&S requirements and standards. Grievances/beneficiary feedback (in line with the SEP) will also be tracked during project implementation as will any serious incident in connection with the project, which may have significant adverse effects on the environment, the affected communities, the public, or workers.

Stakeholder Engagement

14. A separate Stakeholder Engagement Plan (SEP) has been prepared for the Project, based on the World Bank's Environmental and Social Standard 10 on Stakeholder Engagement. This ESMF, as well as the SEP and the Environmental and Social Commitment Plan (ESCP) that have been prepared for this project, have been disclosed in draft on the following MPWT website.

15. During preparation of this ESMF, RPF, ESCP and SEP, various public consultation meetings at the local/provincial levels had been conducted from 3rd to 27th October 2023 with the participation of 669 people (423 male and 246 female) who represented project stakeholders including Department of Public Works and Transport (DPWT), Provincial Administrative Office, Provincial Natural Resources and Environment (PONRE), Provincial Agricultural and Forest Tree Office (PAFO), Provincial Labor and Social Welfare (PLSW), Lao Front for National Development, Lao Women's Union and Youth Union, project affected people (PAPs) and potential project beneficiaries. The participants also represent various ethnic groups such as Lao Tai, Khmu, Makong, Kaleung, Chaler, Phutai, Tri, Katang, Ta-oy and Pako. These consultations collected feedback to inform the Environmental and Social Management Framework (ESMF) and SEP.

1. INTRODUCTION

1. This Environmental and Social Management Framework (ESMF) is developed to support the environmental and social due diligence provisions for activities financed by the World Bank in the Lao PDR Climate Resilient Road Connectivity Improvement Project (CRRCIP, or the "Project").

2. The proposed Project, located in Khammouan (KM), Savannakhet (SVK), and Saravan (SRV) provinces and provides connectivity to National Roads and access to the east west economic corridor between Vietnam and Thailand thus increasing market linkages and contributes towards greater economic gains to the local communities.

3. This ESMF follows the World Bank Environmental and Social Framework (ESF) as well as the national laws and regulations of Lao PDR. The objective of the ESMF is to assess and mitigate potential negative environmental and social risks and impacts of the Project consistent with the Environmental and Social Standards (ESSs) of the World Bank ESF and national requirements. More specifically, the ESMF aims to:

   - assess the potential environmental and social risks and impacts of the proposed Project and propose mitigation measures;
   - establish procedures for the environmental and social screening, review, approval, and implementation of activities;
   - specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social issues related to the activities;
   - identify the staffing requirements, as well as the training and capacity building needed to successfully implement the provisions of the ESMF;
   - address mechanisms for public consultation and disclosure of project documents as well as redress of possible grievances; and
   - establish the budget requirements for implementation of the ESMF.

4. This ESMF should be read together with other plans prepared for the project, including the Resettlement Policy Framework (RPF), Stakeholder Engagement Plan (SEP) which includes consideration of Ethnic Groups (EG), and the Environmental and Social Commitment Plan (ESCP).

2. PROJECT DESCRIPTION

2.1 Project Components

5. The proposed Project aims to improve climate resilient road access in targeted provinces, enhance capacity to manage road network, and in case of an Eligible Crisis or Emergency, respond promptly and effectively to it. The MPWT in consultation with the DPWTs of the three provinces has analyzed the entire 3,600 km network of the District Roads and Rural Roads in ten districts with high poverty headcounts, using a geo-spatial analysis, and shortlisted about 100 km of roads in each of the provinces through a prioritization exercise to be the proposed project roads. The prioritization was based on aspects which include: (i) passing through a poor district – based on poverty head count, (ii) criticality of the link for climate resiliency of the network, (iii) connectivity to agricultural areas, (iv) population served by the road, (v) traffic level, (vi) not passing through environmentally sensitive areas, and (vii) no resettlement of more than 200 people (or 40 households) and/or more than 40 households severely affected with 10 percent of productive assets owned by individual household lost in all three target provinces. The Project comprises the following four components:

   - **Component 1: Climate Resilient Road Access:** The project will support (i) improvement of about 300 km of District Roads and Rural Roads in the provinces of Khammouan, Savannakhet, and Saravan to the standards of Class V/VI roads as per the Ministry of Public Work's (MPWT's) Road Design Manual and addressing climate and disaster resilience aspects, (ii) construction

supervision of the project road improvement works, and (iii) maintenance of the project roads post improvement during the project period.

- **Component 2 - Project Management:** This component will support (i) financial audit, (ii) technical audit of the project road improvement works during construction, (iii) environmental and social monitoring, (iv) road safety audit of the project road designs, (v) road user satisfaction surveys carried out at the start of implementation, at mid-term, and at the close of the project, (vi) incremental operating costs, (vii) technical and operational assistance for the day-to-day management, monitoring and evaluation of the Project, and (viii) land acquisition, resettlement, and rehabilitation.
- **Component 3: Institutional Development:** This component will support MPWT in (i) capacity building of local contractors in the areas of Output and Performance-based Road Contracts, climate resilience, road safety, and environmental and social risk management, (ii) a study on climate resilient road network planning and prioritization and capacity building of MPWT and DPWTs, (iii) preparation of a road sector financing strategy, (iv) training of MPWT and DPWT staff on cross-cutting issues including road maintenance, road safety, gender, citizen engagement, and climate disaster risk, (v) a female internship program, and (vi) preparation of environmental, social, technical, and economic documents for any future road projects in Lao PDR. .
- **Component 4: Contingent Emergency Response Component:** Contingent Emergency Response Component: This component will support MPWT in case of an Eligible Crisis or Emergency in responding promptly and effectively to it as per the Contingent Emergency Response Manual..

2.2 Project Activities

6. MPWT in consultation with the DPWT have selected the district and rural roads through a prioritization exercise based on aspects which include: (i) passing through a poor district – based on poverty head count, (ii) criticality of the link for climate resiliency of the network, (iii) connectivity to agricultural areas, (iv) population served by the road, (v) traffic level, (vi) not passing through environmentally sensitive areas, and (vii) no resettlement of more than 200 people (or 40 households) and/or more than 40 households severely affected with 10% of productive assets owned by individual household lost in all three target province. Table 1 lists the proposed roads which are mapped in Annex A.

Table 1: List of CRRCI Sub-projects

Province/ Road #	Total Length (Km)	Road Class	Total Villages	Total HHs	Total Pop.	Total Female
KM	**86.56**		**21**	**1,592**	**8,370**	**4,204**
1. Road #5682 in Xebangfai District	17.56	Rural road	7	518	2,801	1,403
2. Road# 5683 in Xebangfai District	49	Rural road	**8**	620	3,036	1,533
3. Road# 5669 in Bualapha District	20	Rural road	**6**	454	2,533	1,268
SVK	**123.9**		**42**	**7,680**	**42,775**	**22,154**
4. Road# DR 6575 in Champhone District	8.6	Rural road	5	940	5,660	2,957
5. Road# 6586 in Champhone District	8.3	Rural road	12	2,386	13,412	6,841
6. Road# DR 6323 in Champhone District	14	District road	4	1,026	5,749	3,279

Province/ Road #	Total Length (Km)	Road Class	Total Villages	Total HHs	Total Pop.	Total Female
7. Road# DR 6507 in Champhone District	43	Rural road	7	1,295	7,751	4,087
8. Road# RR 6594 in Songkhone District	20	Rural road	**8**	1,521	7,316	3,768
9. Road# 6861 in in Sepon District	30	Rural road	6	512	2,887	1,222
SRV	**83.5**		**43**	**5,272**	**32,351**	**16,365**
10. Road# 6933 in Salavan District	21.88	Rural road	12	1,461	8,841	4,441
11. Road# 6909 in Laongam District	32.41	District road	14	1,484	8,843	4,546
12. Road# 6913 in Laongam District	16.51	District road	10	1,729	9,829	4,939
13. Road# 7271 in Toumlan District	12.70	Rural road	7	598	4,838	2,439
Grand Total	**293.96**		**106**	**14,544**	**83,496**	**42,723**

2.3 Project Design and Schedule

7. The Project will adopt the design standards specified in MPWTs Road Design Manual. The Road Design Class is V/VI depending upon the traffic volume in the design year i.e., 100 – 300 passenger car units per day roads as Class V and 50 – 100 passenger car units per day roads as Class VI. Geometric design will be for a design speed of 60 kmph (flat terrain) or 40 kmph (rolling terrain). The cross-sectional parameters will be 2 lanes of 2.75 m width and 0.75 m wide shoulders on both sides for roads designed for Road Design Class V. For Road Design Class VI, the cross-sectional parameters will be one lane of 3.5 m width and 1.5 m wide unpaved shoulders on both sides. The pavements will mostly have Double Bituminous Surface Treatment surfacing except for few stretches which will be laid with a concrete pavement. Many of the cross-drainage structures may need to be replaced with newly constructed concrete bridges or box culverts as the existing structures are in dilapidated condition. The project roads will not have major realignments and generally follow the existing alignments.

