



LAO PEOPLE'S DEMOCRATIC REPUBLIC
PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY

MINISTRY OF PUBLIC WORKS AND TRANSPORT

Department of Waterways

Southeast Asia Disaster Risk Management Project

Project ID No: P170945

Mekong and Nam Khan Disaster Management Project
in Luang Prabang Capital, Luang Prabang Province

ABBREVIATED RESETTLEMENT ACTION PLAN
(ARAP)

Volume 1 Main Report
(Final)

1 December 2022

Table of Contents

<i>Abbreviations and Acronyms</i>	<i>1</i>
<i>Definitions and Terms</i>	<i>3</i>
<i>Executive Summary</i>	<i>6</i>
<i>1Introduction</i>	<i>10</i>
<i>1.1Purpose of this document</i>	<i>10</i>
<i>1.2Project Information</i>	<i>10</i>
<i>1.3Project Proponent</i>	<i>11</i>
<i>2Description of the Subproject</i>	<i>11</i>
<i>2.1Subproject Objectives</i>	<i>11</i>
<i>2.2Subproject Location</i>	<i>11</i>
<i>2.3Subproject Works Project Works</i>	<i>13</i>
<i>2.4Design of Embankment and River Bank Protection</i>	<i>15</i>
<i>2.5Riverfront Park</i>	<i>17</i>
<i>2.6Other Facilities</i>	<i>18</i>
<i>2.7Construction Plan and Schedule</i>	<i>19</i>
<i>3Potential Impacts</i>	<i>19</i>
<i>3.1General Impacts</i>	<i>19</i>
<i>3.2Inventory of Loss</i>	<i>20</i>
<i>3.3Gender Considerations</i>	<i>22</i>
<i>3.4Mitigation Measures</i>	<i>23</i>
<i>4Socioeconomic Profiles in Affected Villages</i>	<i>23</i>
<i>4.1Population and Households in the Affected Village</i>	<i>23</i>
<i>4.2Ethnic Groups</i>	<i>23</i>
<i>4.3Religions</i>	<i>24</i>
<i>4.4Infrastructures and Facilities</i>	<i>24</i>
<i>4.5School Facility and Health Centers</i>	<i>27</i>
<i>4.6Education</i>	<i>28</i>
<i>4.7Disease and Treatment Practices</i>	<i>30</i>
<i>4.8Employments and Incomes</i>	<i>30</i>
<i>4.9Migration</i>	<i>32</i>
<i>4.10Land Use</i>	<i>32</i>
<i>4.11Domestic Animal in the Affected Villages</i>	<i>32</i>
<i>4.12Cultural Heritage</i>	<i>33</i>
<i>4.13Poverty Groups</i>	<i>36</i>

<u>4.14 Vulnerability Groups (VG)</u>	36
<u>5 Socioeconomic Profiles of Affected Population</u>	37
<u>5.1 Affected Households</u>	37
<u>5.2 Ethnic Groups and Religions</u>	38
<u>5.3 Infrastructures and Facilities</u>	38
<u>5.4 Employment and Incomes</u>	38
<u>6 Legal Framework</u>	40
<u>7 Principles and Policies for Compensation, Support, Resettlement</u>	40
<u>7.1 Principles</u>	40
<u>7.2 Policy for Compensation, Support, Resettlement</u>	41
<u>7.3 Eligibility</u>	45
<u>7.3.1 Eligibility Criteria</u>	45
<u>7.3.2 Cut-Off Date</u>	46
<u>7.4 Entitlements</u>	47
<u>7.4.1 Compensation Rates</u>	47
<u>7.4.2 Entitlement Matrix</u>	49
<u>8 Implementation Arrangements</u>	50
<u>8.1 Government Agencies</u>	50
<u>8.2 Provincial Resettlement Committee (PRC)</u>	51
<u>8.3 District Resettlement Committee</u>	52
<u>8.4 Measures for Organizational Capacity Building</u>	53
<u>9 Information Disclosure, Consultation and Community Participation</u>	54
<u>9.1 Information Disclosure</u>	54
<u>9.2 Consultation Process</u>	54
<u>9.3 Consultation during preparation of ARAP</u>	54
<u>9.4 Consultation during implementation of ARAP</u>	59
<u>10 Grievance Redress Procedure</u>	61
<u>11 Implementation Schedule</u>	67
<u>12 Monitoring and Evaluation</u>	70
<u>13 Costs and Budget</u>	71
<u>14 Attachments</u>	74

List of Figures

Figure 2-1 Project Location.....	12
Figure 2-2 Subproject Location and Proposed Alignment.....	14
Figure 2-3 Purpose of Proposed Park	18
Figure 2-4 3D illustration pictures of the completed Riverfront Park	18
Figure 4-1 PSMV Zoning Plan (ZPP).....	33
Figure 10-1 GRM Procedure.....	63

List of Tables

Table 2-1 Scope of Works to address flooding in Luang Prabang City.....	14
Table 2-2 Construction Plan Schedule	19
Table 3-1 Summary of all Losses.....	20
Table 3-2 Summary of Affected Housing and Restaurant Structures	21
Table 3-3 Affected Secondary Structures.....	22
Table 3-4 Summary of affected Industrial Trees	22
Table 4-1 Population and Households in Affected Villages.....	23
Table 4-2 Ethnic Groups in Affected Villages	23
Table 4-3 Religions in Affected Villages	24
Table 4-4 Abbreviations of Infrastructure and Facilities in the Villages	25
Table 4-5 Infrastructure and Facilities in the Affected Villages (Households)	26
Table 4-6 Number of School and Health Center in the Affected Villages	27
Table 4-7 Distances from Each Village to School.....	28
Table 4-8: Level of Education in the Affected Villages.....	29
Table 4-9 Employment in Affected Villages (persons).....	31
Table 4-10 Land Use in Subproject Affected Villages	32
Table 4-11 Domestic Animals in Subproject Affected Villages	32
Table 4-12 Outline & Restrictions by Zone Prescribed in PSMV.....	33
Table 5-1 Number of the Affected Households.....	37
Table 5-2 Infrastructure and Facilities of the Affected Households	38
Table 5-3 Occupations of PAHs	39
Table 7-1 Entitlement Matrix	49
Table 9-1 Number of Participants.....	55
Table 9-2 Summary of Consultation Results	57
Table 9-3 Future Consultations	60
Table 10-1 GRM Contact Persons	64
Table 11-1: ARAP Implementation Schedule	67
Table 13-1 Total Compensation Cost.....	72

1 Abbreviations and Acronyms

ADRIF	Asia Disaster Resilience Insurance Fund
AP	Affected People
ARAP	Abbreviated Resettlement Action Plan
CBO	Community Based Organizations
CERD	International Convention on the Elimination of All Forms of Racial Discrimination
COI	Corridor of Impact
COC	Code of conduct
C&R	Compensation and Resettlement
CSO	Civil Society Organizations
DDMCC	Department of Disaster Management and Climate Change
DESIA	Department of Environment and Social Impact Assessment
DMH	Department of Meteorology and Hydrology
DMS	Detailed Measurement Survey
DONRE	District Office of Natural Resources and Environment
DOP	Department of Planning
DOW	Department of Water Ways
DPWT	Department of Public Works and Transport
DRFI	Disaster Risk Financing and Insurance
DRC	District Resettlement Committee
DRM	Disaster Risk Management
DRO	District Resettlement Office
EDPD	Environmental Research and Disaster Protection Division
ECC	Environmental Compliance Certificate
EDL	Electricite Du Laos
EG	Ethnic Group
EGEF	Ethnic Groups Engagement Framework
EGDP	Ethnic Group Development Plan
EPL	Environmental Protection Law
ESCAP	Environmental and Social Code of Practice
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMMP	Environmental and Social Management and Monitoring Plan
FGD	Focus Group Discussion
GBV	Gender-Based Violence
GOL	Government of Lao PDR
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
IEE	Initial Environmental Examination
IOL	Inventory of Loss
IR	Involuntary Resettlement

LFND	Lao Front for National Development
LWHO	Luang Prabang World Heritage Office
LWU	Lao Women Union
MAF	Ministry of Forestry
M&E	Monitoring and Evaluation
MOF	Ministry of Finance
MOICT	Ministry of Information, Communication and Tourism
MONRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
MPWT	Ministry of Public Works and Transport
NGO	None Government Organization
NPA	Non-Profit Association
NRA	National Regulatory Authority
OP/BP	World Bank Operational Policies
PAH	Project Affected Households
PAP	Project Affected Persons
PDO	Project Development Objective
PDR	People's Democratic Republic
PIU	Project Implementation Unit
PM	Prime Minister
PMU	Project Management Unit
PONRE	Provincial Office of Natural Resources and Environment
PRC	Provincial Resettlement Committee
PIU	Project Implementation Unit
PRO	Project Resettlement Office
PTI	Public Works and Transport Institute
PUDA	Provincial Urban Development and Administration
ARAP	Resettlement Action Plan
RCS	Replacement Cost Study
RP	Resettlement Policy
RPF	Resettlement Policy Framework
RSS	Regional Safeguards Secretariat
SEA-DRM	Southeast Asia Disaster Risk Management Project for Lao PDR
SDS	Social Development Specialist
SIA	Social impact assessment
UNESCO	United Nations Educational, Scientific and Cultural Organization
UXO	Unexploded Ordinance
VRS	Village Resettlement Sub-committees
WB	World Bank
WBG	World Bank Group

2 Definitions and Terms

- **Beneficiary** - all persons and households from the villages who voluntarily seek to avail of and be part of the Project.
- **Compensation** - payment in cash or in kind of the replacement cost of the acquired assets for the project.
- **Cut-off Date** – the date prior to which the occupation or use of the project area makes residents/users of the project area eligible to be categorized as affected persons. The cut-off date is established in the Abbreviated Resettlement Action Plan (ARAP). It normally coincides with the date of the census of affected persons within the project area boundaries, or the date of public notification regarding the specific civil works that would cause displacement. Persons not covered in the census, because they were not residing, having assets, or deriving an income from the project area, are not eligible for compensation and other entitlements.
- **Displaced persons** - refers to all of the people who, on account of the activities listed above, would have their (1) standard of living adversely affected; or (2) right, title, interest in any house, land (including premises, agricultural and grazing land) or any other fixed or movable asset acquired or possessed temporarily or permanently; (3) access to productive assets adversely affected, temporarily or permanently; or (4) business, occupation, work or place of residence or habitat adversely affected; and “displaced person” means any of the displaced persons, including those who have no legal recognizable right or claim to the land they are occupying.
- **Eligible land holders** – refers to affected persons who (a) hold title to land; or (b) do not hold title but whose possession of land can be legalized with a title pursuant to the Land Law 2019 of Lao People’s Democratic Republic (PDR) including those who have no legal recognizable right or claim to the land they are occupying, but who are nonetheless entitled to assistance to restore their living standards, livelihoods, and any land-affixed assets affected.
- **Entitlement** – range of measures comprising compensation, income restoration, transfer assistance, income substitution and relocation which are due to affected people, depending on the nature of their losses, to restore their economic and social base.
- **Household** - means all persons living and eating together as a single social unit. The census used this definition and the data generated by the census forms the basis for identifying the household unit.
- **Income restoration** - means re-establishing income sources and livelihoods of PAPs to a minimum of the pre-project level.
- **Improvements** – structures constructed (dwelling unit, fence, waiting sheds, pig pens, utilities, community facilities, stores, warehouses, etc.) and crops/plants planted by the person, household, institution, or organization.

- **Land acquisition** - the process whereby a person involuntary loses ownership, use of, or access to, land as a result of the project. Land acquisition can lead to a range of associated impacts, including loss of residence or other fixed assets (fences, wells, tombs, or other structures or improvements that are attached to the land)
- **Project Authorities** – refers to the Ministry of Public Works and Transport (MPWT), the Ministry of Planning and Investment (MPI), Ministry of Finance (MOF), Ministry of Natural Resources and Environment (MONRE) and Ministry of Information, Communication and Tourism (MoICT).
- **Project Affected Person (PAP) or Household (PAH)** – includes any person, households, entity, organizations, firms or private institutions who, on account of changes that result from the project will have their (i) standard of living adversely affected; (ii) right, title, or interest in any house, land (including residential, commercial, agricultural, forest, plantations, grazing, and/or organizing land), water resources, fish ponds, communal fishing grounds, annual or perennial crops and trees, or any other moveable or fixed assets acquired, possessed, restricted, or otherwise adversely affected, in full or in part, permanently or temporarily; and/or (iii) business, occupation, place of work or residence, or habitat adversely affected, permanently or temporarily, with or without displacement.
- **Rehabilitation** – refers to assistance provided to persons seriously affected due to the loss of productive assets, incomes, employment or sources of living, to supplement payment of compensation for acquired assets, in order to achieve, at a minimum, full restoration of living standards and quality of life. Compensation for assets often is not sufficient to achieve full rehabilitation.
- **Replacement cost**- a method of valuation of assets which determines the amount of compensation sufficient to replace lost assets, including any necessary transaction costs. Compensation at replacement cost is defined as follows: For agricultural land, it is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes. For land in urban areas, it is the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes. For houses and other structures, it is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors' fees, plus the cost of any registration and transfer taxes. In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset. Where domestic law does not meet the standard of compensation at full replacement cost, compensation under domestic law is supplemented by additional measures so as to meet the replacement cost standard. Such additional assistance is distinct from resettlement measures to be provided under other clauses in OP 4.12, Para. 6.

- **Replacement Cost Study (RCS)** - The main objective of the RCS is to determine the rate of land prices based on actual transaction records of the affected areas, of affected main and secondary¹ structures and other immovable assets. This study would be conducted by an independent appraiser. Based on the results of RCS, the PAH will receive compensation at replacement cost (reflecting market price) from RoUM for their loss of land and property due to the sub-project. The RCS will be implemented during the DMS.
- **Resettlement** – means that all measures should be taken to mitigate any and all adverse impacts of a project on PAP property and/or livelihood's, including compensation, relocation (where relevant) and rehabilitation as needed.
- **Unit Costs for Lands** - The affected private lands will most likely fall under the land categories of either residential or commercial lands. The way to obtain data on market rates is to gather data on recent land sales at/around the sub-project area. Methods for data collection include direct interviews (i) real estate agents in Community Based Organizations (CBO) (ii) land owners at/around the sub-project area who are both PAHs and non-PAHs, and (iii) local authorities at/around the sub-project area. Per results of the RCS, the unit costs of land covered with recognized proofs of ownership, structures and other immovable assets are provided.
- **Unit Costs for Structures** - The houses/structures affected by the sub-project have been categorized into two main groups – house/dwelling and other structures. The methodology employed for costing house/structures includes a quantity survey and detailed measurement of the component parts of each structure and a determination of the market value of the house/dwelling. Other structures such as wells and fences, and cultural assets such as stupas, have to be compensated at their market price, and the results of the specific rates of structures are provided.
- **Vulnerable Groups** - are distinct groups of people who might suffer disproportionately or face the risk of being further marginalized by the effects of resettlement and specifically include: (i) households headed by women, the elderly people, people with disability, households with no labors, (ii) households living below the poverty threshold, and people living in extreme hardship (iii) the landless, and (iv) ethnic groups as defined in OP/BP 4.10).

¹ This includes fences, huts, toilets, kitchens, etc.

3 Executive Summary

The South East Asia Disaster Risk Management Project for Lao PDR (Lao DRMP or Parent Project) is being implemented with financing from the World Bank (WB) with the aim of reducing the risk of flooding and enhancing the disaster risk financing capacity of Lao PDR. The Project was approved on July 6, 2017 and became effective on 11 October, 2017, with a commitment amount of US\$30 million. The Lao DRMP includes five components: Component 1 – Integrate Urban Flood Risk Management, Component 2 – Hydromet Modernization and Early Warning System, Component 3 – Financing Planning for Disaster Resilience, Component 4 – Knowledge and Coordination, and Component 5 – Contingency Emergency Response.

During project implementation, Lao PDR experienced widespread flooding in 2018 which significantly impacted its people and country's economy. To help reduce the financing gap and augment the response efforts, the World Bank approved an Additional Financing (LDRM-AF, or AF) of about \$25 million. This includes funding for Structural Investments to Strengthen Flood Protection to support additional investments in Muang Xay and to implement similar activities in two additional provinces, including Bolikhamxay (BKX) and Luang Prabang (LPB).

Objective of the Abbreviated Resettlement Action Plan (ARAP)

This ARAP is prepared to facilitate land acquisition to support the subproject implementation in Luang Prabang Province. The overall objective of this ARAP is to avoid involuntary resettlement (IR) wherever possible; to minimize IR impacts by exploring project's design alternatives; to improve, or at least restore, the livelihoods of all affected people (AP) to the pre-project levels; and to improve the standards of living of affected people, particularly vulnerable groups. The objectives of the ARAP are to: (i) identify and mitigate involuntary resettlement (IR) impacts, and provide compensation payment for unavoidable impact, including provision of assistance to affected people (AP), and ensure fair and transparent process for the participation of affected people and other stakeholders during resettlement process; (ii) enable Project Management Unit (PMU) (at the DOW of MPWT) to clearly identify potential adverse impacts, compensate for unavoidable impacts and restore the livelihoods of PAPs; and (iii) provide direction for the PMU in updating/finalizing, implementing and monitoring the ARAP implementation.

The ARAP identifies measures to ensure that APs are, (i) informed of, and consulted on the activities of the proposed subproject and agree in principle with the subproject; (ii) informed of resettlement/compensation options and AP's entitlements pertaining to involuntary resettlement impacts; (iii) consulted on, offered choices, and provided with suitable compensation and/or resettlement alternatives; and (iv) provided with prompt and effective compensation at full replacement cost for their loss of assets and livelihoods that are caused directly by the subproject.

Scope of Land Acquisition and Resettlement

The project is expected to cause minor physical relocation as a result of the project implementation as it will not require the permanent use of private land. The project will affect 59 project affected households (PAHs) with 331 project affected people (PAP) including 164 females and 167 males by various forms of losses as presented in Section 2. Among the 59 PAHs, there are one single wooden house with 48m² (belongs to one PAH in Phanluang village) and two small restaurant structures with 92.5m² (belongs to two PAHs in Xiengthong -Khily village) will be affected by the

subproject. These structures were built in government land. The total cost for compensation for restaurant, secondary structures, trees, allowance for relocations, and income restoration, etc. is estimated at **LAK767.414.168 (USD45,791)** for compensation and income restoration as summarized in Table 13-1 below. This includes compensation for (i) affected housing structures; (ii) affected restaurants; (iii) affected secondary structures; (iv) affected crops and trees; and (v) dismantlement and transportation, and livelihood restoration assistances.

