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PREPARATION OF ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK FOR THE SOUTH EAST ASIA DISASTER RISK MANAGEMENT (SEA DRM) PROJECT FOR LAO PDR

PRELIMINARY ENVIRONMENTAL AND SOCIAL ASSESSMENT

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TABLE OF CONTENTS

LIST	OF TABLES	ii
LIST	OF FIGURES	ii
LIST	OF APPENDICES	ii
LIST	OF ACRONYMS	iii
ACK	OWLEDGEMENTS	v
1.0	INTRODUCTION AND PURPOSE	1
2.0	BASELINE CONDITIONS	2
3.0	ENVIRONMENTAL VULNERABILITIES AND RISKS	4
4.0	KEY STAKEHOLDERS	5
5.0	INSTITUTIONAL ARRANGEMENTS AND CAPACITY 5.1 INSTITUTIONAL ARRANGEMENTS FOR PROJECT IMPLEMENTATION 5.2 INSTITUTIONAL STRENGTHENING ASSESSMENT	N5
6.0	SITE-SPECIFIC POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS, RISKS, AND ISSUES	10
7.0	ASSESSMENT OF ALTERNATIVES	13
8.0	PARTICIPATORY SOCIAL ASSESSMENT GUIDELINES	14
9.0	STAKEHOLDER CONSULTATIONS9.1IMPORTANCE OF STAKEHOLDER CONSULTATIONS9.2SITE-SPECIFIC CONTEXTURAL GENDER INFORMATION	15

i

LIST OF TABLES

Table 1	Stakeholders and various publics.	.5
Table 2	Institutional strengthening and capacity development assessment	.8
Table 3	Key responsibilities for ESMF implementation.	.9
Table 4	Potential environmental and social impacts of the proposed sub-projects	12

LIST OF FIGURES

Figure 1	Government of Lao PDR SEA DRM Project institutional arrangements
0	,

LIST OF APPENDICES

Appendix A1	List of Consulted Stakeholders
Appendix A2	Stakeholder Consultations
Appendix A3	1 st Public Consultation Meeting Sign-up Sheets
Appendix A4	2 nd Public Consultation Meeting Sign-up Sheets
Appendix A5	Terms of References for PESA

LIST OF ACRONYMS

ADRIF	Asia Disaster Resilience Insurance
ARAP	Abbreviated Resettlement Action Plan
СВО	Community Based Organizations
CSO	Civil Society Organizations
DDMCC	Department of Disaster Management and Climate Change
DIA	Designated Implementing Agency
DMH	Department of Meteorology and Hydrology
DoNRE	Department of Natural Resources and Environment
DoPC	Department of Planning and Cooperation
DoR	Department of Road
DoW	Department of Waterways
DPWT	Department of Public Works and Transportation
DRM	Disaster Risk Management
ECoP	Environment Code of Practice
EGDP	Ethnic Group Development Plan
EGEF	Ethnic Group Engagement Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FGD	Focus Group Discussion
FPIC	Free, Prior and Informed Consultation
GoL	Government of Lao PDR
IDA	International Development Association
IFAD	United Nations International Fund for Agriculture Development
IWMI	International Water Management Institute
M&E	Monitoring and Evaluation
MAF	Ministry of Agriculture and Forestry
MoF	Ministry of Finance
MoNRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
MPWT	Ministry of Public Works and Transport
NTFP	Non-timber Forest Products
OP/BP	Bank Operational Policies
PAH	Project Affected Households
PAP	Project Affected People
PDR	People's Democratic Public
PESA	Preliminary Environmental and Social Assessment
PIU	Project Implementation Unit
PMU	Project Management Unit
PTI	Public Works and Transport Institute
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SEA DRM	South East Asia Disaster Risk Management

SMART	Specific, Measurable, Achievable, Relevant and Time-Bound
ToR	Terms of Reference
USAID	United States Agency for International Development
WB	World Bank
WBG	World Bank Group

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1.0 INTRODUCTION AND PURPOSE

The goal of the proposed World Bank Group (WBG) funded South East Asia Disaster Risk Management (SEA DRM) Project is to reduce the risk of flooding and enhance disaster risk financing capacity within the Lower Mekong Sub-region. The proposed SEA DRM Project will be funded by the WBG through an International Development Association (IDA) Ioan in three SEA countries – namely, Lao People's Democratic Republic (PDR), Cambodia, and Myanmar. The project will allow these aforementioned riparian countries to achieve and expand outcomes in three key areas, including flood risk management investments, disaster risk assessment and financing, and a zero balance contingent emergency response component.