8. The schedule - TBD

2.4 Implementing Agencies

9. The Department of Roads (DOR), under MPWT, with support from provincial Department of Public Works and Transport (DPWT), is responsible for implementation of this Project including overall technical oversight, execution, and management of the Project and has appointed a dedicated team (Project Management Unit - PMU with support from DPWT/Project Implementation Unit-PIU) to be responsible for the day to-day implementation, and operation of the project, including contracting and supervision of all consultants.

10. The Environmental Research and Disaster Prevention Division (EDPD) of the Public Works and Transport Institute (PTI) under MPWT is responsible for supervision, capacity building/training, compliance monitoring and reporting of environmental and social aspects.

11. The proposed project improvement works will be carried out using Output and Performance-based Road Contracts (OPRC) and/or traditional Item-rate contracts. Some provinces have expressed interest in adopting area based OPRCs and these may be feasible if some of the proposed roads for improvement are in the vicinity of each other. The proposed project will improve/construct the pavement, drainage, and structures, and provide road safety appurtenances. The proposed project will have consultants for supervision and monitoring of the works, audits, and road user satisfaction surveys.

3. ENVIRONMENTAL AND SOCIAL POLICIES, REGULATIONS AND LAWS

3.1 Key Legislation

12. The key Lao PDR laws and regulations relevant to the Project are listed in Table 2 below. Note that this table is not exhaustive and only provides the key environmental and social legislation of Lao PDR. Further examination of all relevant legislation will be completed as part of Project level ESMPs.

Table 2: Key E&S Legislation of Lao PDR

Related national legislation	Relevance
Environmental	
Law on Environment Protection, No. 29/NA, dated 18/12/2012	Provides the overarching environmental protection framework.
Law on Forestry, No. 08/NA, dated 13/06/2019	Relevant to the protection of forests close to the Project roads.
Law on Aquatic and Wildlife (24 December 2007)	Relevant to the protection of wildlife and aquatic species in their natural habitats.
Law on Disaster Management, No. 15/NA, dated 24/06/2019	The Project will promote the implementation of this Law by improving roads that are prone to disaster (e.g., floods).
Law on Water and Water Resources, No. 23/NA, dated 11/05/2017	Relevant to the protection of water resources, during construction and operational phases.
Decree on Environmental Impact Assessment, No. 389/GOL, dated 20/10/2022	Describes the EIA/IEE processes and requirements.
Regulation on EIA of Road Project in Lao PDR (2004)	Clarifies the principles and methodologies for EIA of road projects.
Decree on Promulgation of National Environmental Standards (2017)	Provides ambient environmental standards and common pollution control standards for air, soil, and water.
Decree on Protected Area (No. 134/GOL, dated 13/5/2015)	Determines principles, regulations and standards related to the establishment, allocation, protection, development, utilization, and inspection of Protected Areas which can be found close to some of the Project roads.
Ministerial Instruction on Hazardous Waste Management No: 0744IMONRE, February 11, 2015	Provides principles to manage hazardous waste and to classify hazardous waste which will be generated by construction and maintenance works, e.g. waste oil.
Law on National Heritage (2014)	Relevant to potential impacts on physical cultural heritage that may arise during the design and construction phases of the Project.
Decision on the List of Projects and Activities Triggering IEE and EIA, No. 0358/MONRE, February 2023	Provides List of Projects and Activities Triggered IEE and EIA related to road
Social	
The Decree on Compensation and Resettlement of People Affected by Development Projects, No. 84/GOL, dated 05/04/2016.	Provides principles, regulations and standards on the management, monitoring of compensation of losses and the management of resettlement activities.
The Law on Labour Protection, No. 43/NA, dated 24/12/2013	Relevant to project workers (contractors and sub-contractors) as it defines the principles, regulations and measures on administration, monitoring, recruitment, and labour protection to enhance the quality and productivity of works, to safeguard the rights and legitimate interests of employees.
The Law on Grievance Redress, No. 023/NA, dated 09/11/2016	Provides a formal grievance redress mechanism for civilians, individuals, and organizations to utilize during project construction and O&M phases.
The Law on Hygiene, Prevention and Health Promotion, No. 73/NA, dated 22/11/2019	The Law is relevant to the Project as it involves significant use of hazardous materials (e.g., bitumen, paints, hydrocarbons, etc.) for the construction and operation of the road, culverts, and bridges.
The Law on Prevention of HIV Disease, dated 01/NA, dated 29/6/2010	Sets principles, regulations, measures, management and monitoring of HIV/AIDS control and prevention to reduce HIV infection, and AIDS with the aim to promote good health and a HIV free environment among all Project

Related national legislation	Relevance
	staffs and workers.
The Law on Prevention and Control of Communicable Disease, 19 December 2017	Determines the principles, regulations and measures on the management, monitoring, and supervision of prevention and control of communicable disease which is relevant to the workers employed during construction and O&M phases.
The Law on Preventing and Combating Violence against Women and Children, Law No. 56/NA, 23/12/2014;	Relevant to ensure protection of women during the construction and O&M phase of the Project.
The Law on the Development and Protection of Women and Children, No.08/NA, dated 22/10/2004	Promoting the knowledge, capability, and revolutionary ethic of women; gender equality; eliminating all forms of discrimination against women; and preventing and combating trafficking in women and children, and domestic VAWC.
The Decree on Occupational Health and Safety, No. 22/GOL, dated 05/02/2019	Provides the principles, regulations and measures on occupational safety and health to prevent occupational accidents and rights and interests of workers and employers.
Decision on GAP for Labor Safety, Health and Welfare (No. 0540/MAF, dated 9/02/2011)	An instrument to ensure protection of health, safety and welfare for workers who are working in GAP.
Ethnic Groups	
Constitution of the Lao PDR People's Democratic Republic (amended) No. 63/NA, 08/12/2015	Provides the framework to ensure ethnic groups have the right to protect, preserve and promote the fine customs and cultures of their own tribes and of the nation. All acts creating division and discrimination among ethnic groups are prohibited which is relevant due to the number of ethnic minorities living close to the Project roads.
The Ethnic Minority Policy (1992)	Determines the principles that all ethnic groups should have improved access to services and that all discrimination must be eradicated.
Ethnic Group Consultation Guideline, LFND (2012)	Provides principles and processes to carry out meaningful consultations with, and obtain free, prior and informed consent of, all ethnic groups affected by developments projects in a culturally sensitive manner.

3.2 National ESIA Legislation

13. Decree on Environmental Impact Assessment, No. 389/GOL, dated 20/10/2022 sets out the framework for ESIA in Lao PDR. According to the new Decision on the List of Projects and Activities Triggering IEE and EIA (No. 0358/MONRE, issued in February 2023 (Box 1)), IEE is triggered for the proposed CRRCIP. According to discussions with PONRE and one IEE will be prepared and an Environmental Compliance Certificate ECC) per province will be issued by PONRE.

Box 1: MONRE Decision on the List of Projects and Activities Triggered IEE and EIA (No. 0358/MONRE) related to road	
Group 1: IEE (Article 2, #6)	Group 2: EIA (Article 3, #6)
New construction of district roads, district city roads, rural roads and specific roads. Upgrading or rehabilitation of provincial roads and district roads	New construction of national and provincial roads Construction and upgrading or rehabilitation of existing national roads.

3.3 World Bank Standards and Key Gaps with National Framework

14. The project will follow the World Bank Environmental and Social Standards (ESSs), as well as the World Bank Group Environmental, Health and Safety Guidelines. Based on these policies, the environmental and social risk of the project is categorized as moderate risk.

15. The environmental risk of the project is moderate. Based on the scale and nature of proposed project activities, potential environmental risks and impacts associated with road improvement activities are considered site specific, temporary, and manageable if relevant mitigation measures are properly conducted. However, this ESMF has identified some roads which are close to

protection & conservation forests. Although direct impacts are not anticipated to these sites it is still possible that the Project may have indirect impacts to these areas without further assessment of potential impacts and preparation of site-specific management plans.

16. The social risk of the project is moderate. Social risks and impacts are expected to be site specific and manageable since the project aims to finance improvement works for existing District Roads and Rural Roads within the pre-identified road alignments except those segments where some small adjustments may be needed to improve road safety and climate resilience. Moreover, the density of population in the three target provinces is relatively low ranging from 27 to 50 persons per km2 and the traffic volume, as well as number of road commuters, along the rural roads is small. Land acquisition and resettlement are expected to be minor as all main house structures and assets are located outside the road alignments and Corridor of Impact (COIs). Risks of Occupational Health and Safety (OHS) and Community Health and Safety (CHS) including risks of communicable diseases transmission, and Sexual Exploitation and Abuse and Sexual Harassments (SEA/SH), Gender-Based Violence (GBV) and Violence Against Children (VAC) will be likely low to moderate and manageable due to limited influx of workers anticipated from outside local community, and from neighboring countries if foreign contractors are selected. The World Bank's environmental and social standards applicable to project activities are summarized below.