Impacts on Land and Assets

The current design indicates that the project will not require an acquisition of any private land (residential land) but the subproject will result in the loss of property and trees occupied by 59 households in four villages including Phonsa-art, Phanluang, Xiengthong–Khily, and Wat Saen villages. This includes (i) **48m²** of a single wooden house (**owned by one PAH**); (ii) two small restaurants with **92.5m²**; (iii) **452.19m²** of secondary structures including toilets, kitchens, storage, stairs and **240m** fence and **2 steel poles**; and (iv) and **999trees** (fruits, industrial trees and bamboo). Please refer to table below.

Summary of Potential Impacts on Assets of 59 households

No.	Type of Loss	# of HH	# of structures	Affected #	Unit
1	Housing Structure	1	1	48	
1.1	One story wooden house (for recreational purpose, not for living)	1	1	48	m ²
2	Shop	2	2	92,5	m²
2.1	Restaurant	2	2	92,5	m ²
3	Secondary structures	15	15	298,03	m2
3.1	Hut	3	4	162,8	m ²
3.2	Toilet	1	1	6	
3.3	Kitchen coop	4	7	56,83	m ²
3.4	Balcony	4	4	152,96	m ²
3.5	Stair	1	2	22	m ²
3.6	Frog pond	1	1	6,6	m ²
3.7	Fence	6	7	240	m
3.8	Concrete yard	4	4	137	m ²
3.9	Steel pole	1	1	2	pole
4	Tree	67		999	
4.1	Fruit trees	35		927	tree
4.2	Industrial trees	15		20	tree
4.3	Bamboo	17		52	tree

Measures to Mitigate the Impacts and Resettlement

Effort has been made to minimize the potential resettlement impacts. This was done through reduced width of the alignment. As part of the project's resettlement policy, PAHs who are required to resettle will be provided with sufficient time and support to rebuild their new houses

and shops prior to the commencement of civil works. The project will ensure that PAPs are able to continue to have access to their houses and their present livelihood activities during project implementation - to the extent possible. Impacts on their livelihood and business will also be minimized through close and effective contract management and work supervision by PMU and their construction supervision consultant to ensure that ESMP is effectively complied with and that works are completed as per work plan.

The individuals, households and businesses that will likely be affected by the the construction works have been surveyed and consulted. The unit costs of compensation for affected land and assets have been established based on the principle of “Replacement Cost”. The compensation rates have been consulted with and agreed upon by PAPs. The compensation will be paid to the PAPs/PAHs via PAPs’ bank account to ensure transparency and security.

Legal and Policy Framework

This ARAP for LPB project complies with the World Bank’s OP 4.12, applicable provisions of Decree 84 of the Lao Government on Compensation and Resettlement, the Decree on Environmental Impact Assessment (2019) and other relevant national legislation including the Land Law 2019. Where gaps and discrepancies exist between the WB OP. 4.12 and the GOL policies, the WB policy will prevail as per the Project Agreement and will be in accordance with the Project’s Resettlement Policy Framework.

Implementation Arrangements

The Project Management Unit (PMU) established under DOW of MPWT will be responsible for overall project management and coordination with concerned agencies and donors at the central level. Responsibility for day-to-day sub-project implementation, work supervision, implementation and monitoring of the ARAP lies with the Project Implementation Unit (PIU) established in the Water Ways Sector of the Department of Public Works and Transport (DPWT) of Luang Prabang Province. The PIU/DOW will work in close collaboration with the Environment and Disaster Prevention Division (EDPD) of the Public Work and Transport (PTI) under MPWT to ensure ARAP as well as associated safeguard instruments including Environmental and Social Management Plan (ESMP) and Ethnic Group Engagement Plan (EGEP) are prepared, implemented and monitored effectively by the PIU in accordance with the Project’s RPF and updated national legislations, if any. Pursuant to the current legislation, MONRE is responsible for environmental compliance review and also for legal matters regarding land ownership and expropriation.

PMU /DOW – through its provincial agency (PIU/PDPWT), are responsible for supervising and implementing safeguards implementation, including the ARAP with the technical assistance and support from EDPD/PTI. ARAP and compensation, including Grievance Redress Mechanism (GRM), will be reviewed and monitored by the Provincial and District Resettlement Committees, which will be established in accordance with the Decree 84, 2016 on compensation and resettlement. Village Resettlement Sub-committees (VRS) will also be established as needed in villages where land acquisition and resettlement will occur to facilitate ARAP preparation and implementation; including conducting consultation with PAP and managing grievance redress mechanism at the village level.

Monitoring

The ARAP monitoring and evaluation consists of two parts: internal monitoring and external resettlement monitoring and evaluation. The PMU, with technical support from EDPD/PTI, will carry out internal monitoring of the ARAP implementation. Quarterly internal monitoring reports will be submitted to the DOW, PTI/EDPD management and the WB. The DOW will engage an independent entity or consultant to do external monitoring of the project on a semi-annual basis. The external monitoring consultant will assess and certify the completion of ARAP and resettlement process before the commencement of the civil work. Both internal and external monitoring reports will be disclosed publicly through PMU's website and at local level where resettlement takes place.

Costs and Budget

The total cost for ARAP implementation is estimated at **LAK767,414,168 (USD45,791)**. The unit costs of compensation for affected land and assets have been established based on the principle of "Replacement Cost". The compensation rates and its calculations were consulted and disclosed in meaningful manner to each individual affected persons/households from which they have agreed based on the documents signed. As per the advice from the WB, the second market survey was carried out during 2-10 September 2022 to estimate actual inflation of construction materials given that the prices of these materials have been notably increased while land and tree prices remain largely stable. The survey was conducted through the visit of local market (5 businesses/shops) to obtain actual/latest prices of main construction materials (such as cement, sand, gravel, wood and steel products, transport and other building materials). The survey result indicated that the inflation rate of construction materials in Luang Prabang Province was 20.67%. However, 10% of inflation rate was already added into the compensation rates approved by the Provincial Governor (122/GOV.LPB, dated 10 March 2022) during the resettlement planning process and therefore only 10.67% additional inflation rate of construction materials was added into the compensation cost in this ARAP. Findings of the market survey are provided in Attachment 11. Budget for ARAP implementation is covered by PMU. The compensation will be paid to the PAPs/PAHs via PAPs' bank account to ensure transparency and security.

4 Introduction

4.1 Purpose of this document

1. The purpose of the ARAP is to set forth measures to ensure that APs are (i) informed of, and consulted on the proposed project activities and its potential impact related to land acquisition; (ii) informed of resettlement and compensation options that are available for their choice, and their rights and entitlement to compensation and support in livelihood restoration; and (iii) consulted on and provided with suitable compensation and/or resettlement alternatives.

4.2 Project Information

2. Lao PDR is frequently impacted by flood which affects extensively the properties and lives of the people. Between 1991 and 2013, about 200,000 people were affected annually by various floods, which pose a serious threat to the wellbeing of people and socio-economic development in Lao PDR. The Mekong River with a total river length of 4,800 km rises from the Tibetan Plateau and flows into the South China Sea via totally six countries i.e., China, Myanmar, Laos, Thailand, Cambodia, and Vietnam. The river length of the Mekong River passing through Lao PDR is 1,898km, of which the most sections play a role as the border with Thailand. Major cities located along the Mekong River and its tributaries in Lao PDR have experienced repeated damages caused by flood and bank erosion during rainy season from May to October every year. Based on MPWT's investigations, it is estimated that annual economic loss due to flood damage in Lao PDR since 2000 is approximately US\$ 40 million. River bank erosion due to flood has resulted in a loss of around 80 km² of land, raising concerns over sensitive territorial issues at bordering areas between Laos PRD and Thailand and thus a stronger need for river bank protection.

3. The Southeast Asia Disaster Risk Management Project for Lao PDR and its additional financing (LDRM-AF) is being implemented with financing from the World Bank (WB) with an aim to reduce the risk of flooding and enhance disaster risk financing capacity of Lao PDR². The LDRM-AF consists of five components: (1) Integrated Urban Flood Risk Management being implemented by the Department of Waterways (DOW) of the Ministry of Public Works and Transport (MPWT); (2) Hydromet Modernization and Early Warning Systems being implemented by the Department of Meteorology and Hydrology (DMH) of the Ministry of Natural Resources and Environment (MONRE); (3) Financing Planning for Disaster Resilience being implemented by the State Reserve Department in the Ministry of Finance (MOF); (4) Knowledge and Coordination being implemented by the Department of Planning of Ministry of Planning and Investment (MPI); and (5) Contingent Emergency Response Component. In late 2019, additional fund of about \$25 million has been provided to increase the scope of the Component 1 to cover

² The parent project (LDRM) was approved on July 6, 2017 and became effective on 11 October, 2017, with a commitment amount of US\$30 million. The Project Development Objective (PDO) is to reduce the impacts of flooding in Muang Xay of Oudomxay (ODX) Province and enhance capacity of the Government of Lao PDR (GOL) to provide hydro-meteorological services and disaster response.

the need for priority investment in Bolikhamxay Province (BKX) and Luang Prabang Province (LPB) while additional fund has been provided to investment in Oudomxay (ODX) Province.

4.3 Project Proponent

4. The GOL through the MPWT is the Project proponent. The project will be implemented through existing GOL structures of the line ministries. MPI is responsible for overall coordination of the project. MPI will engage specialists to provide expertise and support related to procurement, financial management, safeguards compliance, and project management (including M&E) related to the overall project. Component-specific works and consultants will be procured by DOW, DMH, and MOF

5. The Project Management Unit (PMU) under DOW of MPWT will be responsible for overall project management and coordination with concerned agencies and donors at the central level. A Project Implementation Unit (PIU) is established in the Water Ways Sector of the Provincial Department of Public Works and Transport (DPWT) in Luang Prabang Province for day-to-day sub-project management and work supervision. The PIU/DOW will work closely with the Environment and Disaster Prevention Division (EDPD) of the Public Work and Transport (PTI) under MPWT to ensure ARAP as well as associated safeguard instruments, including Environmental and Social Management Plan, etc., are prepared, implemented and monitored effectively in accordance to the Project's RPF and updated relevant national legislation, if any.

6. The contact details for the Project proponent of Component 1 is as follows:

Ministry of Public Works and Transport of Lao PDR
Department of Waterways
Lanxang Avenue, Vientiane Capital, Lao PDR
Project Coordinator: Moukmany Chanthasy
Contact: 856-21 412250 Fax: 856-21 412250

5 Description of the Subproject

5.1 Subproject Objectives

7. The objective of the LPB Subproject is to strengthening flood protection in the Mekong River in Luang Prabang City, and enhances the Government's capacity for disaster risk management.

5.1 Subproject Location

8. Luang Prabang Province (LPB) is located in northern Laos at the heart of a mountainous region and is bordered with Vietnam to the Northeast as well as with six other Lao provinces borders with Phongsaly Province to the North, Huaphan Province to the East, Xiengkhouang Province to the Southeast, Vientiane Province to the South, Sayaboury Province to the Southwest, and Oudomxay Province to the West. The LPB Province consists of twelve districts and covers an area of 16,875 square kilometres (km²). The town (Luang Prabang Capital) is built on a peninsula formed by the Mekong and the Nam Khan River. Mountain ranges (in particular the PhouThao

and PhouNang Mountains) encircle the city in lush greenery. In the center of the peninsula is a hill, Phousi, which despite the constrained scale of the city, is 150 metres (490 ft) high. Stairs lead to a shrine and an overlook of the city and the rivers.

9. Luang Prabang sub-project site is located in the Luang Prabang City along the Mekong and Nam Khan river mouth in Luang Prabang Province. According to a feasibility study (FS) and detailed design, the LPB subproject consists of (i) two bank-protections along the Nam Khan River with a total length of 2.19km (1.14km on Nam Khan Left and 1.05km on Nam Khan Right), (ii) two flood gates at Houay Misay and Houay Kang and one pump at Houay Misay, (iii) a 0.3ha Riverfront park at Nam Khan River Mouth.



Figure 2-1 Project Location

5.2 Subproject Works Project Works

10. Based on detailed design, the proposed subproject comprising (i) Construction of the river embankments and riverbank protection structures along the two side of Nam Khan River with a

total length of 2.19km (1.14km on the left side and 1.05 km on the right side); (ii) Rehabilitation and/or construction of nine flap gates (F.R.P Type) (6 pipe culverts, 3 box culverts) at the Mekong and Nam Khan Rivers; and (iii) Improvement of the Riverfront Park (0.03ha) at Nam Khan River Mouth. The proposed embankment and river bank protection works at the right hand side of the Nam Khan River will be 7 to 10m apart from the existing riverbank with same elevation as the existing bank. The proposed river bank protection at the left hand side of the Nam Khan River (left side) was designed as same line and elevation as the existing road **(see Figure 2.1).**

1. The area of influence of the LPB subproject would cover the followings:

- Construction areas where the two river bank protections will be built with a total length of 2.19km (covering an estimated area of about 18,235m² on land and about 23,565m² along the slope that are located in the river for the left side and about 24,825m² on land and about 16,240m² in the river for the right side);
- Rehabilitation of nine flood gates at Houay Misay and Houay Kang and nearby streams;
- Construction of a 0.3ha Riverfront Park at Nam Khan River Mouth;
- Roads to be used for transportation of construction materials from two initially identified borrow pits, and/or construction material workshop, etc. to the subproject construction sites. This includes also roads used to transport spoil materials from construction site to identified disposal site(s);
- Roads that will be used to transport construction materials from quarry sites/cement concrete mixing plant to construction sites;
- Waterways that may be used to transport construction material from above the borrow pits to the construction sites;
- Workers' camps and working area (located in the subproject area with about 60-90m from the Nam Khan River, households and temples). However, after site investigation by Safeguards Monitoring Working Group (SMWG), committee disagree with the proposed camp locations as they are too close to the temple and Nam Khan River and suggest to find new site. The new sites will be identified when the contractor is on board and site specific impact assessment and consultation with landowner and surrounding communities will be conducted and included in the Contractor Environmental and Social Management Plan which will be prepared by the contractor and submitted to WB for comments prior to the approval by PMU and commencement of construction activities;
- Any other areas that are potentially affected by noise, vibration, and air pollution; and
- Any other inland and waterway that may be additionally used to transport construction materials and spoil materials.

11. Table 2-1 below provides a summary of the subproject structural components and more details are provided in **Attachment 2 of the ESMP prepared for this subproject.**

Table 2-1 Scope of Works to address flooding in Luang Prabang City

Work Items	Details	River
1. Bank-protection= 2.19km	<ul style="list-style-type: none"> Section Left (Ban Aphai to Nam Khan River Mouth) - L= 1.14 km 	Mekong River Nam Khan River
	<ul style="list-style-type: none"> Section Right (Ban Khily to Ban Phanluang.) - R= 1.05 km 	Nam Khan River
2. Drainage	<ul style="list-style-type: none"> 5 Pipe Culverts and 5 flap gates 1 Pipe Culverts and 1 flap gates 2 BOX Culverts (Houay Kang, Tributary) and 2 flap gates 1 BOX Culvert (Houay Mixay) and 1 flap gates 	Nam Khan River Mekong River
3. Stair	<ul style="list-style-type: none"> 18 Stairs 2 Stairs 5 Park Stairs 	Nam Khan River Mekong River
4. Riverfront Park	<ul style="list-style-type: none"> A= 0.3 ha 	

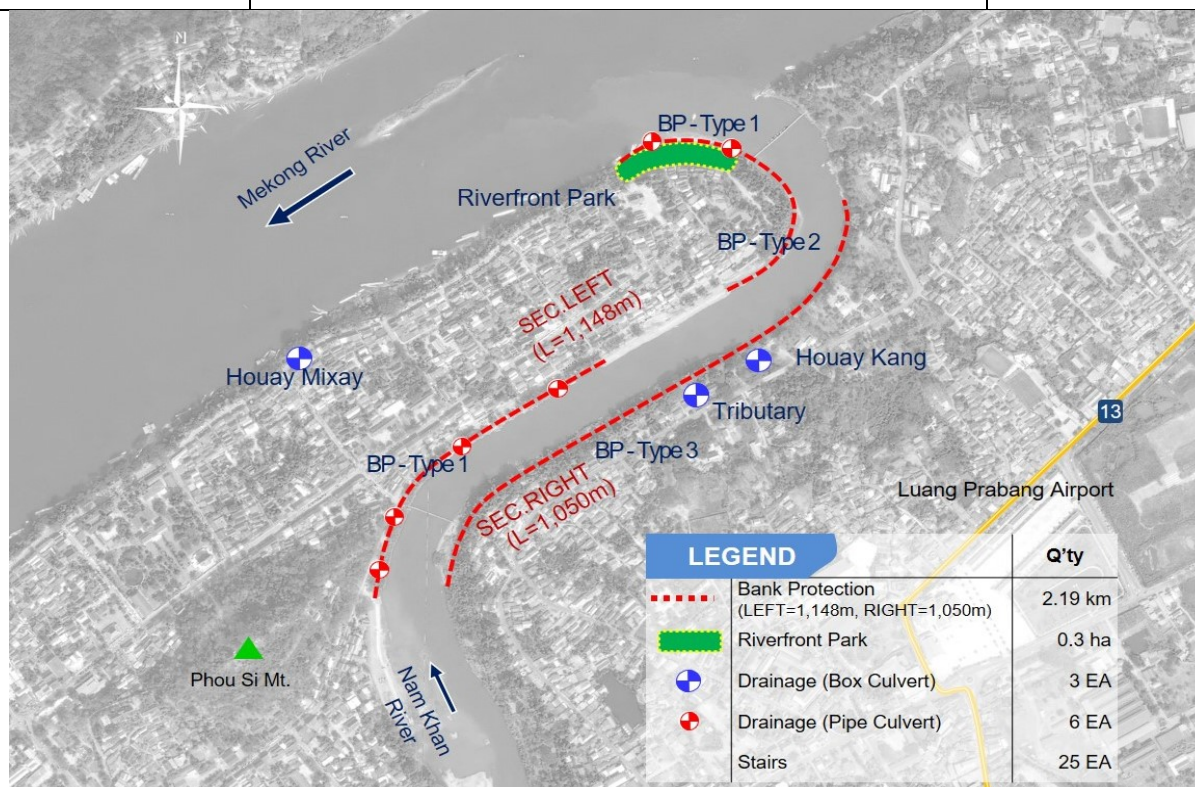


Figure 2-2 Subproject Location and Proposed Alignment

5.3 Design of Embankment and River Bank Protection

12. With regards to the flood embankment and the river bank protection design at the subproject sites, the design team have carefully reviewed the hydraulic and hydrological factors to determine design dimensions, including conducting analysis to check the stability of the proposed riverbank sections. The construction aspects such as material, workability, cost, and period were also considered. The basic principles and design are provided in **Attachment 2 of the ESMP prepared**

by for this subproject. It is estimated that construction of these embankments will require about 54,086m³ of borrow material, 154,924m³ of river sand, 91,102m³ of rip-rap and 21,452 m³ of unusable excavated material to be disposed.