The overall tripartite country SEA DRM Project objective is "to promote and harmonize disaster risk management at the regional level". Each of the three SEA countries have developed a number of sub-projects which will be subject to further assessment and consideration for funding purposes.

The Lao PDR country-specific SEA DRM Project Development Objective (PDO) is "to help reduce the risk of flooding and enhance disaster risk financing capacity within the Mekong region". The Lao PDR SEA DRM Project is comprised of the following five components:

Component 1: Urban Flood Risk Management

This component includes a set of investments designed to strengthen flood resilience in Oudomxay Province, particularly, for the provincial capital of Muang Xay and areas in close proximity. Urban flood risk management infrastructure investments proposed for Oudomxay provincial capital and close proximity include financing for riverbank protection, dike, drainage canal, flood gates, weir and riverside parks. Such infrastructure will protect the urban core from flash floods that occur regularly during the rainy season. The designated implementing agency (DIA) for this sub-project will be the Department of Waterways (DoW) under the Ministry of Public Works and Transport (MPWT).

Component 2: Hydromet Modernization and Disaster Risk Management Systems

This component includes financing for capacity building measures to enhance and strengthen forecasting, early warning and disaster risk management (DRM) systems in the Ministry of Natural Resources and Environment (MoNRE). This component is further bifurcated into two sub-components including: (i) weather forecasting and early warning systems to strengthen the Department of Meteorology and Hydrology (DMH) capacity to predict floods and enhance early warning communication systems; and (ii) DRM through enhanced regulatory capacity in the Department of Disaster Management and Climate Change (DDMCC).

Component 3: Disaster Risk Financing and Insurance

This component includes technical assistance to increase financial resilience of Lao PDR against natural disaster and climate risks in terms of the Government of Lao PDR's (GoL) capacity to meet post-disaster funding needs. This component is further segregated into three sub-components including: (i) national-level disaster risk financing technical assistance for the development of a national financial protection strategy building on a combination of national and regional disaster risk financing instruments. The strategy would build on existing GoL capacity and previous WB support to the Ministry of Finance (MoF) and Ministry of Planning and Investment (MPI); (ii) establishment of the Asia Disaster Resilience Insurance Fund (ADRIF) to support activities for the establishment of a regional disaster risk pooling mechanism; and (iii) financing of the GoL contribution to join the ADRIF.

Component 4: Project Management

This component will support management and implementation of the project. It will include technical and fiduciary staff who will be seconded to the Project Management Unit (PMU) from relevant implementing departments. The project management component will finance institutional support and capacity development for implementation and fiduciary arrangements; including procurement, financial management, management of safeguards issues, internal and external auditing, and the establishment of the project monitoring, evaluation and reporting systems.

Component 5: Contingency Emergency Response

This "zero component" allows rapid reallocation of project proceeds for emergency recovery and reconstruction support in the event of a declared disaster. This component would finance disbursements against a positive list of critical goods and/or the procurement of specific works, goods, services and operation costs required for emergency recovery. An Operational Manual would be developed for this component detailing financial management, procurement, safeguards and any other necessary implementation arrangements to be submitted to and accepted by the WBG prior to the disbursement of project proceeds.

Major documents to be developed for the country-specific Lao PDR SEA DRM Project include a preliminary environmental and social assessment (PESA), an environmental and social management framework (ESMF), ethnic group engagement framework (EGEF) and resettlement policy framework (RPF). The current PESA for the Lao PDR SEA DRM Project only covers Components 1 and 2 above. The other three components either do not have works associated with them (i.e., Components 3 and 4) or, are being conducted under separate contract (i.e., Component 5).