Table 3: Relevant World Bank ESS

ESS	Relevant	Rationale
ESS1: Assessment and Management of Environmental and Social Risks and Impacts		Project is a road rehabilitation project that includes potential moderate risks and impacts.
ESS2: Labour and Working Conditions		Project involves use of labour during the construction and O&M phases.
ESS3: Resource Efficiency and Pollution Prevention and Management		Project construction phase includes elements that can result in pollution, e.g., through the generation of waste and use of potentially hazardous materials.
ESS4: Community Health and Safety		Project includes working within villages and close to sensitive areas, such as schools and marketplaces.
ESS5: Land Acquisition, Restrictions on Land Use And Involuntary Resettlement		Some minor alignment changes may trigger the need for minor land acquisition and compensation payments.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources		None of the roads are located in nationally protected areas, but some are close and pass-through production forests and protection forests.
ESS7: Indigenous People		The ethnic groups in Project Area[i] are meet the eligibility criteria of World Bank's ESS7.
ESS8: Cultural Heritage		Although no major impacts to cultural heritage are anticipated, chance finds could occur.
ESS9: Financial Intermediaries	X	No financial intermediaries involved in the Project.
ESS10: Stakeholder Engagement and Information Disclosure		ESS10 is relevant given the need to engage with beneficiaries and stakeholders on development activities that affect their lives.

4. Potential Environmental and Social Risk Impacts and Standard Mitigation Measures

4.1 Preamble

17. Whilst the project is expected to deliver a wide range of positive impacts it will also cause some unintended adverse impacts that are associated with improvement of the roads. These adverse impacts, and risks, are considered moderate and will be mostly temporary, local, and manageable through proposed mitigation measures. In the section below, key environmental and social risks and impacts of the project's activities are presented.

4.2 Positive Impacts

18. CRRCIP will benefit the communities in rural Lao PDR by covering approximately 104 villages with a population of about 83,500 beneficiaries in eight districts in three Provinces. Social benefits will be delivered through improved access to markets, medical centers and schools, employment opportunities during the construction phase, improved road safety and reductions in travel times. In addition, the Project will also support community engagement in the O&M phase through establishment and capability development of a road/bridge maintenance group that will be responsible for the improved road system.

4.3 Potential Risks and Adverse Impacts

19. Risks and negative impacts during road rehabilitation and O&M will be short-term, localized, and can be mitigated through the application of specific requirements identified in this ESMF and through the development of additional E&S tools including site specific ESMP (SS-ESMP) and site-specific Biodiversity Management Plans (SS-BMP). Table 4 outlines the key issues and proposed measures to mitigate the potential risks and negative impacts of the Project during project preparations (including design), preconstruction, construction, and O&M phases.

20. During the project preparation, it was confirmed by the PMU that there will be no continued road sections planned in the nearby Protected Areas from Road# 5669 in KM, Road# 6861 in SVN, and Road# 7271 in SRV. Hence there are no possibilities of associated roads in the protected areas. The road section connecting Road# 5683 in KM (i.e. improvement of NR 1F planned under Lao government financing), the continued section of 24.76 km from Road #7271 in SRV and the connecting road of 6.95 km from Road #6933 in SRV (of which maintenance is under the responsibility of Kaengpaoh Dam) are also not located in any Protected Areas. It was advised that the PMU ensures the improvement and construction of these connecting road sections comply with the Lao government requirements for road improvement and construction (No. 0358/MONRE).

21. Further, to minimize the potential E&S risks at the project level, it was agreed that:

- The proposed project will not finance road sections within any Protected Areas with internationally or nationally significant biodiversity value that may cover Conservation Forests and Protection Forests, to avoid risks and impacts on biodiversity of significant value, critical and natural habitats, and ecological functions; and
- The project will not finance any activities that cause the resettlement of over 200 affected persons or 40 affected households or cause more than 40 households to be severely affected, i.e., lose 10% or more of their productive assets including land owned by individual household lost.

4.4 Gender Assessment

22. According to data provided by DPWTs and OPWTs for this ESMF, employment in the field of infrastructure in the Project targeted districts and provinces is male dominated or about 75%. There are no female holding a position of head of department or division or sector. About 19% of the 37% female employment is in deputy head of division or sector. This gender gap needs further assessment during the project implementation and gender action plan (GAP) is recommended as part of project implementation to promote or encourage women in the road or infrastructure sector.

23. Considering all the dimensions of the Project, including all parties involved (implementing agency, project beneficiaries and/or affected people, consultants, consultancy firms and contractors) and Its phases (planning and Implementation), key recommendation for GAP are:

- Enhance participation of women and vulnerable groups in project-related activities through consultation and communication.

- Promote women's employment.

Table 4: Environmental and Social Risks and Mitigation & Management Measures

Risk / Impact	Mitigation / Management Measures
Project Preparation Phase	
Sub-component activity: Detailed Design	
Climate change, specifically increased extreme precipitation events resulting in floods.	Determine the flood line to account for climate change and to inform the Finished Road Level of the pavement as well as the soffits of the bridge decks to reduce inundation and severe flooding. The subgrade of the pavement will be at least 0.5 m above the High Flood Level at the location. Pipe culverts and box culverts less than 10 m span to be designed for a 25-year flood frequency and box culverts more than 10 m span and short bridges designed for a 50-year flood frequency. Where practical and cost effective, use improved asphalt mixtures.
Geohazards, such as earthquakes and landslides affecting infrastructure.	Ensure slopes are designed to limit the potential for erosion and landslides and for structural design to incorporate earthquake resilience.
Bridge drainage affecting water flow	Prepare and implement Bridge Construction Plan (BCP). Ensure no waste materials are dumped in the river. Ensure that no concrete sludge waste is dumped in the river. Ensure that no hazardous liquids are placed within 10 meters of the river. Consult with PONRES to establish the fish spawning periods and fish migration periods of special status species. Specifically relevant to Road# 5669 in Bualapha District.
Community and road user Safety compromised by inadequate designs.	Road design shall make safety a priority, such as by widening and sealing shoulders, where land is available, through better marking and signage, introducing traffic calming measures at critical locations, and measures to safeguard pedestrians' safety, including for women and children from local communities who use roads to travel to and from schools, markets, temples, health center and cemeteries. Special attention will be given to the road safety action plan under Component 3 prepared under Technical Assistance by the Global Road Safety Facility. The project includes support to implement the action plan.
Changes in alignment requiring additional tree cutting	Avoid alignment changes where tree cutting is required or minimize to the extent possible. Avoid any changes of alignment in wetland areas, production and protection forests
Impacts to vulnerable groups	Development of a Gender Action Plan.
Sub-component activity: Changes in Land Use	
Resettlement and land acquisition	Prepare any required Abbreviated Resettlement Action Plans (ARAPs) for impact mitigations and compensation for assets and land lost per the RPF. ARAPs will include provisions and entitlements for compensation and necessary support for PAPs during resettlement transition and livelihood restoration, costs, implementation, and monitoring arrangement. Special attention will be paid to the vulnerable and ethnic groups of PAPs including women, female heads of households, elder people and people with disability who may need additional support for relocation and livelihood restoration.
Pre-construction Phase	
Sub-component activity: ESS documentation preparation	
Non-compliance with ESS	Contractor to prepare and submit C-ESMP in compliance with ESS, the approved SS-ESMP, ESMF and national regulatory compliance requirements. SS-ESMP and C-ESMP to include GRM (as outlined in the SEP) and other plans related to occupational health and safety, traffic and road safety, community health and safety, hazardous and non-hazardous waste, camp site management, emergency response, blasting, borrow area, soil disposal, restoration, SEA/SH risk management (CoC signing) and management of construction induced impact, etc. Contractor to also adopt Labor management procedures as outlined in Annex G.
Impacts to designated sites (national and international)	Prepare a SS-BMP for Road# 5669 in Bualapha District in KM, Road# 6861 in in Sepon District in SVN, and Road# 7271 in Toumlan District in SRV. Guidance for the preparation of the SS-BMP is included in Annex D.
Sub-component activity: Changes in land use	
Physical or economic displacement due to project activities	Compensation will be carried out in accordance with RPF applicable to CRRCIP and as per any ARAP. Compensation of impacts must be completed prior to the commencement of impacts caused.
Removal of crops during growing season.	Ensure harvesting of crops is completed before the construction in alignments where crops may be impacted by works.