13. The embankment structure was designed in a manner that achieves cost-effective functional flood embankment – in the face of limited budget. In line with this, various factors are considered as part of the design, including maintenance requirements, use of economical materials, and harmonization with existing infrastructures to inform the technical design. The following key design criteria were considered:

- Flood embankment will be safe against inundation;
- Costs of materials used for embankment construction are affordable and locally available;
- Structure of embankment slopes are stable under river flooding conditions; and
- Seepage flow through embankment and foundation will be controlled so that no internal erosion occurs and so there is no sloughing in the area where the seepage emerges;
- Preservation of existing urban landscape and trees, If technically required, changes in urban landscape, removal of trees and plantation offsetting will be carried out in close consultation with and approval from the LPB World Heritage Office;
- Pay attention to drainage so as not to give negative impacts on the functions in the ZPP-N zone.

14. Through the stability analysis of the riverbank, review on various design standards for embankment, and case studies of similar previous projects in Lao PDR, the following engineering details are taking into account also impacts on environment and social including land acquisition and resettlement:

1) *Levee Crest:*

- The width of levee crest shall be wider than 7.0 m along the Nam Khan River considering design floods of 27,222 m³/s at Luang Prabang in the Mekong River with the free board of 0.5 m considering the aspects of land acquisition and resettlement, and construction costs.

2) *Slope of the bank-protection:*

- The bank-protection slope has been determined through reviewing on socio-economic conditions along the Project sites, especially compensation and resettlement aspects. The design slope of the bank-protection has been determined as 1:2.0 for the Riverfront slope.

3) *Levee Berm:*

- The bank-protection usually requires to have levee berms in case the bank-protection is higher than 5.0 m from the footing. The average height of the design bank-protection along the Subproject area is more than 10 m requiring one or two levee berms based on each section to ensure the bank-protection stability.
- The design width of levee berm has been determined as 2.0 m which is the critical width to guarantee the levee stability from the levee stability analysis as well as considering the walking path for the residents.

4) Embankment Materials:

- River sand and borrow materials will be used as the main materials for construction of embankment and levee (See **Figure A2-4 to A2-6 in Attachment 2 of the ESMP prepared by for this subproject**).

15. Riverbank protection means revetments to protect levee surface from the risks of erosion and scour on the levee safety, which may cause levee failure. The riverbank protection consists of the slope protection and embankment's retaining wall which is the foundation of the riverbank protection structure and to protect the bottom part of the riverbank from being scoured and eroded due to water movement. The length and location of riverbank protection structure have been decided considering hydraulic characteristics and the current status of riverbank erosion of the subproject site.

16. Basic design of the slope and embankment's retaining wall technology will follow those being applied in Vientiane Capital (see **Figure A2-4 to A2-6 in Attachment 2 of the ESMP prepared by for this subproject**).

1) Slope Protection:

- Type of slope protection are determined based on levee stability, construction cost and time period. The design team has compared designed slope with several other slope protection types, including rip-rap, environmental block, masonry, gabion box and gabion mattress, before an optimum type is determined.
- Through the comparison of various types, rip-rap protection type has been proposed for the whole subproject area. It is estimated that the thickness of rip-rap protection will be 0.7 ~ 1.0 m (size 0.4~0.6m) considering the depth of the flow at each part of the riverbank.
- Filter Materials: the suction of backfill material and the seepage can be the major causes of levee failure. To prevent those causes of levee failure, bedding geotextiles and rubbles as filter materials between slope covering and backfill materials have been employed under slope protection.
- The bedding layer under slope protection is usually recommended to have the designed thickness of more than 9 inch (about more than 20cm) and it may improve the stability of rip-rap slope covering. The bedding rubbles with its thickness of 20cm and geotextiles under slope protection are employed from top of the levee to footing along the whole Subproject area.

2) Toe Protection

- Retaining wall serves as the foundation of slope protection against falling down of the embankment and slope covering materials.
- The dumping rip-rap for retaining wall is also considered to be efficient construction method because it can be used as construction road to implement embankment works.
- The design level of retaining wall by sections has been determined considering construction period in the dry season, it means that the retaining wall works shall be the

first step in the levee works, and after that, the retaining wall will be used as construction road for the other levee works such as embankment and slope protection works.

- The design width of retaining wall has been determined to be 3.5m considering the stability analysis of riverbank and the accessibility of heavy equipment for construction.

5.4 Riverfront Park

17. The Riverfront Park is located at the Nam Khan River Mouth, the left bank of the Mekong River with a total area of 0.3ha. The design direction of the Riverfront Park is as follows:

- In connection with tourism, cultural and historical elements of LPB, it creates a more developed riverfront cultural space and functions as an important tourist path in the region.
- Utilizing the scenery of the Mekong and Nam Khan Rivers, it creates a space that enhances the value of LPB as a world-class tourist attraction for local residents and tourists from all over the world.
- Therefore, it is an important goal to designate and develop suitable riverfront park to provide sufficient recreational activities.

18. The purpose of the Riverfront Park is as follows:

- Create a riverfront park along the Mekong River Road, the main tourist base in LPB.
- Strategically create a tourist attraction with improved Mekong River and Nam Khan River Mouth scenery and accessibility.
- Create trail to strengthen the linkage function with historical relics scattered around LPB.

19. The concept of Riverfront Park is presented in Figure 2-3 and Figure 2-4 below and more details are provided in **Figure A2-12 to Figure A2-28 in Attachment 2 of the ESMP prepared by for this subproject.**



Figure 2-3 Purpose of Proposed Park



Figure 2-4 3D illustration pictures of the completed Riverfront Park

5.5 Other Facilities

20. **Stairways:** As part of the proposed structures, construction of different type of stairways have been included to improve access between the rivers (Nam Khan and Mekong) and the nearby roads as well as those that people can use to sit down on the stair and the riverfront to watch the boat racing festival. For Nam Khan, to facilitate the joy of boat racing festival and easy access from inland to the riverfront, twenty (20) stairways (W=3.0m) have been designed on the slope protection for both of the sections based on the PIU's request.

21. **Drainage:** During the FS and conceptual design, it was suggested that 4 drainage structures are included in the target section but a total of 9 drainage structures were planned by considering the field survey and residents' requests. The frequency of design rainfall was adopted for 20 years frequency in consideration of flood safety. The flow velocity was 2.5m/s, and it was estimated that 12 hours of rainfall was flowed out. During detailed design, 6 pipe culverts and 3 BOX culverts, and flap gate (F.R.P Type) have been included in the Subproject.

2. Details of the proposed stairway and drainage are shown in **Figure A2-7 and Figure A2-11 in Attachment 2 of the ESMP prepared by for this subproject** respectively.

5.6 Construction Plan and Schedule

22. The total expected project period is 24 months for construction considering the rainy season as presented in Table below. First 2 months of the construction period are for mobilization, and the last 2 months are for completion test and taking over (See Table 2-3 below). An Environmental Compliance Certificate (ECC) for the subproject from the Ministry of Natural Resources and Environment (MONRE) will be obtained before commencement of civil works.

Table 2-2 Construction Plan Schedule

Work Items	1st Year				2nd Year			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Civil Works								
1. Mobilization								
2. Earthworks (Embankment)								
3. Riverbank Protection Works								
4. Drainage								
5. Riverbank Appurtenance								
6. Riverfront Park								
Tests on Completion / Taking-over								

6 Potential Impacts

6.1 General Impacts

23. **Positive Impacts:** It is expected that the proposed investments on urban flood risk management in Luang Prabang City will have an overall positive intended impacts. Construction of the proposed structure (embankment for riverbank protection) prevents river bank erosion. This will be beneficial to the majority of Luang Prabang city residents whose properties and livelihoods used to be largely affected during flooding season. It is expected that construction of the subproject will bring about socioeconomic, health and ecological benefits. As part of the Component 1, the direct project beneficiaries will include community of about 101,800 people who live in the urban area of Luang Prabang City. National- and local-level project stakeholders will benefit from capacity and institution-building activities. Indirect project beneficiaries include (a) those who work in tourism industry that benefit from River Park and (b) tourists.

24. **Negative Impacts:** Construction of the embankments at the Nam Khan River (2.19km on left side and right side) and Riverfront Park at the Nam Khan River Mouth will take place in the government managed land (river land). The current design indicates that the project will not require an acquisition of any private land but the subproject will result in the loss of property and trees occupied by 59 households (with 331 project affected people (PAP) including 164 females and 167 males) in four villages including Phonsa-art, Phanluang, Xiangthong–Khily, and Wat Saen villages (See Section 3.2 below).

25. **Ethnic Groups:** There are four ethnic minority households living in three subproject villages. Since none of them are adversely affected by the subproject and the number of household is small, preparation of an EGEP is not required.

26. **Cultural Heritage:** The subproject's facilities, including embankment, sluice and water pump, and Riverfront Park, are mostly located in the ZPP-N: Natural and Landscape Zone,

assessments of heritage impacts is carried out in accordance with the guidance of UNESCO and Luang Prabang's World Heritage Office. For more details on the cultural heritage, impacts and mitigation measures please see **Section 6 of the ESMP prepared for this subproject.**

27. Social Sensitive Receptors: There are many schools, hotels and restaurants located adjacent to and surrounding the subproject areas. Almost then schools and tertiary education facilities were identified in adjacent to the Project areas especially Ecole Primaire Luang Prabang, Luang Prabang Preschool, English Clublaos School, and Fasai Nursery and Preschool. For more details on the cultural heritage, impacts and mitigation measures. Please see **Section 5 and Section 6 of the ESMP prepared for this subproject.**

6.2 Inventory of Loss

28. The Inventory of Loss (IOL) was conducted during 10-25 March 2022 based on the current design and alignment of the project within the offset ranging from 13m to 45m from river bank alignment (See **Attachment 9 for Compensation Offset Line**). The current design indicates that the project will not require an acquisition of any private land but the subproject will result in the loss of property and trees occupied by 59 households (with 331 project affected people (PAP) including 164 females and 167 males) in four villages including Phonsa-art, Phanluang, Xiangthong-Khily, and Wat Saen villages. This includes (i) **48m²** of a single wooden house (**owned by one PAH**); (ii) two small restaurants with **92.5m²**; (iii) **452.19m²** of secondary structures including toilets, kitchens, storage, stairs and **240m** fence and **2 steel poles**; and (iv) and **999 trees** (fruits, industrial trees and bamboo). The affected structures were built in the government land. (See a summary of impact in table 3-1 below).

Table 3-1 Summary of all Losses

No.	Type of Loss	# of HH	# of structures	Affected #	Unit
1	Housing Structure	1	1	48	
1.1	One story wooden house (for recreational purpose, not for living)	1	1	48	m ²
2	Shop Structures	2	2	92,5	m²
2.1	Restaurant	2	2	92,5	m ²
3	Secondary structures	15	15	298,03	m2
3.1	Hut	3	4	162,8	m ²
3.2	Toilet	1	1	6	
3.3	Chicken coop	4	7	56,83	m ²
3.4	Balcony	4	4	152,96	m ²
3.5	Stair	1	2	22	m ²
3.6	Frog pond	1	1	6,6	m ²
3.7	Fence	6	7	240	m
3.8	Concrete yard	4	4	137	m ²

No.	Type of Loss	# of HH	# of structures	Affected #	Unit
3.9	Steel pole	1	1	2	pole
4	Tree	67		999	
4.1	Fruit trees	35		927	tree
4.2	Industrial trees	15		20	tree
4.3	Bamboo	17		52	tree

Sources: Field Survey, 10-25 March 2022

29. Table 3-2 shows that a single wood house for recreation purpose (48m²) and two restaurants (92.5m²) will be affected by the subproject. These wooden house and small restaurants were built in the government land (concession land) and it can be relocated in the existing land plot.

Table 3-2 Summary of Affected Housing and Restaurant Structures

No.	Village Name	# of Affected HH	# of Affected Structure	Total Affected Area (m2)
1	A single wooden house for recreation purpose			48
1.1	Phanluang	1	1	48
2	Restaurant	2	2	92,5
2.1	Xiengthong -Khily	2	2	92,5
	Total	3	3	140.5

Sources: Field Survey, 10-25 March 2022

30. Table 3-3 presents the area and number of secondary structures to be affected by the subproject. About **452.19m²** of secondary structures including toilets, kitchens, storage, stairs and **240m** fence and **2 steel poles** will be affected by the subproject.

Table 3-3 Affected Secondary Structures

No.	Village Name	Small Hut	Toilet	Chicken coop	Balcony	Stair	Frog pond	Concrete Yard	Fence	Steel pole
	Unit	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	Pole
1	Phonsa-art								29	
2	Phanluang	68	6	56.83	57.6	22	6.6		211	
3	Xiengthong -Khily	94.8								2
4	Wat Saen				95.36			45		
Total		162.8	6	56.83	152.96	22	6.6	45	240	2

Sources: Field Survey, 10-25 March 2022

31. In addition to the main and secondary structures, about 989 trees (927 fruit trees, 20 industrial trees and 52 bamboo trees) will also be affected by the subproject (Table 3-4).

Table 3-4 Summary of affected Industrial Trees

No.	Village Name	Total	Fruit Tree	Industrial Trees	Bamboo Tree
1	Phonsa-art	44	24	5	15
2	Phanluang	586	553	7	26
3	Xiengthong -Khily	212	200	5	7
5	Wat Saen	157	150	3	4
	Total	999	927	20	52

Sources: Field Survey, 10-25 March 2022

6.3 Gender Considerations

32. A gender-responsive social assessment has been made during consultation of the ARAP to identify potential impacts for different populations (ethnic peoples and vulnerable groups – women and female/male youth and children, the elderly and disabled, landless, and poor, etc.) in relation to their health and safety concerns. The result of the gender consultation and assessment indicates that both men and women shared similar concerns and recommendation on community health and safety, noise and dust, compensation with reasonable price and recruitment of local people for the construction works.

33. Gender mainstreaming and integration has been promoted during the ARAP and unit price preparation to encourage active participation of women and this will continuously be encouraged during implementation and M&E to strengthen implementation and monitoring of subproject activities that can be carried out by local authorities with active engagement of local communities on the use of nature-based/green infrastructure solutions and waste (solid and liquid) management to reduce pollution along the waterways.

6.4 Mitigation Measures

34. Efforts have been made during detailed design to avoid the needs for land acquisition and resettlement. In addition to this ARAP for the subproject activities, a detailed Environmental and Social Management Plan (ESMP) was also prepared as a standalone document to be applied by the subproject in accordance with ESMF. The ESMP including environmental, social, health and safety measures, chance-find procedure and good civil engineering practices (e.g., ESCoP) will be applied to mitigate potential adverse impacts as a result of the subproject.

7 Socioeconomic Profiles in Affected Villages

35. The census and socio-economic information and data collection were carried out during 10-25 March 2022 using census survey form for village census data. Data processing and analysis were implemented by the expert team in Vientiane Capital. This section provides census data and information of village located in the subproject boundary. The results of socio-economic survey are summarized in the following sections and the data collection form is in Attachment 2.

7.1 Population and Households in the Affected Village

36. The subproject covers five villages which are home to a total of 3,971 people from 730 families (See Table 4-1 below). The data shows that the family density in Phanluang and Phonsa-art villages is higher than in Xiengmouan, and Xiengthong-Khily and Wat Saen villages. Please see Table 4-1 below for more detail information.

Table 4-1 Population and Households in Affected Villages

No	Village Name	# of households	Population	Female	Male
1	Phonsa-art	210	1,128	561	567
2	Phanluang	360	2,022	1,065	957
3	Xiengmouan	60	306	172	134
4	Xiengthong-Khily	60	302	161	141
5	Wat Saen	40	213	109	104
		730	3,971	2,068	1,903

Sources: Village Survey, 10 March-10 April 2022

7.2 Ethnic Groups

37. Table 4-2 below provide information on the population by ethnic group in the affected villages. Lao Tai is the largest group making up 94% of the population (3,747 people, 1,960 females and 1,787 males). The remaining 6% includes Khmu and Hmong ethnic groups. Lao language is the main language used by Lao Tai. Neither Hmong nor Khmu ethnic groups are anticipated to be affected by this subproject.

Table 4-2 Ethnic Groups in Affected Villages

No.	Village Name	Lao Tai			Khmu			Hmong		
		# of family	# of Pop.	Female	# of family	# of Pop.	Female	# of family	# of Pop.	Female
1	Phonsa-art	196	1,057	528	11	57	27	3	14	6
2	Phanluang	330	1,869	990	23	110	55	7	43	20
3	Xiengmouane	60	306	172						
4	Xiengthong-Khily	60	302	161						
5	Wat Saen	40	213	109						
Total		686	3,747	1,960	33	167	82	10	57	26

Sources: Village Survey, 10 March-10 April 2022

7.3 Religions

38. The main religion adopted in the affected villages is Buddhism (99% of the population). Only 1% (10 families) of Hmong ethnic group in Phanluang and Phonsa-art villages practice animism. Both Hmong and Khmu ethnic groups have been living in the existing villages for a long time and are well integrated into local Lao communities (Table 4-3).

Table 4-3 Religions in Affected Villages

No	Village Name	# of Family	Buddhism (family)	Animism (family)
1	Phonsa-art	210	207	3
2	Phanluang	360	353	7
3	Xiengmouan	60	60	0
4	Xiengthong-Khily	60	60	0
5	Wat Saen	40	40	0
Total		730	720	10

Sources: Village Survey, 10 March-10 April 2022

7.4 Infrastructures and Facilities

39. The following tables describe characteristic of existing infrastructure and facilities available in the affected households. It informs accessibility of households to different types of facilities such as latrine, market, electricity network, water supply network and road. The table also shows number of small shops, factories, big companies, hotels/guesthouses available in the affected villages. There acronym and numbering system was created in order to be used as variable in the Table 4-4 below.

40. The survey shows that all affected villages have relatively good infrastructure and public utilities. Table 4-5 shows that population in the affected village have good condition of infrastructures and facilities. Among them, there are a total of 9 major companies, 1 main market, 44 small shops, 55 guesthouses occurred in the subproject villages. In addition, there are 297 cars/pickup trucks and all houses have at least one motorbike. This information is an indicator of the wealth of the villages or households. People have access to range of facilities and convenient services such as good access to sanitation, electricity network, clean water supply, all season road, market, etc. The details can be seen in Table 4-5 below.