Risk / Impact	Mitigation / Management Measures
Sub-component activity: Consultation	
Stakeholders not consulted	Consultation per the Project SEP
Sub-component activity: GRM	
GRM not in place or communicated	Establish and communicate the GRM per the SEP
Sub-component activity: Site Clearance	
Impacts to flora and fauna	Keep all work activities and vehicle movements within the RoW. Avoid any unnecessary removal of vegetation. No chemicals will be used to clear vegetation. Trees cannot be cut without approval from PAFO.
UXO incidents	Follow the UXO Procedures provided by Annex H. Coordinate with ongoing UXO/Mine Actions projects in the relevant provinces. Ensure adequate budget is provided for any UXO surveys / clearance.
Construction Phase	
Sub-component activity: General construction works, including earthworks and construction and operation of worker camps and ancillary facilities such as asphalt plant	
Soil erosion on embankments and slopes and land slides	Vegetation located on the steep slopes of mountains within the project area will also be preserved where possible to minimize the risk of erosion. Re-vegetation of exposed areas including; (i) selection of fast growing and grazing resistant species of local flora; (ii) immediate re-vegetation of all slopes and embankments if not covered with gabion baskets; (iii) placement of fiber mats to encourage vegetation growth. As much as possible, construction activities in hilly areas should be undertaken during the dry season only.
Damage to irrigation structures caused by general construction works	Should any operation being performed by the Contractor interrupt or damage existing irrigation facilities, the Contractors will restore the irrigation appurtenances to their original working conditions within 24 hours of being notified of the interruption.
Noise & Vibration, from construction machinery and vehicles specifically affecting sensitive receptors such as schools and hospitals	Contractor shall comply with the vibration levels according to GOL standards. Due attention will be given to minimize human exposure (1 Hz to 80 Hz) and protection of damage to nearby structures. Completion of works during daytime period only (07.00 – 22.00). Noisy plant or equipment including will be sited as far away as is practicable from noise sensitive buildings and use noise barriers / fences as appropriate.
Dust & Emissions from earthworks and movement of construction equipment and vehicles.	Prepare, as part of C-ESMP and air quality plan. The Contractor will ensure that no burning of waste materials on site. Cover all trucks carrying loose or potentially dusty materials (soil, mud, etc.) to and from construction site. Water or sprinkle the construction areas periodically, especially at site located near residential area; avoid overloaded of trucks; routinely clean public roads and access routes. Sheet, seal, or damp down unavoidable stockpiles of excavated material held on site, where required. Seal or re-vegetate completed earthworks as soon as reasonably practicable after completion
Improper management of waste materials, inert, liquid and hazardous.	Preparation and implementation of a waste management and recycling plan as part of CEMPs. Provide refuse containers at each worksite. Where possible, surplus materials will be reused or recycled. Maintain all construction sites in a cleaner, tidy and safe condition. Where spoil material is generated, the Contractor will be responsible for preparing a method statement of the safe disposal of spoil material at approved locations. Storage of hazardous waste will be in specific secure locations as identified by the waste management plan.
Leaks of fuel and oil	Hazardous liquids must be stored within impermeable bunds.
Wastewater disposal / discharge including stormwater from work sites and camps	Wastewater arising on the site will be collected, removed from the site via a suitable and properly designed temporary drainage system and disposed of at a location and in a way that will cause neither pollution nor nuisance. There will be no direct discharge of sanitary or wash water to surface water. Disposal of materials such as, but not limited to, lubricating oil and onto the ground or water bodies will be prohibited. Construction and work sites will be equipped with sanitary latrines that do not pollute surface waters. Discharge of sediment-laden construction water directly into surface watercourses or wetlands will be forbidden. Sediment laden construction water will be discharged into settling lagoons or tanks prior to final discharge. Spill clean-up equipment will be maintained on site.
Encroachment to wetlands	Road 6507 in Savannakhet is located close to wetlands. Contractor shall prepare a

Risk / Impact	Mitigation / Management Measures
	method statement for working in these areas which will identify specific areas to be avoided and include measures to ensure no encroachment by workers into this area. Routine toolbox training to staff raising awareness of this area at the requirements of the method statement will be provided.
Encroachment into production forests by workers and machinery.	Production forests are forests including natural forests and planted forests designed for the supply of wood and NTFPs as commodities to fulfil the requirements of natural socio-economic development and people's livelihood. Specifically applicable to: Road #5682 in Xebangfai District, Road# 5683 in Xebangfai District, Road# 6933 in Salavan District, Road# 6909 in Laongam District. Workers will be given regular toolbox training to ensure they do not encroach in the production forests during works (or for collection of wood fuel) and that tree cutting in these areas will be limited to the right of way with the approval of PAFO.
Encroachment into protection forests by workers and machinery.	No roads are located within protection forests. The following roads are within 5km: Road# 7271 in Toumlan District, Road# 6913 in Laongam District , Road# 6861 in in Sepon District, Road# 5669 in Bualapha District. Workers will be given regular toolbox training to ensure they do not encroach in the protection forests during works (or for collection of wood fuel) and that tree cutting in these areas will be limited to the right of way with the approval of PAFO. To monitor potential impacts for these roads remote sensing monitoring will be completed by the Contractor, pre-construction, mid-constriction and post-construction (years 1, 2 & 5 of O&M phase). Poaching or illegal tree cutting shall be a sackable offence.
Encroachment into conservation forests & KBAs by workers and machinery.	Road# 6861 in in Sepon District is within 1.5km of Dong Phou Vieng NPA. Road# 7271 in Toumlan District is within 1km of the Dong Phou Vieng KBA. Road# 5669 in Bualapha District is within 3km of the Hin Namno and within 2km of the XE Bangfai River Cave System KBA. While it is considered unlikely that Contractor's workers will venture into the park to poach animals or cut trees, the risk, however small, exists. Therefore, the Contractor will be responsible for the preparation of SS-BMPs for these roads and for implementing the mitigation measures proposed in these documents. Guidance for the preparation of the SS-BMP is included in Annex D. As with protection forests, monitoring of potential impacts for these roads will involve remote sensing monitoring completed by the Contractor, pre-construction, mid-constriction and post-construction (years 1, 2 & 5 of O&M phase). Poaching or illegal tree cutting shall be a sackable offence.
Introduction of invasive species	A washdown procedure will be employed to prevent invasive weed spread and potential contamination of the project area from the receiving environment. Non-invasive local plant species will only be used for revegetation
Excavation of contaminated soils from areas around gas stations	Complete a risk assessment to determine the potential presence of contamination in areas to be excavated around gas stations. Remove any potentially contaminated soil as hazardous waste.
Emergency situations, e.g., fire and explosions	Preparation and implementation of an Emergency Response Plan to be included as part of C-ESMPs.
Accidents and traffic disruptions involving construction vehicles	Prepare and implement a traffic management plan as part of C-ESMPs (See Annex I). Provide information to the public about the scope and schedule of construction activities. Allow for adequate traffic flow around construction areas. Provide for road safety campaigns and enforcement of road safety regulations, specifically in villages and close to schools. Provide adequate signalization, appropriate lighting, well-designed traffic safety signs, barriers and flag persons for traffic control.
Access to homes and businesses impeded	Ensure alternative access to houses as soon as possible after the start of the excavation work during the civil works. Compensation for the impacts on PAHs' livelihood and businesses due to contractors failure to maintain/provide access facilities and the prolonged access lost (beyond the agreed work schedule) required to be paid by contractors. Ensure alternative access to the communities, households, schools, temples, markets, health centers and cemeteries as soon as possible after the start of the excavation work during the civil works. Access roads damaged during transport of construction materials and other project related activities shall be reinstated within 1 week upon completion of construction works.
Damage and disruption to Utilities & Property	During construction all power lines and water pipes in the Project Corridor will be kept operational. If any temporary disruption to water or power supplies caused by construction activities is absolutely necessary, the Contractor must warn the affected population and receive approval from the Engineer for the disruption at least 24 hours in advance and no disruption will last longer than 4 hours.

Risk / Impact	Mitigation / Management Measures
	Immediately repair (not more than 10 days) any damage caused by the Project to community and/or private facilities and/or trees. The contractor to pay adequate compensation to affected parties, as necessary.
Community health and safety impacts from construction equipment and vehicles.	Provision of information to local communities about the contractor's policies and responsibilities, including the Contractor's Code of Conduct and minimum working age. Ensuring workers sites are situated (at least 500m) from schools and/or other areas where children congregate. Develop and implement a Community Health and Safety Plan. Subcontract with a Service Provider to provide an HIV Awareness Program to the Local Community Working hour in schools, markets, temples, health center and cemeteries will be informed and consulted with village authority, village elders, principles and in charge person. Provide traffic safety measures around markets, schools and hospitals during works within 500m. Prepare and implement Traffic Management Plan (See Annex I).
Cultural heritage chance finds during excavation and vegetation removal.	Follow chance find procedure provided as Annex E.
Potential major issue and impact on the ethnic groups and vulnerable groups is the risk of excluding them from consultation on road work design and workplan, implementation, and benefit sharing through employment opportunities and compensation (if applicable) for possible minor land and assets lost.	MPWT will hire social consultants with facilitation skills to help carry out meaningful consultation with the ethnic villages and ethnic groups in collaboration with the National University of Laos. Enhance participation of women and vulnerable groups in project-related activities through consultation and communication. Provide women and vulnerable groups with safer access in the utilization of the project road after improvement. Promote women's employment. Build technical capacity in gender-friendly, safe, and accessible road infrastructure.
Sub-component activity: Borrow pits & Quarries	
Selection of borrow pits in sensitive sites. Improper management and safety at sites and lack of restoration at completion of works	Sourcing of quarry and borrow materials from existing licensed sites shall be preferred over establishment of new sites as much as possible. Quarries and borrow pits shall not be established in national, provincial, district protected forests, productive land, and others ecologically sensitive and protected areas. In case the Project will involve new quarry/borrow sites/spoil disposal sites, environmental assessment and approvals will be needed. Such sites shall be located over 500 m away from residential, school, hospital, and other sensitive receptors. Fence all borrow pits and provide warning signs not to enter. Full reinstatement of pits shall follow on completion of works.
Sub-component activity: Temporary Land use	
Temporary economic displacement, small-scale land acquisition, relocation of minor structures and/or access restriction and construction impacts that could affect structures.	Carry out negotiations with the landowners for obtaining their consent for temporary use of lands for construction camp/ borrow areas/Debris Disposal Area etc. per the RPF. Compensate for accidents in accordance with RPF.
Sub-component activity: Worker employment	
Worker's health and safety resulting from unsafe working conditions and travel, (ii) employment discrimination	LMP (Annex G of the ESMF) should be adhered by all contractors/ sub-contractors which includes protection of all workers engaged to work on and or supply materials to the project related activities in compliance with the Labor Law and WB ESS2, including prohibition on child labor, zero tolerance of GVB and VAC, awareness, and protection of all workers from sexually transmitted disease and OHS. Labor Management Procedures (LMP) will be applied, per Annex G of the ESMF. Accommodation shall be provided in line with EBRD/IFC guidelines for worker accommodation.
SEA/SH & Child Labour	Strict Code of Conduct for workers with no tolerance for physical or verbal abuse of women or children. Training to workers on maintaining good community relations, with emphasis on proper conduct around women and children, GBV and VAC. Children prohibited from construction site and worker's camp.
Worker's behavior at site affecting other workers and	As part of the worker orientation program, Contractors' staff shall sign a Code of Conduct relating to his personal behavior on site, see Annex G. Make sure, all

Risk / Impact	Mitigation / Management Measures
community	workers understand and accept all terms and obligations in Code of Conducts, prior to sign and/or thump stamp. Violations of the code of conduct may lead to dismissals.
Labour influx	MPWT will opt for national competitive bidding method to encourage local contractors to undertake the road works and the contractors will be encouraged to hire local labors, including female workers, from local communities to the extent possible. Contractor sub-contracts with a Service Provider to provide an HIV Awareness Program to the Contractor's Personnel and the Local Community as soon as practicable after the Contractor's Personnel arrive at the Site.
O&M Phase	
Sub-component activity: General O&M Works	
General maintenance works resulting in noise, dust, etc.	Per the measures proposed for the construction phase.
Encroachment into forests and wetlands	Workers will be given regular toolbox training to ensure they do not encroach in the production forests, protection forests, NPAs or KBAs during works (or for collection of wood fuel) and that tree cutting in these areas will be limited to the right of way with the approval of PAFO. Poaching or illegal tree cutting shall be a sackable offence.
Encroachment of agricultural activities and new settlements to the remaining road-side forests	Contractors shall monitor the road-side encroachment to the forests and report to the supervision firm/PMU. MPWT/DOR will engage with local authorises/PAFO for enforcement in accordance with national laws and regulations on forestry and land uses, and for awareness raising of communities on importance of forests for their ecosystem services.
Road safety for workers, community and road users	Per the measures proposed for the construction phase.
Sub-component activity: Road Operation	
Climate change impacting upon structures	Shorten maintenance periods to accommodate changes in precipitation and temperature. Increasing monitoring frequencies to ensure structures are enduring climate change pressures. Monitoring the deformations of the pavement layers. Increasing financial and technical resources for more frequent maintenance and repairs.
GHG Emissions from operational traffic	Road improvement activities will have low impact on Green House Gas emissions due to reasons that the proposed project roads have very low traffic volumes, and the proposed roads are also used for non-motorized transport by the rural population.
Human trafficking	The Project through Sub-Committee for the Advancement of Women and Mother and Child of DPWT in the project provinces with the support of the focal point at the Personnel Department of MPWT and PTI in charge of the Advancement of Women and Mother and Child would be in charge shall undertake comprehensive outreach raising awareness on human trafficking to the vulnerable and ethnic women and children in the project area using the information education communication materials already developed for anti-human trafficking by different projects. Contractor Code of Conduct be communicated to local people and participatory monitoring by local people shall be encouraged. Beyond Project level management of this issue the GoL should continue to increase efforts to disseminate, implement, and train police and border officials on the national victim protection and referral guidelines.
Illegal trades of timber and wildlife products from nearby Conservation Forests / Protected Areas and Protection Forests	Road improvement will not significantly increase access to Dong Phou Vieng NPA, which is readily accessed by other existing provincial roads. Xe Champhon KBA can also be easily accessed by other national and provincial roads. Access to the Xesalane Protection Forest will be largely prevented by existing topography, plantations and a river which act as a buffer to this site. Bolevan National Protection Forest is approximately 4km from the nearest project road. None of these sites are at significant risk of illegal trade of timber and wildlife products due to the rehabilitation of the project roads. Xetanoun Phou Nark Protection Forest is however within 700m of Road# 7271 in Toumlan District. Further, this road is within proximity of the Dong Phou Vieng KBA and is possibly at risk of illegal timber/wildlife trading through improved access to the forest area. A SS-BMP is required for this road which will need to include specific mitigation measures to guard against illegal trading of products from these areas. This should include coordination with relevant authorities and communities responsible for the

Risk / Impact	Mitigation / Management Measures
	management of these designated sites to monitor potential impacts during the O&M phase.
Road safety, for both road users and local community	The road safety action plan under Component 3 prepared under Technical Assistance by the Global Road Safety Facility should ensure that road safety is improved.
Dust and Emissions	None required. Improved road conditions should reduce dust impacts. Traffic levels are not anticipated to increase significantly to effect air quality.
Noise and Vibration	None required. Traffic levels are not anticipated to increase significantly to significantly impact noise levels. Operational phase vibration will not be significant.

5. PROCEDURES AND IMPLEMENTATION ARRANGEMENTS

5.1 Environmental and Social Risk Management Procedures – Component 1

5.1.1 General

24. The environmental and social risk management procedures for Component 1 are summarized in Table 5.

Table 5: Project Cycle and E&S Management Procedures

Project Stage	E&S Stage	E&S Management Procedures
a. Assessment and Analysis: Subproject identification	Screening	• During subproject identification, ensure subproject eligibility by referring to the Exclusion List in Box 2 below. • For all activities, use the Screening Form in Annex C to identify and assess potential environmental and social risks and impacts, and identify the appropriate mitigation measures for the subprojects. • Identify the documentation, permits, and clearances required under the government's Environmental and social legislative framework.

b. Formulation and Planning: Planning for subproject activities, including human and budgetary resources and monitoring measures	Planning	• Based on Screening Form adopt and/or prepare relevant environmental and social procedures and plans.
		• Prepare a Site Specific Environmental and Social Management Plans (SS-ESMP) all subprojects (roads) and Site-Specific Biodiversity Management Plans (SS-BMPs) for:
		  ○ Road# 5669 in Bualapha District in KM,
		  ○ Road# 6861 in in Sepon District in SVN, and
		  ○ Road# 7271 in Toumlan District in SRV
		• Submit SS-ESMPs and SS-BMPs for each sub-project road for prior review and no objection by the World Bank prior to initiating bidding processes for subprojects.
		• Ensure that the contents of the SS-ESMPs and SS-BMP comply with Annex F and Annex D respectively; and they are shared with relevant stakeholders in an accessible manner and consultations are held with the affected communities in accordance with the SEP.
		• Complete all documentation, permits (ECC), and clearances required under the government's Environmental Regulation.
		• If required, prepare and complete implementation of any Abbreviated Resettlement Action Plan (ARAP) in accordance with the Resettlement Policy Framework (RPF) prior to starting construction activities.
		• Train staff responsible for implementation and monitoring of plans, per table 7.
		• Incorporate relevant environmental and social procedures and plans into contractor bidding documents, train contractors on relevant procedures and plans.
		• Based on the SS-ESMP, the selected contractor is required to prepare a Contractor-ESMP (C-ESMP) to be implemented during the road construction work. The work will not start until the C-ESMP is reviewed and endorsed by PMU with recommendation from the supervision consultant.
		• Conduct UXO risk assessment (and survey and clearance if required)