Table 4-4 Abbreviations of Infrastructure and Facilities in the Villages

Types of infrastructure and facilities	Acronym	Unit
1. Latrine	L	HH
2. Market	M	Number
3. Big Company	BC	Number
4. Small Shop	SS	Number
5. Hotel and Guesthouse	HG	Number
6. All weather land Road	A-R	Number
7. Boat Transportation	BT	Number
8. Public Bus	PB	Public transport
9. Pick-up and Truck	P-T	Car
10. Motorbike	MB	Bike
11. Tractor	T	Tractor
12. Rice Mill	RM	Number
13. Electricity Household	EH	HH

Types of infrastructure and facilities	Acronym	Unit
14. Industrial factory	ID	Number
15. Drilled Bore	DB	HH/tap
16. Pipe Water	PW	HH
17. River and Lake	R-L	River

Table 4-5 Infrastructure and Facilities in the Affected Villages (Households)

No.	Village Name	1	2	3	4	5	6	7	9	10	12	13	14	15	16	17
		L	M	BC	SS	HG	AR	WT	PT	MB	EH	IF	W	DB	PW	RL
1	Phonsa-art	250	0	4	12	3	13	1	110	250	250	0	0	0	250	2
2	Phanluang	483	1	4	20	6	3	0	84	483	483	2	0	1	483	1
3	Xiengmouan	102	0	1	4	19	6	1	53	102	102	0	0	0	102	1
4	Xiengthong-Khily	119	0	0	5	17	3	2	27	119	119	0	0	0	119	2
5	Wat Saen	64	0	0	3	10	4	1	23	64	64	0	1	0	64	1
Total		1,018	1	9	44	55	29	5	297	1,018	250	2	1	1	1,018	7

Sources: Village Survey, 10 March-10 April 2022

7.5 School Facility and Health Centers

41. There are many public and private schools, colleges and university as well as international school are located surrounding the subproject areas. Almost then schools and tertiary education facilities were identified in adjacent to the Project areas especially Ecole Primaire Luang Prabang, Luang Prabang Preschool, English Clublaos School, and Fasai Nursery and Preschool.

42. In the subproject villages, there is one primary school, with a total of 13 classrooms, and oversight by 14 teachers. The total number of secondary school and high school together is 2 schools, 22 classrooms and 53 teachers are available to provide the service to the public (see Table 4-6). Students travel about 0.2km to 4km distance to their schools by bicycles or/and motorbikes.

43. There are four primary medical facilities identified within the Luang Prabang City including two public hospitals: Luang Prabang Provincial Hospital (LPPH), Lao Friends Hospital for Children; and two private hospitals: Chinese Hospital, and Lao-Chinese Hospital. Other medical and health care services are also available such as Luang Prabang Blood Centre, 22 private clinics, 6 community health centres, and 60 pharmacies. There is no any health centres located in these five village areas.

44. Lao Friends Hospital for Children (LFHC) is the first full-service paediatric hospital in northern Lao PDR and currently has inpatient & outpatient departments, 24 beds, emergency room, intensive care unit, operating room, laboratory, pharmacy, radiology, and ancillary facilities. The LFHC is currently operating a growing outpatient, seeing up to 100 patients per weekday. Any patient requiring inpatient care would be transferred immediately to LPPH.

45. Health statistics of 2021 was provided by the Provincial Department of Health (PDH) for this study. More than 40 health issues were identified by the PDH) throughout the province. The prevailing health issues in Luang Prabang City of both children under five and adults include cold / fever, sore throat and bumps in the back of throat, digestive disorders, and peripheral neuropathy.

46. These facilities will not be affected by the subproject in terms of land requisition; however, during the consultation with communities, the subproject was recommended not to transport construction materials during the students commuting to schools and pay attention to mitigation measures of noise and dust as well as regularly communication with the school and health officials on the construction activities and schedule.

Table 4-6 Number of School and Health Center in the Affected Villages

No.	Village Name	No. of Primary School			No. of Secondary/High school			Health Centre
		School	Classroom	Teacher	School	Classroom	Teacher	
1	Phonsa-art	0	0	0	2	22	53	0
2	Phanluang	0	0	0	0	0	0	0
3	Xiengmouan	1	13	14	0	0	0	0
4	Xiengthong-Khily	0	0	0	0	0	0	0

No.	Village Name	No. of Primary School			No. of Secondary/High school			Health Centre
		School	Classroom	Teacher	School	Classroom	Teacher	
5	Wat Saen	0	0	0	0	0	0	0
Total		1	13	14	2	22	53	0

Sources: Village Survey, 10 March-10 April 2022

Table 4-7 Distances from Each Village to School

No.	Village Name	Distance (km)		
		Primary School	Secondary/High School	Health centre
1	Phonsa-art	0.2 Km	0.2 Km	2 Km
2	Phanluang	1 Km	1 Km	2 Km
3	Xiengmouan	2 Km	1,5 Km	4 Km
4	Xiengthong-Khily	1 Km	1 Km	3 Km
15	Wat Saen	1 Km	1,5 Km	4 Km

Sources: Village Survey, 10 March-10 April 2022

7.6 Education

47. It is noticed all population in the affected villages can read and write. There are many levels of schooling from primary school up to university level. The highest number of students' enrolment is the high school level followed by secondary school, higher diploma, and university level respectively. These figures were current status estimated by the village chief. This represents number of youths is high in the affected villages (Table 4-8).

Table 4-8: Level of Education in the Affected Villages

No	Village Name	Uneducated		Primary school		Secondary school		High school		Higher diploma		University	
		Total	Female	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
1	Phonsa-art	0	0	93	52	315	137	430	234	125	57	95	43
2	Phanluang	0	0	141	86	330	170	1058	594	262	80	161	97
3	Xiengmouan	0	0	0	0	13	8	56	25	17	7	15	4
4	Xiengthong-Khily	0	0	26	16	9	4	10	5	1	0	14	9
5	Wat Saen	0	0	21	9	10	8	8	4	4	2	0	0
Total		-	-	281	163	677	327	1,562	862	409	146	285	153

Sources: Village Survey, 10 March-10 April 2022

7.7 Disease and Treatment Practices

48. According to the field survey, there is no malnutrition issue or epidemic disease in the last two years. When people feel sick, they use services from the public hospital and health center nearby. Some of them may buy medicine from a clinic or pharmacy to treat their illness. The current situation of COVID-19 pandemic has impacted the socio-economic conditions as a whole.

49. Interviews conducted in five subproject villages indicated that all villages seek medical services in hospitals and/or purchase medicines by themselves when needed. According to the statistics of PDH, by 21/12/2021 there were a total number of 4,475 people with COVID-19 infection cases including 16 imported. The province health authorities as well as the provincial authorities from other sectors have implemented the mitigation measures based on the relevant Prime Minister Instructions and Orders.

50. Health statistics of 2021 was provided by the Provincial Department of Health (PDH) for this study. More than 40 health issues were identified by the PDH throughout the province. The prevailing health issues in Luang Prabang City of both children under five and adults include cold / fever, sore throat and bumps in the back of throat, digestive disorders, and peripheral neuropathy.

7.8 Employments and Incomes

51. The majority of occupation of people in the affected villages is family business which accounts for about 46% followed by students, general workers, government officials, private employees and farmers. This can be interpreted that the main income of people in the subproject villages is from operating family businesses (See Table 4-9).

Table 4-9 Employment in Affected Villages (persons)

No	Village Name	Occupations												(Total)	
		(Farmer)	(Female)	(Business)	(Female)	(Govt official)	(Female)	(private employees)	(Female)	(Worker)	(Female)	Students	(Female)	(Total)	(Female)
1	Phonsa-art	0	0	485	255	75	30	52	21	323	157	195	98	1128	561
2	Phanluang	20	8	1034	673	175	90	180	80	63	0	550	214	2022	214
3	Xiengmouan	0	0	202	145	46	15	7	3	30	7	21	2	306	172
3	Xiengthong-Khily	0	0	85	70	44	23	29	13	21	2	123	53	302	161
5	Wat Saen	0	0	30	24	13	7	4	1	16	5	150	70	213	109
(Total)		20	8	1,836	1,167	353	165	272	118	453	171	1,039	437	3,971	1217

Sources: Village Survey, 10 March-10 April 2022

7.9 Migration

52. There was incident of labor migration in the last three years in the affected villages. Young people were migrated to work in the other province, mainly Vientiane Capital. Young people also migrated to work in Thailand. From the interview, men will migrate to work in construction, agriculture, and mining industries.

7.10 Land Use

53. The Table 4-10 shows the land use in the affected villages of which the residential land accounts for 70% of the total land area followed by agriculture, village land and cemetery land accordingly.

Table 4-10 Land Use in Subproject Affected Villages

No.	Village Name	Total area of village (Ha)	Residential land (Ha)	Agricultural Land (Ha)	Cemetery (Ha)
5	Phonsa-art	32.40	30.00	0	0
4	Phanluang	13.96	10.00	1.5	0.7
2	Xiengmouan	4.76	4.76	0	0
3	Xiengthong-Khily	36.22	22.66	0	0
1	Wat Saen	14.58	4.27	0	0
Total		101.92	71.69	1.5	0.7

Sources: Village Survey, 10 March-10 April 2022

7.11 Domestic Animal in the Affected Villages

54. Table 4-11 below shows the number of domestic animals in affected villages. The majority of villagers raise poultry as main sources of food and incomes followed by goat, and cow respectively.

Table 4-11 Domestic Animals in Subproject Affected Villages

No.	Village Name	Cow		Goat		Poultry	
		# of animal	# of HH	# of animal	# of animal	# of animal	# of HH
1	Phonsa-art	0	0	0	0	800	60
2	Phanluang	85	2	120	2	3500	300
3	Xiengmouan	0	0	0	0	0	0
4	Xiengthong-Khily	0	0	0	0	0	0
5	Wat Saen	0	0	0	0	0	0
Total		85	2	120	2	4,300	360

Sources: Village Survey, 10 March-10 April 2022

7.12 Cultural Heritage

55. The subproject facilities such as the flood embankment and bank protection, drainage and flap gates, and Riverfront Park will be mostly located in the ZPP-N: Natural and Landscape Zone, accordingly, assessments of heritage impacts (provided in the subproject ESMP) is preceded in line with UNESCO and Luang Prabang's World Heritage Office.

56. A Master Plan on Conservation (PSMV or plan de sauvegarde et de mise en valeur), which was elaborated in 2001 on French initiative, has been the legal basis of all regulations on land use, architectural restrictions, and building rehabilitation in the Heritage Area. The PSMV had been revised, considering the latest circumstances, and been finalized by the end of 2017

57. The outline and restrictions by zone prescribed in the PSMV are as shown in Figure 4-1 and Table 4-12.

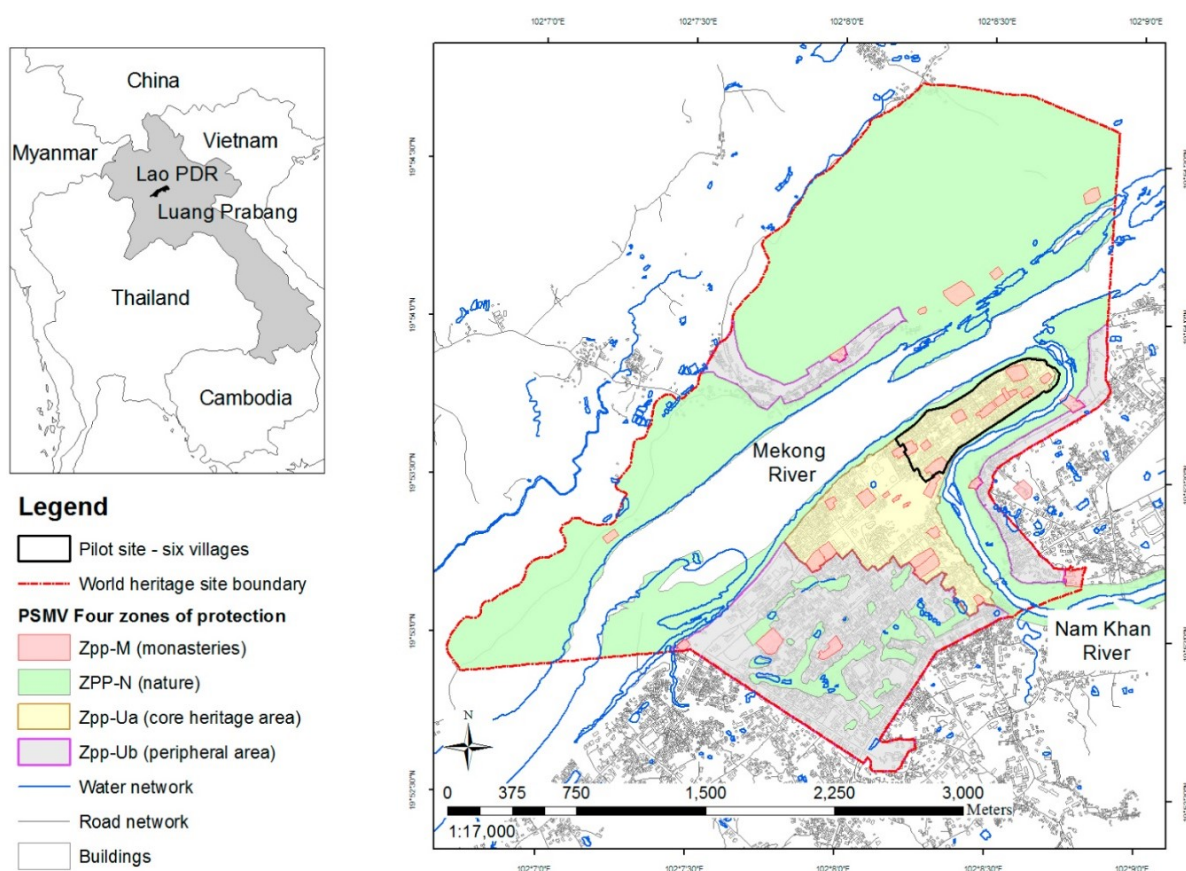


Figure 4-1 PSMV Zoning Plan (ZPP)

Table 4-12 Outline & Restrictions by Zone Prescribed in PSMV

Division	ZPP-Ua	ZPP-Ub	ZPP-N	ZPP - M
1. Situation	<ul style="list-style-type: none"> - Peninsula between Nam Khan and Mekong. - Phousi Hill is not included. 	<ul style="list-style-type: none"> - To the south of ZPP-Ua - Right banks of Nam Khan and Mekong 	<ul style="list-style-type: none"> - Divided into four zones: natural forest zone, wetlands, river banks, and Phousi Hill. 	<ul style="list-style-type: none"> - Constituted with land plots include in the enclosed of monasteries.

Division	ZPP-Ua	ZPP-Ub	ZPP-N	ZPP - M
2. Character	<ul style="list-style-type: none"> - Mainly residential area with some equipment, commerce, and service activities along the main roads and secondary roads. - Activities directly linked to tourism present some risks to change the nature of buildings' heritage value. 	<ul style="list-style-type: none"> - Mainly residential area with some equipment, commerce, and service activities along the main roads and secondary roads. 	<ul style="list-style-type: none"> - This zone constitutes a principal component of site inscription to the list of world heritage. 	<ul style="list-style-type: none"> - Rehabilitation works identical to original, possibility for revolution to be determined case by case, on consent of the services of La Maison du Patrimoine. Demolition is prohibited.
3. Particular Attention regarding New Constructions, etc.	<ul style="list-style-type: none"> - Respect for adequacy of architectural type and detail of decoration - Materials and colors used both in restoration work as well as in new construction - Positioning of vegetation with reference to fences and land lots, maintenance, or reconstruction of vegetal frames 	<ul style="list-style-type: none"> - Respect for adequacy of architectural type and detail of decoration - Materials and colors used both in restoration work as well as in new construction - Positioning of vegetation with reference to fences and land lots, maintenance, or reconstruction of vegetal frames 	<ul style="list-style-type: none"> - Guarantee the current natural characteristics and integrity by preserving vegetal cover and management of wastewater discharge 	<ul style="list-style-type: none"> - All activities not expressly authorized.
4. Rehabilitation	<ul style="list-style-type: none"> - Respect regulations so that urban landscape will not be damaged. 	<ul style="list-style-type: none"> - Act with flexibility according to circumstances. - Permit the relocation of a building. - Prohibit leaving traces of destruction. 	<ul style="list-style-type: none"> - Prohibit any reconstruction or restoration that might damage the urban landscape. - Prohibit destruction of buildings. 	<ul style="list-style-type: none"> - In case of reconstruction, application of the rules relating to construction possibility and architectural prescriptions.
5. Road System	<ul style="list-style-type: none"> - Respect regulations so that urban landscape will not be damaged. 	<ul style="list-style-type: none"> - Act with flexibility according to circumstances. - Permit the relocation of a building. 	<ul style="list-style-type: none"> - Prohibit any reconstruction or restoration that might damage the urban landscape. 	<ul style="list-style-type: none"> - Without object.

Division	ZPP-Ua	ZPP-Ub	ZPP-N	ZPP - M
		- Prohibit leaving traces of destruction.	- Prohibit destruction of buildings.	
6. Nature	- Prohibit cutting down existing trees.	- Prohibit cutting down existing trees.	- Prohibit cutting down existing trees.	- Without object.
7. Drainage	- N/A	- Pay special attention to drainage so that the wetlands pollution will be alleviated.	- Pay attention to drainage so as not to give negative impacts on the functions in the zone.	- Without object.
8. Construction (Max. Height)	- No construction can exceed more than one floor above the ground.	- No construction can exceed more than one floor above the ground.	- Number of floors authorized: one floor on open stilts.	- Any construction cannot be taller than the sanctuary. - The highest level of floor of any construction not directly or indirectly destined to the worship must be inferior to the level of plinth of major Buddha statue.

Source: PSMV- Heritage Preservation and Development Master Plan

58. Each village has a temple for conducting traditional and cultural practices. There is one with few local stupas located close to the subproject site. During the consultation with local communities, the subproject was recommended to conduct traditional ceremony asking permission from the land and water spiritual before starting construction activities and working on the big Buddha day is not allowed. Other than that, the subproject is not expected to create any impacts on any local and national archaeological, paleontological or cultural significance. However, there is a possibility for (as yet undiscovered) sites of local cultural significance (i.e., artifacts, sacred sites, cemeteries) in subproject areas during construction. Nonetheless, a “Chance Finds Procedure” in the ECOP describing the process to be followed when any artifacts are found. More details are provided in the ESMP prepared for this subproject.