Project Stage	E&S Stage	E&S Management Procedures
		per Annex H.
c. Implementation and Monitoring: Implementation support and continuous monitoring for projects	Implementation	• Continue awareness raising and/or training on SS-ESMPs, SS-BMPs, ESCP, and SEP with focusing on Community Health and Safety (CHS) and Occupational, Health and Safety (OHS). • Ensure implementation of plans (SS-ESMPs (and CEMPs), SS-BMPs, ESCP, SEP, ARAPs) through regular site visits, planned monitoring and regular reporting (monthly reports from contractors and supervising firms and WB Bi-Annual monitoring reports from PMU as per ESCP). • Ensure functioning of the GRM and track grievances/beneficiary feedback. Notify the WB within 48 hours after learning of the incident or accident.
d. Review and Evaluation: Qualitative, quantitative, and/or participatory data collection on a sample basis	Completion	• Assess whether plans have been effectively implemented. • Ensure that physical sites are properly cleaned-up, restored, and handed-over. • Conduct awareness raising local communities on road safety, ownership, and sustainable use of subprojects.

25. More detail for each stage is provided below.

5.1.2 A Note on Implementation Structure

26. Specific information regarding implementation arrangements are provided below under Section 5.4. However, for clarity, the following summarize the responsibilities:

i. **MPWT** – Executing Agency

ii. DOR (of MPWT) **Project Management Unit (PMU)** – the PMU/DOR is responsible for management, procurement, contracting and financial management of the Project as well as monitoring the implementation progress against the agreed performance indicators and produce period progress reports. The PMU/DOR is responsible for managing the detailed design and also provides oversight of Project implementation and consultation with key stakeholders and the public including the management of Supervision firm during Project implementation.

iii. **DPWT Project Implementation Unit (PIU)** – Supports the PMU.

iv. **EDPD of PTI** - responsible for supervision, capacity building/training, compliance monitoring and reporting of environmental and social aspects.

v. **Contractor** – completes road construction works and O&M activities.

vi. **Supervision Firm** – Supervises construction on behalf of the DOR (also referred to as Implementation Support and Monitoring Consultant (ISMC))

vii. **E&S Consulting Firm** – Prepares Initial Environmental Examinations (IEE) and assists PMU in preparation of SS-ESMPs and other relevant E&S tools.

viii. **The Safeguards Monitoring Working Group (SMWG)** - responsible for ensuring compliance with GOL regulations during construction including key local communities affected during construction and those to be involved during operations phase.

5.1.3 Sub-project Assessment and Analysis

27. As a first step, all proposed activities will be screened by the PMU to ensure that they are within the boundaries of the Project's eligible activities, and they are not considered as activities listed on the E&S Exclusion List in the box 2 below.

Box 2: Exclusion List

1. Weapons, including but not limited to mines, guns, ammunition, and explosives

2. Support of production of any hazardous good, including alcohol, tobacco, and controlled substances
3. Any construction in protected areas or priority areas for biodiversity conservation, as defined in national law
4. Activities that have the potential to cause any significant loss or degradation of critical natural habitats, whether directly or indirectly, or which would lead to adverse impacts on natural habitats
5. Activities that involve extensive harvest and sale/trade of forest resources (post, timber, bamboo, charcoal, wildlife, etc.) for large-scale commercial purposes
6. Activities involving changing forestland into agricultural land or logging activities in primary forest
7. Purchase or use of banned/restricted pesticides, insecticides, herbicides, and other dangerous chemicals (banned under national law and World Health Organization (WHO) category 1A and 1B pesticides)
8. Activities that involve the use of international waterways
9. Any activity affecting physical cultural heritage such as graves, temples, churches, historical relics, archeological sites, or other cultural structures
10. Activities that may cause or lead to forced labor or child abuse, child labor exploitation or human trafficking, or subprojects that employ or engage children under the age of 18, in connection with the project in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral, or social development
11. Any activity on land that has disputed ownership or tenure rights
12. Any activity with significant environmental and social risks and impacts that require an Environmental and Social Impact Assessment (ESIA)
13. Any activity that will require Free, Prior and Informed Consent (FPIC) as defined in ESS7
14. Any activity and road sub-project that will cause or require resettlement of more than 200 people (or 40 households) and/or more than 40 households to be severely affected, i.e., lose 10% or more of their productive assets including land owned by individual household lost.

28. As a second step, the DPWT PIU and Supervision Firm will use the E&S Screening Form in Annex C to identify and assess relevant environmental and social risks specific to the activities and identify the appropriate mitigation measures. The Screening Form lists the various mitigation measures and plans that may be relevant for the specific activities (such as SS-ESMP covering CHSP, OHSP, the Labor Management Procedures, Chance Find Procedures, etc.), SS-BMP, and ARAPs.

29. The DPWT PIU and Supervision Firm will also identify the documentation, permits, and clearances required under the government's Environmental Regulation.

5.1.4 Sub-project Formulation and Planning

30. Based on the process above and the Screening Form, the PMU through the E&S Consulting Firm will develop relevant SS-ESMPs, LMP, SS-BMPs and ARAPs based on Annexes D, F, G, and the RPF. The PMU will review and approve SS-ESMPs and other applicable forms. The contents of these plans will be shared with relevant stakeholders in an accessible manner, and consultations will be held with the affected communities on the environmental and social risks and mitigation measures in accordance with the SEP. All SS-ESMPs, SS-BMPs and ARAPs will also be submitted to the World Bank for prior review and no objection.

31. The EDPD/PTI through the E&S Consulting Firm will also prepare an Initial Environmental Examination (IEE) covering all subprojects for each province and obtain ECC from PONRE required under the EIA's Decree (2022) before any subprojects begin.

32. If required, the PMU will prepare and ensure ARAP is implemented in accordance with RPF before any subprojects, with acquisition of private land and relocation of structures, begin. The compensation will be paid to the PAPs/PAHs via PAPs' bank account to ensure transparency and security.

33. The PMU will also ensure that a UXO risk assessment is completed per the requirements of Annex H. If required, the PMU will engage an authorized contractor to carry out UXO survey and clearance before any subprojects begin.

34. At this stage, staff who will be working on the various subproject activities should be trained in the environmental and social management plans relevant to the activities they work on. The PMU, PTI and E&S Consulting firm should provide such training to field staff.

35. The PMU should also ensure that all selected contractors, subcontractors, and vendors understand and incorporate environmental and social mitigation measures relevant to them as

standard operating procedures for civil works. The PMU, PTI and E&S Consulting firm should provide training to selected contractors to ensure that they understand and incorporate environmental and social mitigation measures; and plan for cascading training to be delivered by contractors to subcontractors and vendors. The PMU, PTI and E&S Consulting firm should further ensure that the contractors, subcontractors, or communities responsible for ongoing operation and maintenance of the investment have received training on operations stage environmental and social management measures as applicable.

5.1.5 Implementation and Monitoring

36. During implementation, the PMU will ensure that further the environmental and social risk screening is carried out to identify possible new risks and confirmed the risks identified in the ESMF for each road section after the detailed design and corridor of impacts are determined and site-specific tools are prepared before the work starts. PMU will also conduct quarterly compliance monitoring of these and submit a report to WB on a biannual basis. EDPD/PTI will also ensure that the Project is also in compliance with GOL requirements regarding E&S requirements and standards (such as ECC conditions).

37. At the Project level, one (1) qualified Senior Environmental and Social Consultant (SESC) as a part time, one (1) Environmental and Social Consultant (ESC) on a full time basis, and one (1) supporting staff (full time) will be recruited to assist EDPD/PTI on the implementation, capacity building/training and compliance monitoring and reporting of the ARAPs, SS-ESMPs, SS-BMPs , and SEP. At sub-project level, a full time E&S supporting staff per province (3 staffs for 3 provinces) will be recruited to assist PIU for compliance monitoring of C-ESMPs, SS-BMP and SEP.

38. At a minimum, the reporting will include (i) the overall implementation of E&S risk management instruments and measures, (ii) any environmental or social issues arising as a result of project activities and how these issues will be remedied or mitigated, including timelines, (iii) Occupational Health and Safety performance (including incidents and accidents), (iv) community health and safety, (v) stakeholder engagement updates, in line with the SEP, (vi) public notification and communications, (vii) progress on the implementation and completion of project works, and (viii) summary of grievances/beneficiary feedback received, actions taken, and complaints closed out, in line with the SEP. Reports from the local levels will be submitted to the PMU, where they will be aggregated and submitted to the World Bank on biannual basis.

39. Throughout the Project implementation stage, the PMU through the EDPD/PTI will continue to provide training and awareness raising or consultation to relevant stakeholders, such as staff, selected contractors, and communities, to support the implementation of the environmental and social risk management mitigation measures. An initial list of training needs is proposed below, in Section 5.5.

40. The PMU with EDPD/PTI, Supervision Firm and PIU will also track grievances/beneficiary feedback (in line with the SEP) during project implementation to use as a monitoring tool for implementation of project activities and environmental and social mitigation measures.

41. Last, if the PMU and PIU becomes aware of a serious incident in connection with the project, which may have significant adverse effects on the environment, the affected communities, the public, or workers, it should notify the World Bank within 48 hours of becoming aware of such incident. A fatality and lost time injury is automatically classified as a serious incident, as are incidents of forced or child labor, abuses of community members by project workers (including SEA/SH, gender-based violence incidents), unexpected disease outbreak, displacement without due process (forced eviction), violence and protests, or kidnappings.

5.1.6 Review and Evaluation

42. Upon completion of Project activities, the PMU, through the PTI, PIU and Supervision Firm will review and evaluate progress and completion of project activities, and all required environmental and social mitigation measures. Especially for civil works, the PMU, through the PTI, PIU and Supervision Firm will monitor activities regarding site restoration and landscaping in the affected

areas to ensure that the activities are done to an appropriate and acceptable standard before closing the contracts, in accordance with measures identified in the SS-ESMPs, SS-BMPs and other plans. The sites must be restored to at least the same condition and standard that existed prior to commencement of works. Any pending issues must be resolved before a subproject is considered fully completed and handed over. PMU, through the PTI, PIU and Supervision Firm will prepare the completion report describing the final status of compliance with the E&S risk management measures and submit it to the World Bank.

5.2 Component 2 and 3

43. The MPWT will ensure that technical assistance activities under the Project are carried out in accordance with Terms of Reference acceptable to the Bank, that are consistent with the ESSs. They will also ensure that the outputs of such activities comply with the Terms of Reference.

5.3 Component 4

44. Contingent Emergency Response Component (CERC) will be established to support MPWT in case of an Eligible Crisis or Emergency in responding promptly and effectively to it. A Contingent Emergency Response Manual included as an Addendum to the ESMF will be prepared and applied under this component. The ESMF Addendum will include selection and eligibility criteria and simplified process of risk screening, ESF instrument preparation and implementation. The same institutional arrangement will be used to implement, monitor, and report on the ESF compliance by the CERC activities including the project level GRM.

5.4 Implementation Arrangements

5.4.1 General

45. At Project level, DOR through the PMU is responsible for ensuring effective and timely oversight of the implementation of SS-ESMPs, SS-BMPs and ARAPs. They are also responsible for submitting monitoring reports periodically to WB. EDPD/PTI as member of PMU, is responsible for providing technical guidance to PMU/DOR and PIUs/DPWTs on the implementation, capacity building/training and compliance monitoring and reporting of the SS-ESMPs, SS-BMPs and ARAPs reviewed and agreed with WB. PTI will conduct quarterly monitoring of ESS compliance and submit a report to WB on a biannual basis. EDPD/PTI will also ensure that the Project is also in compliance with GOL requirements regarding ESS. It was agreed with PONRE that an Initial Environment Examination (IEE) per province will be prepared, and an Environmental Compliance Certificate (ECC) will be issued by PONRE. The Safeguards Monitoring Working Group (SMWG) will be chaired by DPWT and comprise representatives from key agencies responsible for ensuring compliance with GOL regulations during construction including key local communities to affected during construction and those to be involved during operations phase.

46. At the subproject level, the PIUs/DPWTs and Supervision Firm will be responsible for the day-to-day compliance monitoring on sites, including ensuring timely and effective implementation of the SS-ESMPs, SS-BMPs during preconstruction, construction, and operations including those related to ARAP planning and implementation and monitoring of the Project and all safety related on the ground as well as close consultation between contractor and LA/LC and submit quarterly progress reports to PMU/DOR and PTI. The PIUs/DPWTs will also liaise with the concerned local agencies and authorities to ensure effective and timely coordination among contractor, supervision firm, and local authorities and local communities (LA/LC) and identify issues arising from sites and propose solutions to the PMU/DOR and EDPD/PTI and/or higher-level management. The PIUs/DPWTs will also be responsible for establishment of the SMWGs to ensure compliance monitoring with the ECC and other GOL regulations while PMU/DOR will sign a contract with the supervision firm and the contractor and provide budget for PIUs for the planning and compliance monitoring by the SWMGs and other associated costs while EDPD/PTI will ensure effective fund flow from PMU/DOR to SMWGs to performance their functions. The member of SMWG consists of DPWT; Provincial Department of Natural Resources and Environment (PONRE); Provincial Lao Women Union (PLWU); Provincial Department of Labour

and Social Welfare (DOLSW); the Lao Front for National Development (LFND); and Provincial Assembly (PA).

47. The Supervision Firm is responsible for supervision and monitoring of works contracts will also be responsible for review and approval of the Contractor Environmental and Social Management Plan (C-ESMP) and day-to-day supervision and monitoring of contractor compliance with the C-ESMP during the implementation of the Project including ensuring full compliance with the ESS measures as required by the WB and GOL. The Supervision Firm will also help PMU to prepare and submit the bi-annual Environmental and Social Monitoring Report (ESMR) to the WB for review prior to its implementation support mission.

48. Local contractors will be required to prepare, implement, daily self-monitoring and monthly reporting of C-ESMP in accordance with the approved SS-ESMP, SS-BMP, SEP and ECC conditions issued by PONRE. This provision will be specified in the Bidding Document (BD) and Contractor Document (CD). Contractors will be expected to disseminate and create awareness within their workforce of environmental and social E&S risk management compliance for their effective implementation.

49. Table 6 below summarizes the roles and responsibilities regarding the implementation arrangements for environmental and social management.

Table 6: Implementation Arrangements

Level/ Responsible Party	Roles and Responsibilities
DOR/PMU and EDPD/PTI	1. Provide support, oversight, and quality control to field staff working on environmental and social risk management. 2. Collect, review, and provide quality assurance and approval to Screening Forms and SS-ESMPs, SS-BMPs and ARAPs as relevant. Keep documentation of all progress. 3. Oversee overall implementation and monitoring of environmental and social mitigation and management activities, compile progress reports into the ESMR from local levels/subprojects, and send to the World Bank on a biannual basis. 4. Train central and field staffs and contractors who will be responsible for implementing the ESMF. 5. Ensure that all Bid documents and contract documents (BD / CD) include all relevant E&S risk management provisions per screening forms, SS-ESMPs, SS-BMPs and ARAPs.
DPWTs/PIUs and Supervision Firm	1. Ensure project activities do not fall under the Negative List. Fill out Screening Forms for relevant subproject activities and submit forms to the national level. 2. If relevant, complete site-specific ESMPs for subproject activities and submit fthe plans to the national level with support to the E&S consultants. 3. Oversee daily implementation and monitoring of environmental and social mitigation measures, and report progress and performance to the PMU monthly. 4. Provide training to local contractors and communities on relevant environmental and social mitigation measures, roles, and responsibilities. 5. Ensure GRM is established and functioning for each road sub-project, and monitored and reported on a regular basis as required in the SEP separately prepared. 6. Compile quarterly E&S reports and report to PMU and PTI.
Local contractors	1. Comply with the Project's environmental and social mitigation and management measures as specified in SS-ESMPs, SS-BMPs and ARAPs, and BD/CD, as well as national and local legislation. 2. Take all necessary measures to protect the health and safety of workers and community members, and avoid, minimize, or mitigate any environmental harm resulting from project activities. 3. Prepare and submit E&S progress report to DPWTs/PIUs and Supervision Firm on a quarterly basis.

5.4.2 Project Support

50. To cope with a growing number of road and infrastructure projects in the country and ensure adequate in-house capacity to comply the ESF requirements under the proposed project, the MPWT is proposed to hire a team of E&S consultants including young graduates as junior consultants with the right technical background to support PMU in ESF documents preparation,

implementation and monitoring on the ground. Due to the current shortage of qualified national E&S consultants in Laos, the junior consultants with required technical background will be recruited and guided by a small number of senior or more experienced consultants during the course of project implementation. MPWT has also established a partnership with the National University of Laos (NUOL), Faculty of Social Sciences (FSS), LWU and LFND to carry out social impact assessment, consultation and monitor resettlement plans and stakeholder engagement plans applied under the above listed road projects.