59. Meanwhile, the bank protection structures and the Riverfront Park are situated in periphery of the ZPP – Ua (core heritage area) on the left bank of Nam Khan River, and the ZPP – Ub (peripheral area) on the left bank of Nam Khan (refer to Figure 4-1). However, the ZPP-N: Natural and Landscape Zone identified in the Regulation (2001) includes riparian areas of Nam Khan and Mekong Rivers within the heritage area which also lie within ZPP – Ua and ZPP – Ub zones.

60. As the subproject area is rich in cultural heritage, the overall assessment of heritage impacts is therefore considered to be moderate within the ZPP – M, ZPP-Ub and ZPP-N (on the right bank of Nam Khan River) zones of the LPB World Heritage Protected Area given that there is no any

physical damages to the cultural heritage buildings and temporary effects and disturbance during the construction phase which can be minimized through effective management and compliance monitoring and reporting of this subproject ESMP and C-ESMP. The Cultural and Heritage Impact Assessment was carried out as part of this subproject ESMP and provided in Section 6 of the subproject ESMP.

7.13 Poverty Groups

61. The Guideline number 0830/MAF, dated 06/04/2018 on guideline for implementation the Decree 384, 2017 sets the Criteria for Poverty Graduation and Development. Section 4 of this guideline indicates that families that graduate from poverty are the families that have achieved six criteria for graduation of families' from poverty defined in the Decree 348/GOL, but still do not have stabilization, and are vulnerable with risk to fall back into poverty as they have not yet achieved the majority of criteria for developed families such as: political aspects, education, cultural, environmental, and national defense-peace keeping. Importantly, although members of a family have occupations, they remain at subsistence income. They do not have savings to ensure economic stability of their families. Average income per person should not be less than 5.6 million kip or USD700 per person per year. According to the data provided by the village chief, there are no poor households in the five subproject villages or expects to be affected by the subproject.

7.14 Vulnerability Groups (VG)

62. As per the given definition above, vulnerable groups are distinct groups of people who might suffer disproportionately or face the risk of being further marginalized by the effects of resettlement and specifically include: (i) households headed by women, the elderly people or people with disability and households with no labors, (ii) households living below the poverty threshold, (iii) the landless, and (iv) ethnic groups.

63. Vulnerable households, as defined by Decree 348/GOL, dated 16/11/2017 on the Criteria for Poverty Graduation and Development, Article 4 of this Decree defined criteria for graduation of families from poverty as following:

- Have safe and strong housing;
- Have assets and equipment necessary for their livelihoods and income generation;
- Have labor, stable income or employment;
- School age family members receive lower secondary school education;
- Have access to clean water and stable sources of energy;
- Have access to primary public health services;

64. In order to put this decree into implementation, the government also issued a Guideline number 0830/MAF, dated 06/04/2018 on guideline for implementation the decree on the Criteria for Poverty Graduation and Development. Section 4 of this guideline indicated that families that graduated from poverty are the families that achieved six criteria for graduation of families' from poverty defined in the Decree 348/GOL, but still do not have stabilization, and vulnerable to development, risk to fall back to poverty family due to those families are not yet achieved the

majority of criteria for developed families such as: political aspects, education, cultural, environmental, and national defense-peace keeping. Importantly, although members of family have occupations, they remain at subsistence income. They do not have saving for families to ensure economic stabilities of their families. Average income per person should not be less than 5.6 million kip or USD700 per person per year.

65. According to the data provided by the village chief, there are no vulnerable household or people in the five subproject villages or expects to be affected by the subproject.

8 Socioeconomic Profiles of Affected Population

66. The census and socio-economic surveys were carried out during 10-25 March 2022. All affected households have been interviewed in the socio-economic survey. Data processing and analysis were implemented by the expert team in Vientiane Capital. This section provides census data and information of village located in the subproject boundary. The analysis results of socio-economic survey are summarized in sections below (See Survey questionnaire in **Attachment 2**).

8.1 Affected Households

67. Table 5-1 indicates that the subproject will affect 59 subproject affected households (PAHs) with 331 subproject affected people (PAP) including 164 females and 167 males from four villages (including Phonsa-art, Phanluang, Xiengthong-Khily, and Wat Saen) by various forms of losses as presented in Section 2 above. Among the 59 PAHs, there is a single wooden house with **48m²** (belongs to one PAH in Phanluang village) and two small restaurant structures with **92.5m²** (belongs to one PAH in Xiengthong -Khily village) will be affected by the subproject. These structures were built in the government land.

68. The current design indicates that the project will not require an acquisition of any private land (residential land) but the subproject will result in the loss of property and trees occupied by 59 households (with 331 project affected people (PAP) including 164 females and 167 males) in four villages including Phonsa-art, Phanluang, Xiengthong-Khily, and Wat Saen villages. This includes (i) **48m²** of a single wooden house (**owned by one PAH**); (ii) two small restaurants with; (iii) **452.19m²** of secondary structures including toilets, kitchens, storage, stairs and **240m** fence and **2 steel poles**; and (iv) and **999trees** (fruits, industrial trees and bamboo). The affected structures were built in the government land. (See a summary of impact in table 3-1 below).

Table 5-1 Number of the Affected Households

No	Village	# of HH	# of people	Female	Male
1	Phonsa-art	8	35	19	16
2	Phanluang	22	124	61	63
3	Xiengthong-Khily	11	70	35	35
4	Wat Saen	18	102	47	55
	Total	59	331	164	167

Sources: Socio-economic Survey, 10 March-10 April 2022

8.2 Ethnic Groups and Religions

69. All affected households are Lao Tai and their religions are Buddhism. Lao language is the main language used by Lao Tai. No Hmong and Khmu ethnic groups are affected by the subproject.

8.3 Infrastructures and Facilities

70. The following tables describe characteristic of existing infrastructure and facilities available in the affected households. It informs accessibility of households to different types of facilities such as latrine, market, electricity network, water supply network and road. The table also shows number of small shops, factories, big companies, hotels/guesthouses available in the affected villages.

71. Water, sanitation and hygiene in the affected households are good. All affected households have access to pipe water supply. They have enough clean water to wash and clean. All of the affected households buy drinking water from service providers delivering to their house once a week. The access to food and household supplies are easy as there are many small shops nearby their houses. The survey result shows that each PAH has at least 1-2 cars and/or 1 motorbike. Affected households are happy that the road will be improved as it will be more convenient, safe and time saving for travelling and transportation of goods. See Table 5-2 for more details.

Table 5-2 Infrastructure and Facilities of the Affected Households

No.	Village Name	L	SS	PT	MB	EH	PW
		Latrine	Small Shop	Pivk-up Truck	Motor bike	Electricity House	Pipe Water
1	Phonsa-art	8	2	15	8	8	8
2	Phanluang	22	6	30	22	22	22
3	Xiengthong-Khily	11	5	19	11	11	11
4	Wat Saen	18	1	42	18	18	18
Total		59	14	106	59	59	59

Sources: Socio-economic Survey, 10 March-10 April 2022

8.4 Employment and Incomes

72. The occupation of the majority of people in the affected villages is family business which accounts for about 25% followed by government officials, general workers, students, private employees and farmers. This can be interpreted that the main income of people in the subproject villages is from operating family businesses (See Table 5-3).

Table 5-3 Occupations of PAHs

No	Village Name	Occupations												(Total)	
		1. Farmer	(Female)	2. Business	(Female)	3. Govt officials	(Female)	4. Private employee	(Female)	5. Worker	(Female)	6. Student	(Female)	(Total)	(Female)
1	Phonsa-art	2	2	3	2	10	5	2	1	3	1	15	8	35	19
2	Phanluang	5	6	18	5	27	20	10	4	32	10	32	18	124	63
3	Xiengthong-Khily	4	12	25	2	8	5	7	4	18	6	8	6	70	35
4	Wat Saen	5	5	30	14	24	10	11	4	13	5	19	9	102	47
(Total)		16	25	76	23	69	40	30	13	66	22	74	41	331	164

Sources: Household Survey, 10 March-10 April 2022

9 Legal Framework

73. The main objective of compensation policy under this ARAP is to ensure that all people persons subjected to adverse impacts (displaced persons or PAPs) are compensated at replacement costs for loss of assets (e.g. land, houses, structures, trees, businesses) and livelihoods as a result of the subproject. and other assets and otherwise provided with any rehabilitation measures or other forms of assistance necessary to provide them with sufficient opportunity to improve, or at least restore, their incomes and living standards. Given the nature of the subproject activities, the subproject area will need land acquisition and/or compensation. The compensation and resettlement relevant policies of the World Bank and GOL will be applied to address temporary impacts and ARAP will be prepared and implemented in accordance with the policies.

74. This ARAP for LPB subproject complies with the World Bank's OP 4.12, applicable provisions of Decree 84 of the Lao Government on Compensation and Resettlement, the Decree on Environmental Impact Assessment (2019) and other relevant national legislation including the Land Law 2019. Where gaps and discrepancies exist between the WB OP. 4.12 and the GOL policies, the former WB policy will prevail as per the Project Agreement and will be in accordance with the Project's Resettlement Policy Framework.

10 Principles and Policies for Compensation, Support, Resettlement

10.1 Principles

(1) For Compensation and Support

- 1) Households/individuals whose assets such as lands, houses, structures, crops, etc. and, or business are affected as a result of land acquisition are entitled to compensation and support. Severely affected households – as defined by the subproject will receive support in cash (or in kind in case of agricultural land for land) to restore their livelihood to the pre-project level.
- 2) The eligibility criteria to such entitlements are defined on the basis of the World Bank's Operational Policy on Involuntary Resettlement (OP 4.12), relevant Laws of Lao PDR, and consultation with affected households.
- 3) Compensation will be paid at full replacement costs for affected lands, houses, structures without taking into account depreciation and or deduction of the salvageable materials. Compensation for affected crops will be at market prices, at replacement costs for perennial trees, or as agreed with affected households.
- 4) "Land for land" compensation should be applied for agricultural land, particularly for affected households whose main income is land based. If productive land of equivalent quality and area is not available in the subproject area and convenient for affected household to continue their existing agricultural activities, compensation in cash for the affected land should be proposed to the affected households.

- 5) Compensation and allowance shall be provided to affected households before land needed by the subproject is acquired.
- 6) Acquire land (or right to use land) through negotiated agreements and with the use of the power of eminent domain only as a last resort;
- 7) Upon completion of the subproject, land surface shall be restored as much as possible to its original condition in case of temporary land use/ disruption to enable landowners/users/lessees to resume their pre-subproject activities;
- 8) Keep PAP and PAH, and communities fully informed about the subproject, the process that will be followed to acquire and compensate for land, and their related rights and avenues for redress;
- 9) Ensure that aggrieved persons will have redress and recourse options and that solutions are in line with principles stipulated in this ARAP;
- 10) All PAP and PAH, regardless of their legal status of land, will receive support in their efforts to restore their livelihoods to the pre- subproject level – as a minimum;
- 11) PAP and PAH will be notified of the subproject implementation schedule and consulted regarding the principles of land acquisition and loss of, or damage, to assets; and

(2) For Physical Resettlement

- All households who lose their houses (fully affected, or partially affected but the remaining part is not usable) shall be entitled to buying at least a standard land plot in the subproject's resettlement site.
- Households building houses/structures on public land prior to subproject's cut-off day will be compensated for affected structures at full replacement costs and are eligible for financial assistance to relocate and to enable them to afford a standard land plot in the subproject resettlement site if they have no other place to move to.
- By the end of the subproject, if the livelihoods of affected households have not yet restored to pre-subproject level, additional support measures will be provided.

75. As this ARAP is one of the subproject components, the subproject will not be considered complete until the ARAP is fully implemented and meets the objectives of the World Bank's OP 4.12.

10.2 Policy for Compensation, Support, Resettlement

76. Displaced persons will be entitled to the following types of compensation. The proposed compensation package will be consulted with affected people during consultation following completion of Inventory of Loss:

(1) Agricultural land:

- a) The preferred mechanism for compensation of affected agricultural land will be through provision of replacement land of equal productive capacity and satisfactory

to affected person. If satisfactory replacement land cannot be identified, compensation at full replacement cost may be provided.

- b) Affected person will be compensated for the loss of standing crops at market price, for perennial trees at full replacement cost.
- c) For PAP with no formal or customary rights to affected land, compensation will not be paid for land but for trees/crops if they have been created before the cut-off date. Cash assistance will be provided based on the land origin, land use history, reasons for ineligibility, and the time when the land was put into use.

(2) Residential land

- a) Loss of residential land will be compensated either through a replacement land of residential purpose satisfactory to the affected person, or in cash at full replacement cost.
- b) If the remaining residential land is not sufficient to rebuild a new house or restore the existing house, at the request of the affected person, the entire residential land will be acquired and affected land and assets affixed to land will be compensated at full replacement cost.

(3) Houses and secondary structures

- a) Houses and secondary structures affixed to affected land (created before the cut-off date) will be compensated at full replacement cost regardless of the legal status of the affected land to enable affected person to build a new house/structure with similar technical standard without subject to depreciation and deduction of salvageable materials. For partially affected structure, addition to compensation for affected part at replacement cost, financial support, as agreed with affected persons, will be provided to enable them to repair the remaining part.

(4) Crops and trees

- a) Affected crops will be compensated at market prices and trees at replacement costs, or as agreed with affected households. If trees are movable, transportation costs and labor shall be provided to enable affected person to move trees to their new place.

(5) Businesses

- a) Compensation for loss of business will involve, as relevant: (i) provision of alternative business site of equal size and accessibility to customers, satisfactory to the displaced business operator; (ii) cash compensation for lost business structures; and (iii) transitional support for loss of income (including employee wages) during the transition period.
- b) Lost income will be compensated by way of a disturbance allowance, taking into account the nature of the business and transition period, and that access to similar opportunities will be facilitated through the livelihood restoration program.
- c) For structures with no proof of income (no income tax payment receipt) will receive allowance of 3 month supply of rice per person in the household with the allowance

equivalent to 16 kg of rice at current market price). The allowance cost is provided in Table 13-1.

- d) For those with proof of income (with income tax payment receipt), the actual compensation cost for the loss of income will be calculated based on the actual number of days that the shops would need to be closed during the construction period multiplied with net profit per day derived from the monthly tax payment.

(6) Cultural sites

- a) For any cultural sites such as cemeteries affected, compensation and / or relocation will be done in accordance with cultural norms and regulatory requirements with adequate compensation allocated to facilitate the process.

(7) Tenants

- a) Tenants, who have leased a house for residential purposes will be provided with a cash grant of three months rental fee at the prevailing market rate in the area and will be assisted in identifying alternative accommodation.

(8) Infrastructure and access to services

- a) Infrastructure (such as water sources, roads, sewage systems or electrical supply) and community services (such as schools, clinics or community centers) will be restored or replaced at no cost to the communities affected. If new resettlement sites are established, infrastructure and services consistent with local standards will be provided at no cost to the relocated persons.

(9) Public utilities

- a) Compensation and relocation of affected community infrastructures and public utilities will be covered in a separate compensation and relocation plan which will be discussed, prepared and implemented by the concerned agencies and technical service providers before commencement of subproject activities.
- b) Where there is loss of income due to destruction of community assets, additional compensation will be considered for damages and destruction to property.
- c) All community assets destroyed or whose land is required for the Subproject will be compensated and assistance provide for re-establishment of the assets;

(10) Livelihood Restoration Measures

- a) Severely affected persons who a) physically resettle, or b) from vulnerable groups (as defined in Project's RPF), c) lose more than 10% of their productive land will receive livelihood restoration support (in addition to compensation for their affected assets and loss of income/ income generation activities). The livelihood restoration support aims to assist severely affected persons to improve or at least restore their livelihoods and income generation activities to the pre-project living standards, income earning capacity and production levels. Where needed, additional financial assistance will be provided on a case by case basis;

- b) For affected structures with no proof of income (no income tax payment receipt) will receive allowance of 3 month supply of rice per person in the household with the allowance equivalent to 16 kg of rice at current market price). The allowance cost is provided in Table 13-1.
- c) For those with proof of income (with income tax payment receipt), the actual compensation cost for the loss of income will be calculated based on the actual number of days that the shops would need to be closed during the construction period multiplied with net profit per day derived from the monthly tax payment.

(11) Vulnerable households/persons

77. In case vulnerable and poor households are affected by the subproject activity, they are eligible to support for livelihood restoration. They are the following groups of households:

- a) Divorced or widowed female headed households with dependents and low income between 240,000 to 500,000 Kip per month per capita;
- b) Households with disabled or invalid persons and with low income between 240,000 to 500,000 Kip per month per capita;
- c) Households with persons falling under the government poverty line of 240,000 Kip per month per person; and
- d) Elderly households with no means of support and with low income between 240,000 to 500,000 Kip per month per capita.

(12) Vulnerable households

78. These vulnerable households will need support for livelihood assistance or to have access to the work associated with the construction work of the subproject. Thus, special measures, additional to the compensation entitlements, aimed to improve their status to bring them up to an acceptable level above the poverty line will be applied for the vulnerable group.

79. The measures focus on avoiding potential social risks and are organized around the themes that include: a) reducing barriers to access to markets, trading and employment opportunities; b) empowerment through good governance, sound participatory processes and effective organization of the poor; and c) reducing vulnerability to poverty through building social assets (such as for those with no proof of income tax payment will receive allowance of 3 month supply of rice per person in the household with the allowance equivalent to 16 kg of rice at current market price and increased security of tenure). There is no vulnerable household expects to be affected by this subproject.

80. For severely affected people, livelihood restoration measures will be identified in consultation with them. However, common livelihood restoration measures for vulnerable group may include:

- e) Ensuring they rightfully receive their compensation;
- f) Protection from opportunistic relatives;
- g) Open bank accounts;

- h) Special support for widows and children from female headed households to access support from the Provincial or District Committee for Compensation or designated representative at the district and provincial levels so as to enable them to process their entitlements;
- i) Financial literacy training;
- j) Find new land and / or accommodation;
- k) Livelihood restoration (e.g. training) with special consideration of vulnerable groups;
- l) Securing land tenure in new location.

10.3 Eligibility

1.1.1 Eligibility Criteria

81. The eligibility for affected people to be entitled to compensation is their asset ownership as classified as follows:

- a) Those who have formal legal rights to land (including customary and traditional rights recognized under the Land Law (2019) will be entitled to compensation for affected land and all assets affixed to land, as well as income restoration measures;
- b) Those who do not have formal legal rights to land at the time the census begins but have a claim to such land or assets – provided that such claims are recognized under the laws of Lao PDR or become recognized through a process identified in the resettlement action plan, will be entitled to compensation for affected land, all assets affixed to the land, as well as income restoration measures; and
- c) Those who have neither formal legal right nor recognized or recognizable legal right or claim to the land they are occupying will be entitled to all assets affixed to the land, as well as income restoration measures. In cases where the remaining portion of land is no longer viable, they will be entitled to buying a replacement plot.