5.5 Proposed Training and Capacity Building

51. A Capacity assessment was made during the preparation of this ESMF through the Key Informant Interview (KII). At the project/national level DOR and PTI under MPWT have experience working with several World Bank financed projects, but only limited experience of implementing E&S risks management under the WB ESF especially the ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources as well as English language and reporting skills. Participating local government departments of the targeted provinces are known to have limited experience of implementing E&S risks management with the WB's financed projects, institutional capacity constraints and current systems for E&S risk management are weak. Successful implementation of the Project will depend, among others, on the effective implementation of the environmental and social risk management measures outlined in this ESMF. Training and capacity building will be necessary for the key stakeholders to ensure effective implementation of the ESMF, SEP, and other environmental and social documents. An initial training approach is outlined in the table below. To the extent possible, training on environmental and social risk management will be integrated into the project cycle and operational procedures. Given the need to raise awareness among project workers and stakeholders at many levels, a cascading model is proposed where information will follow from the national level to the field levels.

52. Table 7 below summarizes the proposed ESF trainings and workshops for the CRRCIP key personnel needed to strengthen capacity.

Table 7: Proposed Training and Capacity Building Approach

Level	Responsible Party	Audience	Topics
National level	E&S Firm with support from the World Bank as needed	National staff responsible for overall implementation of ESMF including: DOR PTI/EDPD	• ESMF and approach • Preparation of SS-ESMPs, SS-BMPs and ARAP (if needed) in accordance with the ESCP, ESMF, RPF and SEP • Biodiversity impacts, mitigation & monitoring • E&S compliance monitoring and reporting • Incident and accident reporting • Application of LMP, including Code of Conduct, incident reporting, SEA/SH, COVID-19 mitigation • UXO Management • Application of SEP and the grievance/beneficiary feedback mechanism
Provincial and district levels	PTI/EDPD with assistance from E&S Firm	Supervision ESS team Contractors' ESS team DPWTs/PIUs SMWGs GRMC	• ESMF and approach • Preparation, implementation, monitoring and reporting of Contractor's ESMP (C-ESMP) in accordance with the approved SS-ESMP, SS-BMP and SEP • Biodiversity impacts, mitigation & monitoring • Incident and accident reporting (ESIRT) • Application of LMP, including Code of Conduct, incident reporting, SEA/SH, COVID-19 mitigation • Application of SEP and the grievance/beneficiary feedback mechanism • UXO Management • IT, English and report writing trainings for DPWTs/PIUs and OPWTs
Local/site	Supervision	Supervision firm	• Application of SEP and the grievance/beneficiary feedback

Level	Responsible Party	Audience	Topics
level	Firm and contractors	staffs Contractor staffs and workers	mechanism • Application of LMP, including OHS, CHS, Worker Code of Conduct, incident reporting (ESIRT), SEA/SH, COVID-19 and also other types of (air, water and waste) born communicable diseases and possible outbreak • OHS measures and Personal Protective Equipment • UXO Management • COVID-19 mitigation • Community health and safety issues • Biodiversity impacts, mitigation & monitoring • Application of Contractor's ESMP • Workers' grievance redress
Community level	Supervision firm and contractors	Village authorities and local people: ethnic groups, disable and, vulnerable groups and females	• Project information: project activities and schedule • Community health and safety issues and risk management measures • SEA/SH issues, prevention measures • Grievance redress

5.6 Estimated Budget

53. The following table lists estimated budget items for the implementation for the ESMF, which have been included in the overall project budget. The SEP will be shared between PTI (included in this ESMF budget), supervision firm and contractor costs.

Table 8: ESMF Implementation Budget

Activity/Cost Item	Potential Cost (USD)
1. Trainings for staffs (venue, travel, refreshments etc.)	30,000
2. Trainings for Supervision Firm and contractors (venue, travel, refreshments, etc.)	5,000
3. Printing of awareness raising materials / grievance redress materials	10,000
4. Software for data collection / supervision / monitoring / grievance redress	40,000
5. Cost of obtaining clearances or permits (IEE/ECC)	50,000
6. Cost of UXO assessments and clearances or permits	Contractor cost
7. Implementation of site-specific ESMPs and other site-specific plans (SS-BMPs and SEP)	Contractor cost
8. Environmental and social consultant and supporting junior consultants (for different levels): • one (1) qualified senior Environmental and Social Consultant (SESC) as a part time - mainly for planning, capacity building, preparation of SS-ESMPs and IEEs for 300 working days during construction phase • one (1) Environmental and Social Consultant (ESC) on a full time basis for 2 years during construction phase • four(4) supporting staffs (full time), one to be appointed at the PMU/PTI and the others at PIU in the 3 provinces, to support management of ESHS risks and impacts of the Project for 4 years	217,000
9. Travel **and accommodation budget for field works (data collection for SS-ESMP and IEE preparation, compliance monitoring, consultation with local communities)**	**169,000**
• PMU/PTI Compliance motoring on a quarterly basis for 5 years	50,000
• PIU/SMWGs (3 provinces) on a quarterly basis for 5 years f	50,000
• Local community participatory monitoring (108 villages)	54,000
• Data collection for SS-ESMP and IEE preparation	15,000
• External monitoring or supervision consultant	Project Management Cost
TOTAL	521,000

6. STAKEHOLDER ENGAGEMENT, INFORMATION DISCLOSURE AND CONSULTATIONS

6.1 Stakeholder Engagement Plan & Disclosure

54. A separate Stakeholder Engagement Plan (SEP) has been prepared for the Project, based on the World Bank's Environmental and Social Standard 10 on Stakeholder Engagement. This ESMF, as well as the SEP and the Environmental and Social Commitment Plan (ESCP) that have been prepared for this project, have been disclosed in draft on the following MPWT website.

6.2 Summary of Consultations to Date

55. During preparation of this ESMF, RPF, ESCP and SEP, various public consultation meetings at the local/provincial levels had been conducted from 3rd to 27th October 2023 with the participation of 669 people (423 male and 246 female) who represented project stakeholders including Department of Public Works and Transport (DPWT), Provincial Administrative Office, Provincial Natural Resources and Environment (PONRE), Provincial Agricultural and Forest Tree Office (PAFO), Provincial Labor and Social Welfare (PLSW), Lao Front for National Development, Lao Women's Union and Youth Union, project affected people (PAPs) and potential project beneficiaries. The participants also represent various ethnic groups such as Lao Tai, Khmu, Makong, Kaleung, Chaler, Phutai, Tri, Katang, Ta-oy and Pako. These consultations collected feedback to inform the Environmental and Social Management Framework (ESMF) and SEP.

56. Both women and men strongly support the proposed Project and believe that they will equally benefit from the project. Particularly, women believe the road improvement and construction will make travel more convenient thereby enabling them to better perform social and livelihoods function such as picking up children from school or nursery, going to market, visiting relatives and friends, go to work, etc. They also believe that they will have better access to hospital and health facilities. Male stakeholders indicated that they are happy that the road condition will improve extending the lifespan of vehicles with less maintenance costs, safer and faster travel. Other key comments from stakeholders to date are summarized in the table below. Mitigation measures for relevant comments have been provided as part of this ESMF.

Table 9: Key Comments to Date

Key Comments from Government Stakeholders	Key Comments from Project Affected People
The contractor should regularly sprinkle water on the road to prevent dust.	Before the construction, detailed measurement should be carried out to determine impact on the villager's assets.
Damaged access roads during the construction shall be repaired.	Sprinkle water on the road 1-3 times a day to reduce construction dust.
Speed limited and warning signs should be in place during operational phase.	There should be a regulation to manage workers' influx while working on sites.
The relevant government stakeholders should be involved from the beginning of the project to consistently monitor the construction works.	Before the construction, the project should organize meetings with PAPs on road and safety matters.
The UXO survey and clearance is needed for risky areas (Savannakhet province).	Consider hiring local people as unskilled laborers.
Excavated soil must not block the waterways causing the flood to villagers' land.	If the road will go through or impact the villagers' rice fields or crops, harvesting should be taken before construction.
Consider hiring local unskilled laborers to work for the project equally both men and women.	Pay attention to the risk of traffic accidents to children and elderly during construction.
Before starting the actual construction, a consultation with affected villagers along the road is needed to raise awareness about the project activities, E&S mitigation measures and GRM.	Support provision of facilities such as health centers, schools, and community markets and improve access roads to areas that are not in the project area

Endnotes

[i] Lao, Phoutai, Khmu, Makong, Brou and Yrou. Khmu, Makong, Brou and Yrou