82. Persons covered under a) and b) are eligible for compensation at full replacement costs for the land and non-land assets that they lose, and other assistance. Persons covered under c) are provided with resettlement assistance in lieu of compensation for the land they occupy, and other assistance, as necessary, to achieve the objectives set out in the OP 4.12 of the World Bank, if they occupy the subproject area prior to a cut-off date established by the borrower and acceptable to the World Bank. All persons included in (a), (b), or (c) are provided with compensation for loss of owned or used assets associated to land, including businesses associated to land.

83. All PAP and PAH comprised of different populations (see Entitlement Matrix) will be provided with compensation (if deemed legal owner or occupant during census), and rehabilitation and restoration if: (i) their land is acquired for subproject purposes (ii) their income source is directly and adversely affected; (iii) their houses are partially or fully demolished; and (iv) other assets (i.e., crops, trees and facilities) or access to these assets will be reduced or damaged due to land acquisition for the subproject purpose.

84. Thus, land acquisition and its effect on income sources – either on a temporary or permanent basis, will apply to the subproject regardless of whether they are directly funded by the World Bank or not. The policy applies to all PAP and PAH regardless of the number or the severity of the induced impact.

85. Attention is to be given to the needs of different populations (ethnic peoples and vulnerable groups – women and female/male youth and children, the elderly and people with disability, the landless, and poor, etc.).

1.1.2 Cut-Off Date

86. The cut-off date will be the date when Inventory of Loss conducted for the subproject is completed and a public notice of the cut-off date is announced by local authority. Persons who encroach upon the subproject area and/or establish assets within the project's ROI after the cut-off date are not entitled to compensation or any other form of resettlement assistance unless they are a part of the natural growth of the community (i.e. marriage, birth). Similarly, fixed assets, such as structures, crops, fruit trees, etc., those are established after the date of completion of the Inventory of Loss, or after a mutually agreed date, shall not be compensated unless such tree and crops are considered part of the community's natural growth.

87. In addition to the Letter of Cut-Off-Date issued by the Governor of Luang Prabang (Letter No. 10/DPWT.LPB, dated 16 January 2020), the DPWT of Luang Prabang Province has recently issued new Letter of Cut-Off Date to notify Government departments, organizations, people's army, public security, village authorities and other line agencies within the Luang Prabang City, the DPWT of Luang Prabang Province (Please refer to **Attachment 5 for the Letter of Cut-Off-Date**). The letter emphasizes the subproject activity will require some land acquisition on along the Mekong River, and therefore the DPWT shall notify all stakeholders who are currently managing Mekong Rivers to extend their cooperation and observe the following notification:

- a) Do not construct any new structure such as houses, restaurants, services shops, animal pens/coops, riverbank protection, and other buildings in the preserved areas of Mekong Rivers;
- b) Do not excavate soil, gravel, sand, fill or cut the river channel without permission from relevant authorities;
- c) Buildings or structures located outside the subproject area can be improved but permission from the relevant regulations needs to be obtained.

88. The Governor of Luang Prabang Province established a Provincial Resettlement Committee (PRC) on 29 January 2021 (Refer to **Attachment 3 for Provincial Agreement on Establishment**). The Agreement also appointed staff member to join the Committee's Secretariat and its technical team with responsibility to conduct data collection and assessment of subproject impacts. The Agreement authorizes the DPWT to lead activities concerning compensation payment and resettlement works in consultation with relevant provincial and district authorities. Therefore, the preparation of the Inventory of Loss for affected land and assets owned by people and governmental agencies comes under the responsibility of the PRC and its Secretariat. The consultant will work closely with the PRC to ensure the identification, assessment and valuation

of affected land and assets associated to land are conducted in compliance with the national laws, regulation as well as the World Bank's OP 4.12 on Involuntary Resettlement.

10.4 Entitlements

89. The compensation measures to be provided by DOW should include in-kind compensation and/or cash for land and other structures at full replacement cost acceptable to all Subproject Affected Households. Specifically, the following compensation and associated provisions should be provided:

- a) Cash compensation for affected structures, any residential land and asset loss at equivalent at full replacement cost. The option should also be provided for DOW to provide replacement of residential land and assets of equal size acceptable to Subproject Affected Households;
- b) Community land-for-land replacement of equal value acceptable to the affected people will need to be provided, or cash equivalent at full replacement cost if there is no community land available;
- c) Cash compensation for renters, crops, trees and other productive assets affected due to the subproject;
- d) Replacement or re-installation of community utilities and facilities such as wells, sanitation facilities, and roads, etc. which are impacted by the subproject; and
- e) Compensation of public works and other collective assets through in-kind replacement of structures to equivalent or higher standard.

90. The actual compensation entitlements should be finalized and agreed upon in consultation with the Provincial and District authorities. DOW should formalize outcomes of this consultation in a Compensation Agreement and liaise with the local authorities to determine compensation rates.

1.1.3 Compensation Rates

91. Compensation for affected assets shall be based on replacement cost. Compensation for lost production should reflect estimated loss of net income irrespective of whether compensation is provided in cash or in-kind.

92. The Provincial Resettlement Committee (PRC) was established as per the Agreement of the Provincial Governor (No.44/Gov.LPB, dated 29 January 2021). The Committee was established specifically for subproject to oversee the compensation activities associated with the subproject. This committee will also confirm the compensation rates to be used so they are consistent for all subproject Affected Households (See Attachment 3 for Provincial Agreement on Establishment of Resettlement and GRM Committees and Attachment 6 for the Decision of Provincial Governor on Compensation Rates for the LPB Subproject, No. 122/GOV.LPB, dated 10 March 2022).

93. A replacement cost survey was conducted from 10-22 February 2021 as the basis for proposing compensation rates for affected lands, houses, structures, and trees. Rates of

compensation were determined based on actual prevailing market prices of land and assets (See Attachment 4 for Methodology of Unit Rate Assessment). Compensation payment for affected person are calculated as follows:

- a) For perennial trees: Compensation amount = number of tree x price of each type of tree (LAK/Tree) at replacement cost.
- b) For annual crops: as farmers are informed 6 months in advance to harvest their produces, annual crop will not be affected. Thus, no compensation for crop will be made. However, if case where land need to be required for subproject purpose before the crops are not ready for harvest, compensation will be made for affected crops at market price as per the valuation of the PRC.
- c) For houses and secondary structures: Compensation amount = area of structures (m^2 or m) x price of each type of construction material (LAK/ m^2 / or LAK/m).
- d) Loss of income: The actual compensation cost will be calculated based on the actual number of days that the shops would need to be closed during the construction period multiplied with net profit per day derived from the monthly tax payment.
- e) The unit costs of compensation for affected land and assets have been established based on the principle of “Replacement Cost”. The compensation rates and its calculations were consulted and disclosed in meaningful manner to each individual affected persons/households from which they have agreed based on the documents signed³. As per the advice from the WB, the second market survey was carried out during 2-10 September 2022 to estimate actual inflation of construction materials given that the prices of these materials have been notably increased while land and tree prices remain largely stable. The survey was conducted through the visit of local market (5 businesses/shops) to obtain actual/latest prices of main construction materials (such as cement, sand, gravel, wood and steel products, transport and other building materials). The survey result indicated that the inflation rate of construction materials in Luang Prabang Province was 20.67%. However, 10% of inflation rate was already added into the compensation rates approved by the Provincial Governor (122/GOV.LPB, dated 10 March 2022) during the resettlement planning process and therefore only 10.67% additional inflation rate of construction materials was added into the compensation cost in this ARAP.

94. Once the result of the compensation rates (proposed based on replacement costs survey) are available, affected person are consulted on the proposed compensation rates (for each type of impact) and compensation package for each households/individual. Consultations were undertaken at various levels, including district and village, and with representatives of the affected people to arrive obtain concurrence of affected people on compensation packages prior to compensation payment/resettlement. So far, the consultation focused on proposed unit prices for compensation for each type of affected assets, affected people and how compensation process and grievance process will be implemented. The subproject affected households (PAHs) have been consulted on

³ The signed document with individual household is available at the PMU/PIU office.

the proposed rates and accepted the proposed rate (See Minutes of Consultation in Attachment 7 for details).

1.1.4 Entitlement Matrix

95. Affected households are entitled to entitlements for loss of assets established before the subproject's cut-off-date (See Table 7-1 Matrix).

Table 7-1 Entitlement Matrix

Type of Losses	Entitled Persons	Entitlements	Implementation Issues
A. Loss of Structures			
Totally Affected Restaurant Structure, and Secondary Structures (kitchen, rice bins)	Owners of affected structures whether land is owned (regardless of legal status).	Cash compensation at replacement cost for the entire structure equivalent to current market prices of (i) materials, with no deduction for depreciation of the structure or salvageable materials; (ii) materials transport; and (iii) labor cost to cover cost for dismantling, transfer and rebuild; and	The cash compensation for the entire structures may not be based on the current market price. Concern that the compensation may not be release before the dismantling and before their transfer, thus affected owners may advance these costs
Partially Affected structures but no longer viable (Will require relocation)		Timely provision of trucks for hauling personal belongings at no cost to the PAP.	The trucks that will haul the personal belongings shall have enough laborers The personal belongings shall be itemized and ensure that its secured and safe during the actual transfer Transfer and hauling shall not be during rainy season
Partially Affected structures/shops and secondary structures (Will not require relocation)	Owners of affected houses whether or not land is owned.	Cash compensation at replacement cost for the affected portion of structure equivalent to current market prices of (i) materials and labor, with no deduction for depreciation of the structure or for salvageable materials (ii) materials transport, and (iii) cost of repair of the unaffected portion.	Cash compensation may not be based on the current market prices. Cash compensation may not be release timely or delayed in available of funds.
B. Loss of Livelihoods Activities Including Crops, Trees and Ponds			
Crops and Trees		Cash compensation at replacement cost for the affected trees, crops.	Cash compensation may not be release timely or delayed in available of funds.
C. Temporary Impacts Due to Subproject Construction or Maintenance			
Temporary Use of Land	Legal owner or occupant.	For agricultural and residential land to be used by the civil works contractor as by-pass routes or for contractor's working space,	The construction supervision consultant will ensure that the (i) location and alignment of the by-pass route to be proposed by

Type of Losses	Entitled Persons	Entitlements	Implementation Issues
		(i) rent to be agreed between the landowner and the civil works contractor but should not be less than the unrealized income and revenue that could be generated by the property during the period of temporary use of the land; (ii) cash compensation at replacement cost for affected fixed assets (e.g., structures, trees, crops); and (iii) restoration of the temporarily used land within 1 month after closure of the by-pass route or removal of equipment and materials from contractor's working space subject to the conditions agreed between the landowner and the civil works contractor.	the civil works will have the least adverse social impacts; (ii) that the landowner is adequately informed of his/her rights and entitlements as per the Subproject resettlement policy; and (iii) agreement reached between the landowner and the civil works contractor are carried out.
Transportation allowance	Relocating households – to other sites.	Provision of dump trucks to haul all old and new building materials and personal possessions.	PAP/PAH may also opt for cash assistance. The amount (cost of labor and distance from relocation site) to be determined during implementation.

11 Implementation Arrangements

96. The implementation framework of this ARAP complies with the World Bank's OP 4.12, some provisions of Decree 84 of the Lao Government, and the Decree on Environmental Impact Assessment (2019) in consultation with the relevant national legislations including the Land Law, 2019.

11.1 Government Agencies

97. The institutional structures to be put in place for the implementation of the ARAP for the subproject will be consistent with national guidelines and will include:

- Department of Waterways under the MPWT who is the Project Owner (PO) led by the Director General as the Project Director;
- Provincial Department of Public Work and Transport (PDPWT) in Luang Prabang province, the Subproject Owner;
- Public Works and Transport Institute (PTI) partnered to support preparation of safeguard instruments (ESMF, RPF, EGEF, ESMP, and ARAP), monitoring and reporting on implementation of the safeguard instruments including ARAP;

- Provincial Resettlement Committee (PRC, Luang Prabang Province) led by the Provincial Vice-Governor and comprises of relevant provincial departments in charge of oversight and review of ARAP preparation, compensation and GRM;
- District Compensation and Resettlement Units (Luang Prabang) by the District Vice-Major of Luang Prabang city and comprises of relevant district offices which serves as a secretariat of PRC) in charge of supervision, review and report on ARAP implementation, compensation and handling with GRM;

11.2 Provincial Resettlement Committee (PRC)

98. A Provincial Resettlement Committee (PRC) will be established for the subproject in Luang Prabang Province. PRC members will be appointed by the Governor of the Province. The PRC's main role will be to oversee the implementation of ARAP for the subproject, and the committee will meet at least quarterly or more regularly if required.

99. The PRC has been recently established with an Agreement of the Provincial Governor which include representatives from provincial cabinet office, Lao Front for National Development, PONRE, Public Security, DPWT, Provincial Propaganda Office, and District Governor (refer to below). The chair of the committee should be the Provincial Governor or Vice-Governor. Representatives of the PRC should include:

- Vice-Governor of Luang Prabang province;
- Provincial Department of Natural Resources and Environment (PONRE) staff;
- Provincial Justice Department representatives (if required for grievance redress).
- Lao Front for National Development (LFND);
- Department of Public Works and Transport (DPWT);
- Provincial Public Security;
- District Governor.

100. The specific responsibilities of the Provincial Resettlement Committee (PRC) are outlined in Decree 84, Article 20 as follows:

- Supervise, manage the planning and implementation of the plan for compensation, resettlement and rehabilitation of the livelihood of people of the subproject owner and units under his supervision;
- Appoint a unit to manage the compensation and resettlement, and an operation unit of the compensation and resettlement;
- Consider and approve a plan for the environmental, social and natural management, follow-up and examination of the development subproject before the final endorsement of the Ministry of Natural Resources and Environment;

- Work out a policy and define a unit of compensation, set the duration of maintenance of the allocation-resettlement area, transitional period and the period of livelihood rehabilitation of each development subproject;
- Consider and timely settle the request(s) relating to compensations, allocation resettlement and the rehabilitation of people's livelihood according to its mandate and responsibilities;
- Report on its performance to the government and make copies and distribute them to the Ministry of Natural Resources and Environment at each period;
- Issue decisions or notices as references for the implementation of the plan for compensation, resettlement and the rehabilitation of people's livelihood;
- Provide information for the affected and other stakeholders concerning the development subproject, benefits and impacts, progress in the implementation of the plan for compensation, resettlement and rehabilitation of people's livelihood throughout the implementation of the development subproject; and
- Exercise rights and perform other duties as assigned by the government.

11.3 District Resettlement Committee

101. The further planning and implementation of the subproject will be undertaken in coordination with district government agencies, through the establishment of District Resettlement Committee (DRC) for each district affected by the subproject, which will be appointed by the PRC. The main function of the DRC will be to represent the interest of the PAPs and stakeholders in dealing with subproject impacts and mitigation measures with regards to resettlement and land impacts.

- Guide and facilitate the implementation of activities related to the plan for compensation, resettlement and rehabilitation of people's livelihood in its locality;
- Support and render co-operation, co-ordinate with and join the unit to manage the compensation, and resettlement and the subproject owner in implementing timely the plan for compensation, resettlement and rehabilitation of people's livelihood in its locality;
- Consider and timely settle the request(s) related to the compensation, and resettlement and rehabilitation of people's livelihood according to its mandate and responsibilities;
- Report the unit's performance to the management unit of compensation and resettlement, and other related parties at each period (in this case reporting would be to the PRC);
- Supply information to the affected and other stakeholders on the development subproject, benefits, and impacts, progress in the implementation of the plan for compensation, resettlement and rehabilitation of people's livelihood throughout the implementation of the development subproject; and

- Exercise rights and perform other duties as assigned by the management unit of the compensation, and resettlement, and higher authorities.

102. The members of the DRC will include representatives from all districts potentially affected by the subproject. The DRC will be chaired by the District Governors or Vice-Governors of the relevant districts. The representatives from each district required to provide full and balanced advice on ARAP implementation include:

- Vice-Governor Luang Prabang;
- Provincial Office of Natural Resources and Environment (PONRE) staff;
- District Office of Natural Resources and Environment (DONRE) staff;
- District Justice Department representatives (if required for grievance redress);
- District Forestry Officer;
- District Agriculture Officer;
- District Land Officer;
- Lao Women Union (LWU) representatives;
- Lao Front for National Development (LFND);
- Representatives; and
- Village chiefs from affected villages, including traditional leaders as required.

103. Village Authority is responsible for facilitating ARAP preparation and implementation and dealing with GRM at village level. The Village Authority includes Village Mediation Committees or Units (VMCs/VMUs) in charge of receiving, addressing and recording grievances in GRM logbook, and escalating pending grievance that could not be resolved at village level to district and provincial level committees respectively.

11.4 Measures for Organizational Capacity Building

104. The subproject is expected to create positive impacts on the environment by improving climate resilience of the road and reducing greenhouse gas emissions from traffic per kilometer travelled. The subproject will also provide significant capacity building through on-the-job training, the introduction and implementation of Luang Prabang subproject.

105. The PMU with the support from EDPD/PTI will have a supervisory role in planning, capacity building and monitoring the implementation of ARAP to ensure that provisions contained in the ARAP are implemented, monitored and reported through the following capacity buildings:

- Institutional capacity building may be required to effectively carry out implementation activities in the affected areas. This is particularly important as livelihood restoration (beyond cash compensation) is a critical component of the program and is not a legislative requirement, meaning that Local Governments and organizations within affected communities may not have had prior experience with mobilization, implementation support and monitoring of livelihood restoration measures.

- Institutional capacity building could include training activities, workshops and technical assistance provided in advance of entitlement distribution and land acquisition. Capacity building would improve the institutional groups' understanding of the objectives of the ARAP. Capacity assessment should be included in all livelihood restoration initiatives to confirm that the stakeholders involved will have the capacity to implement the initiatives proposed, and capacity building activities should target any gaps identified. Lessons learnt from previous similar subprojects will be important to incorporate into capacity building exercises.

12 Information Disclosure, Consultation and Community Participation

12.1 Information Disclosure

106. Both English language and Lao language versions (executive summary) of ARAP will be posted on the MPWT official government website and will also be distributed to national and local governments, key stakeholders and civil society organizations, and different stakeholders two weeks prior to the second public consultation meeting.

107. Once the ARAP is cleared by the World Bank for implementation, the ARAP will be disclosed in English and Lao languages on the MPWT's website, and locally in Lao language at the village halls. The final English version of ARAP will be disclosed on the World Bank's website. The summary of ARAP will be disclosed in local languages in the village common spaces.

12.2 Consultation Process

108. The subproject adopts a participatory consultation approach to promote meaningful consultation with affected households at the subproject area. A focus is placed on consultation with affected vulnerable groups, including female headed households, ethnic minorities, women, youth, the elderly, the poor, and people with disability, etc.). Consultation with CSOs (NPAs, CBOs) and other relevant stakeholders were also held to understand their perspective and inform subproject design as well as overall impact mitigation approach.

109. Consultation meetings conducted so far indicated that consulted stakeholders, including affected households, support implementation of the proposed subproject.

12.3 Consultation during preparation of ARAP

110. During the preparation of ARAP, ESMP and EIA including the unit rate, there were several consultations undertaken with provincial, district and village authorities including representatives of the affected people (men, women, ethnic minorities, and disadvantaged people). PAPs were invited to participate in public meetings in the early stages of the ARAP, ESMP and EIA preparation. They were provided with information on the proposed infrastructure, its environmental and social risks and potential impacts, mitigation measures proposed for such risks and impacts, including measures that will be implemented to support livelihood restoration activities for adversely affected households if any, particularly those who lose assets and means of livelihood as a result of land acquisition to allow subproject construction. However, for this

subproject acquisition of private land will not be required. Information publicly disclosed includes criteria for cut-off date for the LPB subproject, eligibility criteria for affected people and entitlements, modalities of compensation, grievance redress procedures, including the unit rate for compensation. The consultations were undertaken with participation of provincial, district and village authorities, representatives of the affected people (men, women, and disadvantaged people). The PAP had presented their ideas and provided suggestions for ARAP, ESMP and EIA preparation and unit rate preparation process through a series of participatory exercises and focus group discussion (FGD) to ensure that affected people have opportunities to engage and voice their concerns.

3. During November 2020 until 11 April 2022, there were 14 rounds of consultations with a total number of 689 participants of which 214 (or 31%) are female as presented in in Table 9-1 and Table 9-2 below (See **Minutes of Meetings and List of Participants in Attachment 7**). Consultation methods applied include: a) public meetings, b) household interview (survey), c) and key informant interview. The consultations aimed to:

- Disseminate key subproject information such as the design of the proposed structures for riverbank protection, river front parks; and 9 flap gates and drainage;
- Present anticipated environmental and social risks and impacts associated with construction of the subproject and proposed mitigation measures;
- Disseminate eligibility criteria and entitlements of PAP for loss of assets attached to affected (public) land, and compensation measures;
- Obtain opinions, concerns and recommendations from representatives of affected people and other stakeholders on subproject design, implementation;
- Conduct Inventory of Loss (IOL);
- Collect household data for development of ARAP, ESMP, and EIA.

Table 9-1 Number of Participants

No.	Date	Objective	Participants		
			Total	F	Organization
1	2-4/11/2020	Dissemination of project information and work plan to prepare safeguards documents (ARAP, ESMP and EIA)	35	09	PMU, PTI, PRC, Line Departments, LPB World Heritage Office and PIU and Village authorities
2	10/3/2021	Dissemination of project information, impacts, mitigation measures, and collection of community opinions, concerns and recommendations on the project as well as inform the villages about the activities to prepare safeguards documents (ARAP, ESMP and EIA)	246	90	PMU, PTI, ISAN, PRC, Line Departments, LPB World Heritage Office and PIU, villager authorities and representatives of villagers

No.	Date	Objective	Participants		
			Total	F	Organization
		including data collection and consultation with communities			
3	23/3/2021	Technical consultation on work plan and schedule	15	01	PMU, PTI, ISAN, PRC, Line Departments, LPB World Heritage Office and PIU
4	17-31/8/2021	<ul style="list-style-type: none"> Consultation and discussion on method and procedure to development compensation policy and unit rate; Conducted replacement market survey 	42	09	PMU, PTI, ISAN, PRC, Line Departments, LPB World Heritage Office and PIU, villager authorities
5	1/11/2021	Consultation and discussion on draft compensation policy and unit rate	18	04	PMU, PTI, PRC, Line Departments, LPB World Heritage Office and PIU
6	1-5/11/2021	Dissemination of and consultation on draft compensation policy and unit rate in 14 villages located within and surrounding the subproject area	207	80	PMU, PTI, PRC, Line Departments, LPB World Heritage Office and PIU, villager authorities and representatives of villagers and PAHs located within and surrounding the subproject area
7	9/11/2021	Technical consultation on the 1 st revised compensation policy and unit rate after consultation with PAPs	16	02	PMU, PTI, PRC, Line Departments, LPB World Heritage Office and PIU
8	6/12/2021	Technical consultation on the 2 nd revised compensation policy and unit rate for approval.	17	02	Vice Governor of LPB, PMU, PTI, PRC, Line Departments and PIU
9	21/12/2021	Technical consultation on identification of worker camp sites and disposal of excavated surplus soils	17	03	PMU, PTI, PRC, Line Departments and PIU
10	22/2/2022	1 st Technical consultation on the subproject details design	10	0	PMU, PTI, ISAN, PRC, Line Departments, LPB World Heritage Office and PIU

No.	Date	Objective	Participants		
			Total	F	Organization
11	24/2/2022	2 nd Technical consultation on the subproject details design and compensation amount	12	3	PMU, PTI, ISAN, PRC, Line Departments, LPB World Heritage Office and PIU
12	28/2/2022	Consultation on work plan for conducting final DMS	21	04	PMU, PTI, ISAN, PRC, Line Departments, LPB World Heritage Office and PIU and affected village authorities
13	9/3/2022	Technical consultation on the revised details design and the revised compensation amount	12	3	PMU, PTI, ISAN, PRC, Line Departments, LPB World Heritage Office and PIU
14	11/4/2022	Consultation on work plan for conducting final DMS	21	04	PMU, PTI, ISAN, PRC, Line Departments, LPB World Heritage Office and PIU and affected village authorities
Total Participants			689	214	

Table 9-2 Summary of Consultation Results

Positive Impacts	Negative Impacts	Recommendations
<ul style="list-style-type: none"> All participants agreed with the subproject development plan. The subproject should start as soon as possible as it will help prevent the erosion as it increases about 50cm-1m each year. 	<ul style="list-style-type: none"> Affect lands and properties such as residential land, small shops, secondary structures and seasonal crops which panted in the government reserved land and not main income. Community health and safety from transportation of 	<ul style="list-style-type: none"> The design of bank protection structures and Riverfront Park shall be in line with the existing structures and landscape. If technically required, changes in urban landscape, the design shall be consulted and agreed with the Luang Prabang World Heritage Office (LPB World Heritage Office in order to minimize the impacts on World Heritage areas as well as cultural heritage as well as private lands and properties.

Positive Impacts	Negative Impacts	Recommendations
<ul style="list-style-type: none"> The subproject will prevent erosion of riverbank and protect the land people lands, properties and lives especially for those who live along the riverbank. Villagers will have beautiful riverbank and having a nice recreation place to sit. It will be easy to go fishing, farming and celebrate boat racing as the subproject will install stairs. The subproject will improve community economy such as more shops and increase incomes. 	<ul style="list-style-type: none"> construction materials, noise and dust emissions, solid waste and wastewater from worker camps, and risks of communicable diseases especially the ongoing Covid-19 infection. Potential social issues from labour influx such as thieves, drunk, violence including Sexual exploitation and Abuse, and Sexual Harassment (SEA/SH), gender and child violence and abuses. Poor waste management from people selling foods if no proper management of the improved riverbank. 	<ul style="list-style-type: none"> The loss and compensation amount data shall be checked and confirmed with PAPs. Compensation should be paid for all affected lands and assets with fair prices and consultation with PAPs. The compensation shall be completed before starting any construction activities. Contractor will need to obtain an approval of construction from the LPB World Heritage Office Constructor will need to comply with the UNESCO's Luang Prabang Urban Regulation for the construction in the Heritage Protection Zone (the PSMV). Preservation of existing urban landscape and trees, If technically required, changes in urban landscape, removal of trees and plantation offsetting will be carried out in close consultation with and approval from the LPB World Heritage Office; Pay attention to drainage so as not to give negative impacts on the functions in the ZPP-N zone; Notify village authorities and villagers 2 months in advance of construction takes place. Implement measures to prevent community health and safety such as control of driving speed limit, water spraying, noise control, cover the truck when transporting construction materials to prevent falling on the road and so on. Implement good solid waste and wastewater management for worker camp and storage areas. Implement measures to avoid social issues and risks on COVID-19 infection

Positive Impacts	Negative Impacts	Recommendations
		<p>such as having vaccination to prevent COVID-19 outbreak before coming to work.</p> <ul style="list-style-type: none"> • Request for campaigns on community engagement in keeping the improved riverbank clean, green and beautiful especially community solid waste management. • Request to conduct spiritual ceremony to ask for permission from the river and soil spirits before construction. • Request to not working on Buddha Day “Van Sin”. • Regular consultations with local communities, temples, LPB-WHO and DPWT on the construction activities and schedules during the construction phase. <p>All recommendations are integrated in the project design and responded in this ARAP and the updated ESMP.</p>

12.4 Consultation during implementation of ARAP

111. During ARAP implementation, monthly meetings will be held face-to-face with PAH to obtain their feedback on how the ARAP implementation can be improved. Representatives of PAH be invited to sit in various process, including grievance redress process which will be established to ensure PAH’s voice will be heard during various stages of ARAP implementation process. Upon completion of ARAP implementation, a survey will be undertaken by the MPWT/DOW/PMU/PTI to assess their level of satisfaction of PAP/ PAH as to ARAP implementation process and result.

112. The consultation with affected communities shall be implemented and undertaken continuously throughout the construction phase. Consultation report of each consultation shall be made with minutes of meeting along with attendance records and the signatures of all participants. The future consultations are listed in Table 9-3 below.

Table 9-3 Future Consultations

No.	Consultation	Objectives	Methods	Implementing Body	Timeline
Pre-construction					

No.	Consultation	Objectives	Methods	Implementing Body	Timeline
1	ARAP Implementation: Consultation with concerned authorities and affected households on confirmation of loss and compensation amount and method. Separate consultations may need to be conducted with vulnerable households and individuals to ensure that their concerns and needs have been met.	To confirm and verify and obtain consent from PAP on their losses and compensation amount	Meetings and open discussions	PTI/EDPD and DPWT/PIU	November 2022
2	Consultation on draft EIA Report: consultation meeting with concerned local authorities (provincial and district levels) and representatives from affected villages.	To obtain comments on the draft EIA report and incorporate all comments into the revised EIA report	Open Meetings	MONRE/PTI/E DPD and DOW	October 2022
Construction Phase					
3	Consultations with affected communities on subproject activities, impacts, construction schedule and work plan	To inform PAP on subproject construction activity and schedule and potential risks as well as community health and safety	Open meeting	Contractor, CSC, DPWTs	Throughout construction phase
4	Dissemination of final project design, potential impacts on hotel business and income due to temporary effects and disturbance (noise, dust, traffic congestion due to construction material transport, and possible change in the natural view along the riverbank) from the civil works.	to improve understanding of local communities including hotel business operators as well as their clients	Open meeting	Contractor, CSC, DPWTs	Throughout construction phase

No.	Consultation	Objectives	Methods	Implementing Body	Timeline
5	Ad hoc meetings on a basis where substantial changes have been made or conflict has arisen due to accident, misunderstanding or other causes.	To address or solve conflicts	Open Meeting, Focused Group Discussion and In-depth Interview	Contractor, CSC, DPWT, PIU, PTI	Throughout construction phase
Operation Phase					
6	Consultation on Green Clean and Beautiful (GCB) community network on waste management for the Riverfront Park, Nam Khan and Mekong Rivers (Moving towards GCB for Luang Prabang)	To obtain opinion of local community on participatory GCB community network on waste management	Open Meeting, Focused Group Discussion and In-depth Interview	PTI/EDPD and DPWT/PIU	O&M Phase

13 Grievance Redress Procedure

113. The PMU-DOW/MPWT and PIU-DPWT have established a grievance redress committees at village, district and provincial levels. These committees were established to result resettlement related grievances. These committees will receive, evaluate and facilitate the resolution of PAP and PAH concerns, complaints and grievances. Grievance redress committees will be comprised of representatives of PAP and PAH, community leaders, and independent civil society organizations (Non-Profit Association and CBO) in addition to representatives from village and district levels, and PMU and PIU authorities. If the grievance relates to a dispute over the valuation of an asset to be acquired, then the DOW-MPWT will acquire an additional independent assessor to inform the decision of the relevant grievance redress committee. The grievance redress committees will function, for the benefit of PAP and PAH during the entire life of the subprojects, including the defects liability period.

114. Throughout the subproject planning, implementation and operation, all complaints and grievances may be received in writing, or if given verbally then written at the same time and place, members of the affected ethnic group community and duly recorded by each level of the grievance redress process (community, district, provincial). A template or form will be developed that is easy to understand and to fill in for anyone who wishes to issue a complaint. Members of affected ethnic group communities will be exempted from all administrative and legal fees incurred pursuant to the grievance redress procedures. Grievances related to any aspect of the proposed subproject will be dealt with through negotiations with the ultimate aim of reaching a consensus. Grievance redress procedures aim to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns linked to the subproject. These grievance redress procedures

are not meant to circumvent the government's inbuilt redress process, nor provisions of the national laws, but rather to address members of ethnic group communities' concerns and complaints promptly, making it readily accessible to all segments of ethnic group communities and scaled to the risks and impacts of the subproject.

115. However, the complainant also retains the right to bypass this procedure and can address a grievance directly to the DPTW PIU office or the national assembly, as provided by law in Lao PDR. At each level, grievance details, discussions and outcomes will be documented and recorded in a grievance logbook. The status of grievances submitted, and grievance redress will be reported to Provincial DPWT Luang Prabang Waterway sector management through the monthly report. In order to effectively and quickly resolve grievances, PAP and PAH may follow the following stages:

- a) Stage 1: If PAP and PAH are not satisfied with the resettlement plan or its implementation, the person can issue oral or written complaint to the village committee or the District Resettlement Office (DRO). If it is oral complaint, the village should deal with this complaint and make written records. Village committee or DRO should solve the complaint within two weeks.
- b) Stage 2: If PAP and PAH are not satisfied with the result of step 1, he/she can file appeal with the Subproject Resettlement Office (PRO) after he receives the decision made in step 1. The PRO should make a decision within two weeks.
- c) Stage 3: If PAP and PAH are not satisfied with the result of step 2, he/she can file appeal with provincial Resettlement Committee for administrative arbitration after receiving the decision made by the PRO. The administrative arbitration organization should make the arbitrated decision within 10 days.
- d) Stage 4: If PAP and PAH are still unsatisfied with the arbitrated decision made by the administrative arbitration organization, after receiving the arbitrated decision, he/she can file a lawsuit in a civil court according to relevant laws and regulations in Lao PDR.

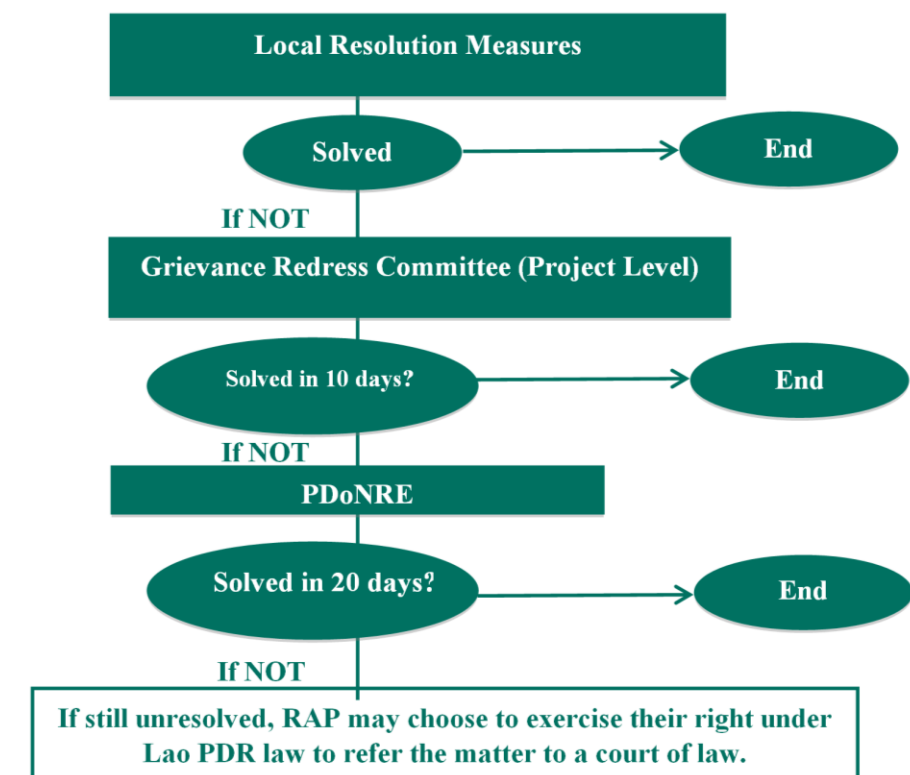


Figure 10-1 GRM Procedure

116. Members of ethnic group communities can make a complaint or appeal on any aspects of subproject’ design and implementation, including issues related to resettlement. A complaint and grievance feedback form will be developed under the subproject and made available at Luang Prabang’s provincial capital, and vicinity, including in ethnic group communities, for use by community members to raise complaints or grievances. Ethnic group community members will be clearly informed of the complaint and appeal channels described above through community meetings and other forms of communication (See **Attachment 8 for GRM Monitoring Form**).

117. PAP and PAH can make a complaint or appeal on any and all aspects of subproject design and implementation, including issues related to resettlement. A hotline phone will be established with dedicated staff assigned to so that PAPs or complainants will not be charged for their phone calls used to raise their grievances and their complaints are responded in an efficient manner. PAP and PAH will be clearly informed of the complaint and grievance redress mechanism and appeal channels described herewith through village meetings and other channels. In addition, a complaint box should be made available in a convenient location of the village.

118. The subproject organizations addressing the community level complaint and appeal process shall not charge any fee. Any expenses incurred due to complaint and appeal should be paid as unexpected expenses and paid for by the subproject. The communities and individuals who believe that they are adversely affected by a WB supported subproject may submit complaints to existing subproject-level grievance redress mechanism or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address subproject-related concerns. Subproject affected communities and individuals may submit their complaints to the WB’s independent Inspection Panel which determines whether harms occurred,

or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WB's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit www.worldbank.org/grs. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

119. The communities and individuals who wish to submit their complaints to existing subproject-level grievance redress mechanism could contact the following relevant staff and organizations as presented in Table 10-1 below:

Table 10-1 GRM Contact Persons

No.	Name and Surname	Position	Organization	Contact Number
1	Mr. Vilaythong	Vice Governor of Luangprabang municipality	District cabinet office for Luangprabang municipality	020 28808870
3	Mr. Bounthan	Head of Lao front Office	Lao front office Luangprabang municipality	030 4408889
4	Ms. Thongbay	Deputy head of agriculture office	District cabinet office for Luangprabang municipality	020 54043542
5	Ms. Southa Thongsamout	Head of district Lao Women Union	Lao Women Union office for Luangprabang municipality	020 54498419
6	Ms. Khansay Honginkeo	Head of district justice office	District justice office for Luangprabang municipality	020 99869797
7	Mr. Souphanousith	Deputy head of DONRE	DPWT Luangprabang municipality	020 99292083
8	Mr. Nakhasou	Head of PIU Office	PIU office in LPB	020 55626555
9	Ms. Lattiyakone Duangthasy	ESS Officer for PMU office	PMU office in VTE	02055895899
10	Mr. Vilayhong	Village head	Phanluang Village	020 56308885
11	Mr. Bounluea	Village head	Phonsa-art Village	020 54989560
11	Mr. Khamtan	Village head	Xiengthong-Khily Village	020 55471118
12	Ms. Sisomvang	Village head	Xiengmouan Village	020 55670553
13	Ms. Amphay Boualaphan	Village head	Wat Saen	020 55772341

120. On 7 June 2022, PIU has received a letter from the owner of Mekong Riverview Hotel requested for a meeting with PIU and concerned authorities to discuss on the potential impacts on the hotel and its riverside restaurant during project construction. The letter stated that the hotel and

restaurant business has been significantly affected by the Covid-19 pandemic and expects to end or become normal soon. It is projected that more tourists will start to visit Luang Prabang and stay in Mekong Riverview Hotel. However, the construction of the DRM project will have risks and negative impacts on our hotel and restaurant operation. Normally, the largest income is from the high season (November-February) and during this season the room rate ranges from USD180 to USD290 per room per night and there are about 50-60 staffs hired. The owner of the Mekong Riverview Hotel had spent USD30,000 to construct the existing River Park and a police office building at the Nam Khan Mount as well as provides USD500 per month for maintenance cost.

121. In the afternoon of July 28, 2022, at 2:00 PM, a meeting was held to discuss and resolve concerns raised over potential impacts of the Disaster Risk Management Project in Lao PDR (Additional Financing) in Xiengthong-Khyli Village, Luang Prabang Capital, Luang Prabang Province. The meeting was chaired by Mr. Bounkhong Souksavat, Deputy Head of the Department of Public Works and Transport (DPWT) of Luang Prabang Province, with a total number of 31 participants including 8 females from the World Bank, Project Management Unit (PMU), Department of Waterway (DOW), Public Works and Transport Institute (PTI), environmental and social consultants, Feasibility Study and Detailed Design (FS/DD) team, Subproject Grievance Redress Committee (GRC), Subproject Implementation Unit (PIU) and village authorities, Mr. Urban PAULSSON (the owner of Mekong View Hotel Co., Ltd) and other 5 Project Affected People. The list of participants is enclosed herewith.

122. The meeting began with the chairman presenting the purpose of the meeting and followed by safeguard consultant giving a presentation on the subproject boundary, corridor of impact, potential impacts and proposed mitigation measures associated with the implementation of the subproject for construction of flood management system including the riverbank protection structure. The topics presented at the meeting are as follows:

- Environment and Social Management Plan (ESMP);
- Abbreviated Resettlement Action Plan (ARAP);
- Environment Impact Assessment (EIA);
- Contractor-Environment and Social Management Plan (C-ESMP)

123. During the consultation meeting, all participants supported the subproject and provided opinions and useful suggestions which can be summarized as follows:

- On July 11, 2022, the owner of Me Kong View Hotel Co., Ltd. has directly sent an email to the World Bank Office in Vientiane on his concern about the potential impacts from the planned subproject on the hotel business and income due to temporary effects and disturbance (noise, dust, traffic congestion due to construction material transport, and possible change in the natural view along the river bank) during the construction period of the subproject. This may result in decreased number of tourists/quests staying in the hotel. In a worst-case scenario there may be no quests staying at the hotel as there might be negative comments to the hotel on the online booking sites due to the on-going construction activities and thereby reducing the hotel's income which had already been heavily affected by the Covid-19 pandemic.

- The PMU/DOW, PTI, environmental and social consultants, FS/DD team presented and clarified on the subproject boundary, corridor of impact, proposed mitigation measures to mitigate the temporary impacts and disturbance (noise, dust, traffic congestion due to construction material transport, and possible change in the natural view along the riverbank) during the construction period. These impacts and proposed mitigation measures are provided in the subproject ESMP of which the draft version was consulted with all PAPs before submission to the World Bank for review and clearance. The contractor is required to develop its C-ESMP, in accordance with the subproject ESMP, and to strictly comply with the environmental and social health and safety measures (ESHS) measures in the C-ESMP. to be reviewed the World Bank and approved by the PMU. The PMU with technical assistance from PTI will regularly and closely conduct compliance monitoring while DPWT with support from a construction supervision consultant firm will carry out daily compliance monitoring on the ground.
- The owner of Mekong View Hotel has admitted that it is difficult to assess and estimate the impacts on the hotel and other hospitable types of business and incomes as these businesses are still able to continue to operate and to be accessible for all guests during the construction period.
- The owner of Mekong View Hotel as well as other PAPs participated in the meeting had no objection to the subproject development and implementation and have requested PMU and PIU to develop and implement effective traffic management and road safety measures (especially related to transportation of the construction materials) to mitigate risks on community health and safety and prevent accident during the construction period.
- The meeting agreed that no compensation for the income loss because it is difficult, if not impossible to assess impacts on the hotel and other hospitable types of business and incomes while these businesses are still able to continue their operation and to be accessible for all guests during the construction period. Thus, compensation for this type of imperceptible impacts is unqualified and is not included in the Governor's Agreement on the Determination of Compensation Unit Rate for the subproject.
- The World Bank advised that subproject (PMU/PIU) includes the useful suggestions made by the owner of Mekong View Hotel on the traffic management and road safety measures to minimize the civil work-related risk to prevent accidents due to transportation of construction materials. These include, but are not limited to (i) putting in place flag men and traffic police; and (ii) installing warning signs; updating and re-distributing the existing brochure with more relevant subproject information and 3D illustration pictures of the completed subproject site to all PAPs, businesses and their clients and general visitors in Luang Prabang Capital to increase their understanding on the work subproject. Also, the World Bank emphasized the need for close and effective monitoring the C-ESMP compliance by the contractor as per the approved subproject ESMP to minimize the civil works related impacts and complete the construction as per the agreed construction schedule. Tai

124. The minutes of meeting and list of participants are provided in Attachment 10. More details on the proposed measures to mitigate temporary effects and disturbance during the construction period are provided in the subproject ESMP.

14 Implementation Schedule

125. The overall schedule covering all settlement activities from preparation through implementation, including target dates for the achievement of expected benefits to PAH (resettles) and linked to the implementation of the overall subproject is presented in Table 11-1 below.

Table 11-1: ARAP Implementation Schedule

No	Task	Description	Responsibility	Schedule
1	Establishment of PRC	The PRC will oversee the implementation of the ARAP including the preparation phase.	PRC and MPWT/DOW	29 January 2021
2	Notify Cut-Off-Date	PIU disseminate Cut-Off Date letter issued by DPWT of Luang Prabang Province.	PIU	16 January 2020
3	Government capacity building	Capacity building for key Government stakeholders e.g. members of PRC.	MPWT/DOW	February 2021
4	Completion of the inventory of loss	The inventory of loss of land and assets in Cheng village completed before finalization of the ARAP.	PRC and the Consultant	14-24 March 2022
5	Conduct on-going formal consultation and public disclosure with affected communities and relevant authorities	The PRC, MPWT/DOW and the Consultant to notify stakeholders of subproject activities and allow participation in planning and decision making particularly on compensation and resettlement works.	PRC, DOW and the Consultant	28 March – 1 April 2022
6	Conduct detailed measurement survey (DMS) of land and assets affected	Formal consultation with PAPs of concern, and valuation of 100% of assets impacted by the Subproject and its associated works to be conducted.	MPWT/DOW and DPWT	28 March -1 April 2022

No	Task	Description	Responsibility	Schedule
	by the DRM's subprojects.			
7	First draft of ARAP	Prepared a first draft of ARAP	Consultant in association with DOW/MPTW	May-June 2022
8	Identification of compensation/restoration requirements for land and assets impacted by the DRM subproject.	Identification of compensation and restoration measures should consider any factors of vulnerability identified during detailed measurements and consultation.	MPWT/DOW and DPWT and PRC	October 2022
9	Finalization of ARAP	Final ARAP will follow review and update of draft ARAP	Consultant in association with DOW/MPTW	November 2022
10	Issuance of compensation / restoration requirements for land and assets impacted by the Subproject.	<p>Issuance of compensation and additional restoration measures for land and assets impacted at the subproject development sites in agreement with asset owner.</p> <p>Information on compensation amounts and processes, requirements that Affected Persons must fulfil before payment is affected and payment timing will be communicated to Affected Persons.</p> <p>All compensation payments will be made prior to land acquisition and through the designated bank accounts of Affected Persons</p>	MPWT/DOW and DPWT and PRC	December 2022
11	Asset owners impacted by the subproject development will be required to resettle	Resettlement / relocation activities to include demolish their houses, move their assets to the new premises, harvest of crops, transportation of livestock and any additional support required to restore activities at new	MPWT/DOW and DPWT and PRC	January 2023

No	Task	Description	Responsibility	Schedule
		site (e.g. installation of equipment, fencing etc.).		
12	Delivery of livelihood restoration support for severely affected PAPs/PAHs (expected to lose >10% of productive assets and entirely resettle) and the vulnerable and poor	Implementation of various community development measures and livelihood restoration initiatives. Villages affected by construction to be prioritised for livelihood restoration. Initiatives to then continue for villages to be affected by subproject development activities.	MPWT/DOW and DPWT and PRC	January-March 2022
14	Relocation of public utilities and infrastructure	Relocation of public utilities (electricity, telephone lines and water supply system)	EDL and concern agencies	December 2022
15	Inspection and verification of ARAP/compensation completion by supervision consultant to recommend site handover to PIU and contractor to start work	All structures and assets compensated have to be removed before hand over the subproject site to contractor. Social safeguard specialist of Supervision (ISWS) consultant will review and certify if the compensation and resettlement are completed and recommend PIU to hand over the subproject site to contractors to start their works.	Social safeguard specialist of Supervision (ISWS) consultant	Early Feb 2023
16	Monitoring the implementation of ARAP with GRM continue to be active until the end of the	Follow up/monitoring ARAP during and after resettlement including GRM and include the results in the safeguard monitoring report	MPWT/DOW and DPWT and PRC	Dec, 2022-March 2023 and for GRM until the completion

No	Task	Description	Responsibility	Schedule
	subproject works			n of the subproject
17	Completion audit	A completion audit will be undertaken once all mitigation measures have been completed to assess whether the ARAP provisions have been met.	WB, Consultant	Early Feb 2023
18	Reporting	Completion Report Preparation for Resettlement and Compensation	MPWT/DOW and DPWT and PRC	Feb 2023

15 Monitoring and Evaluation

126. Monitoring is a key component of the subproject implementation. MPWT DOW will appoint adequate full-time staff to support PIU in internal monitoring of ARAP implementation. The appoint staff will monitor the process of ARAP implementation, compensation payment, land acquisition, resettlement, and livelihood restoration in collaboration with local village or district authorities.

127. Internal Monitoring:

- 1) Monthly internal monitoring reports will include:
 - a) Consultation and participation of affected people during ARAP implementation;
 - b) Compensation payment, including use of funds for compensation, support, and livelihood restoration;
 - c) Support for subproject affected vulnerable groups;
 - d) Grievances recording and grievance resolution process;
 - e) Land readjustment and reallocation;
 - f) Quality and quantity of newly reclaimed land;
 - g) Schedule of the above activities;
- 2) Monitoring visits will be undertaken on a quarterly basis in order to:
 - a) Improve environmental and social management practices;
 - b) Ensure the efficiency and quality of the environmental and social assessment processes;
 - c) Establish evidence- and performance-based environmental and social assessment for the subproject; and
 - d) Provide an opportunity to report the results of safeguards instrument impacts and proposed mitigation measures' implementation.

128. External Monitoring: Given the small scope of impact, external monitoring is not engaged for this subproject.

16 Costs and Budget

129. A draft compensation unit rates for the LPB Subproject was prepared by PRC in consultation with concerned departments and PAPs and was approved by the Governor of Luang Prabang Province. Indicative rate for a single wooden house is 526,153 LAK/m². The Decision of Provincial Governor, No. 122/GOV.LPB, dated 10 March 2022 on Compensation Rates for the LPB Subproject is provided in Attachment 6.

130. Based on the IOL, estimation of the compensation and income restoration for affected assets such as houses, structures, shops, restaurant, trees, etc. was calculated based on the Unit Rate for Compensation Costs approved by the Governor of Province as referred above. Total amount for compensation payment, support, and livelihood restoration, is estimated to be **LAK767.414.168 (USD45,791)** (See summary in Table 13-1 below). The unit costs of compensation for affected land and assets have been established based on the principle of “Replacement Cost”. The compensation rates and its calculations were consulted and disclosed in meaningful manner to each individual affected persons/households from which they have agreed based on the documents signed. As per the advice from the WB, the second market survey was carried out during 2-10 September 2022 to estimate actual inflation of construction materials given that the prices of these materials have been notably increased while land and tree prices remain largely stable. The survey was conducted through the visit of local market (5 businesses/shops) to obtain actual/latest prices of main construction materials (such as cement, sand, gravel, wood and steel products, transport and other building materials). The survey result indicated that the inflation rate of construction materials in Luang Prabang Province was 20.67%. However, 10% of inflation rate was already added into the compensation rates approved by the Governor of Luang Prabang Province (122/GOV.LPB, dated 10 March 2022) during the RAP2 preparation and therefore only 10.67% additional inflation rate of construction materials was added into the compensation cost in this ARAP. Budget for ARAP implementation is covered by PMU. The compensation will be paid to the PAPs/PAHs via PAPs’ bank account to ensure transparency and security.

131. The above compensation costs do not include operational costs such as travel related costs, accommodation, monitoring and reporting, capacity building or training for implementing agencies and committees. The operational costs are covered in separate subproject management budget which include safeguard implementation, monitoring and consultants’ costs.

Table 13-1 Total Compensation Cost

No.	Type of Loss	# of HH	# of structures	Affected #	Unit	Original Unit Price (LAK) ⁴	Unit Price (LAK) ⁵	Compensation Amount (LAK)
1	Housing Structure	1	1	48				25,255,344
1.1	One story wooden house (for recreational purpose, not for living)	1	1	48	m ²	321,200	526,153	25,255,344
2	Shop	2	2	92.5	m²			43,194,525
2.1	Restaurant	2	2	92.5	m ²	353,570 – 481,250	453,570-577,500	43,194,525
3	Secondary structures	15	15	298.03	m2			435,845,715
3.1	Hut	3	4	162.8	m ²	165,000 – 481,000	205,000-577,500	53,395,153
3.2	Toilet	1	1	6		3,421,000 – 3,591,500	3,891,501-3,973,636	23,349,006
3.3	Kitchen coop	4	7	56.83	m ²	825,000 – 1,045,000	912,780-1,168,358	51,631,305
3.4	Balcony	4	4	152.96	m ²	165,000 – 1,016,400	270,283-1,219,680	88,101,641
3.5	Stair	1	2	22	m ²	220,000	270,283	5,946,226
3.6	Frog pond	1	1	6,6	m ²	522,500	627,000	4,138,200
3.7	Fence	6	7	240	m	440,000 – 1,001,000	486,816-1,107,506	164,309,038
3.8	Concrete yard	4	4	137	m ²	570,283	324.340	44,434,580
3.9	Steel pole	1	1	2	pole	165,000	270.283	540,566
4	Tree	67		999				244,385,000
4.1	Fruit trees	35		927	tree	33,000-385,000	33,000-385,000	205,599,000

⁴ Original unit price with 10% inflation and approved by the Governor of Luang Prabang Province (122/GOV.LPB, dated 10 March 2022)

⁵ New unit price with 20.67% inflation rate of construction materials

No.	Type of Loss	# of HH	# of structures	Affected #	Unit	Orginal Unit Price (LAK) ⁴	Unit Price (LAK) ⁵	Compensation Amount (LAK)
4.2	Industrial trees	15		20	tree	88,000-385000	88,000-385000	18,766,000
4.3	Bamboo	17		52	tree	385.000	385.000	20,020,000
5	Livelihood support							18,733,584
5.1	Rice supports for affected Housing Structures and shops	3	3		16kg rice x person x 3month			5,760,000
5.2	Dismantlement and Transportation Costs for Affected Houses and Shops	3	3		LS			12,973,584
Total Compensation Cost (LAK)								767,414,168
Total Compensation Cost (USD)								45,791
Exchange Rate BCEL on 2022-10-10, 1USD=16.759 LAK								

The actual compensation cost for loss of income will be calculated based on the actual number of days that the shops would need to be closed during the construction period multiplied with net profit per day derived from the monthly tax payment.

17 Attachments

- Attachment 1 List of PAHs and Inventory of Loss (IOL) Form
- Attachment 2 Village Social Economic Census Form
- Attachment 3 Provincial Agreement on Establishment of Resettlement and GRM Committees, No.44/Gov.LPB, dated 29 January 2021
- Attachment 4 Methodology of Unit Rate Assessment
- Attachment 5 Cut-Off-Date
- Attachment 6 for the Decision of Provincial Governor on Compensation Rates for the LPB Subproject, No. 122/GOV.LPB, dated 10 March 2022
- Attachment 7 Minutes of Consultation Meetings and List of Participants
- Attachment 8 GRM Monitoring Form
- Attachment 9 Compensation Offset Line
- Attachment 10 Minutes of Meeting and List of Participant of the Consultation and Grievance Resolution on Concerns raised (Mr. Urban PAULSSON, the owner of Mekong View Hotel Co., Ltd) over Potential Impacts (temporary effects and disturbance) of the Subproject
- Attachment 11 Findings of the Market Survey during 2-10 September 2022.