The principle emphasis of the PESA, ESMF and supporting documents will be Component 1 – urban flood risk management with a secondary focus on Component 2 – hydromet enhancement and DRM systems. As indicated, the PESA provides background information in terms of the environmental and social context for the proposed sub-project initiatives (see Appendix A5: PESA terms of reference). It provides insight into environmental vulnerabilities and risks associated with natural disasters, potential environmental and social impacts (i.e., positive, and negative or adverse effects). The PESA provides information to guide decision-makers about proposed sub-projects, including design features and/or mitigation measures. The document provides guidance on culturally-appropriate and participative consultation methods for engaging with different populations (i.e., ethnic peoples and vulnerable groups – women and female/male youth and children, men, the elderly and disabled, landless, and poor, etc.). Finally, the PESA documents findings of the consultation, engagement and information disclosure process with national and subnational and local government officials, stakeholder community (i.e., civil society organizations [CSOs] including non-profit associations and community-based organizations [CBOs]), various publics and different populations.

2.0 BASELINE CONDITIONS

Lao PDR is regularly impacted by flooding which causes widespread damage to infrastructure and impacts livelihoods and well-being. In the north of the country, the topography is mountainous with numerous rivers. Oudomxay Province which is located in the northwest of the country is characteristic of this mountainous topography. The province is prone to flash floods with the most devastating effects exhibited in the Oudomxay provincial capital Muang Xay in 1945, 1985, 2008 and 2013. Investment is needed to protect the provincial capital from future flood events and reduce the damage to public

infrastructure, and personal assets, livelihoods and well-being. Accordingly, the Government of Lao PDR is considering an investment in Muang Xay and close proximity to strengthen urban flood risk management.

Environment – As mentioned, Oudomxay Province is located in the northwest of Lao PDR. The province covers an area of 15,370 square kilometers (km²). The province borders China to the north, Phongsali Province to the northeast, Luang Prabang Province to the east and southeast, Xaignabouli Province to the south and southwest, Bokeo Province to the west, and Luang Namtha province to the northwest. Oudomxay province consists of seven districts, including Muang Xay (the provincial capital), Muang Namor, Muang La, Muang Beng, Muang Hoon, Muang Pabeng and Muang Nga. Oudomxay PProvince has a mountainous topography with elevations ranging from 300 meters (m) to 1,800 m above sea level. Approximately sixty rivers flow through the province. Other main rivers that flow through the province include Nam Phak, Nam Sae, Nam Beng, Nam Kor and Nam Nga. The latter two rivers flow through the provincial capital Muang Xay or in the vicinity.

In 2000, Oudomxay Province established three different types of protected areas; including provincial, district, and watershed with a total protected area of 315,000 hectares (ha). The watershed protected area has not been fully delineated.

Climate and Extreme Weather – Oudomxay Province has a moderate monsoon climate however, because of high elevations, temperature variation is greater than other parts of the country. Temperatures in February and March average between 18°Celsius (°C) and 19 °C, while temperatures from April to May exceed 30 °C. Cyclones developing in the South China Sea can make landfall in Viet Nam and then inland over northern parts of Lao PDR. Although diminishing in strength as the cyclone tracks inland, it still brings strong winds and heavy rainfall according to MoNRE Department of Meteorology and Hydrology which maintains climatic records.

Social – Oudomxay Province has a population of approximately 315,000 people and more than 20 different clans belonging to 12 different ethnic groups live in the Province. The largest ethnic group is the Khamu who are a part of the Lao Theung ethnic people's category. According to the provincial administration, the Khamu (including Khamu Lue, Khamu Khong, Khamu Ou and Khamu Bit) comprise 60 to 80 percent of the population while Lao Loum and Hmong (including Hmong Khao, Hmong Dam and Hmong Lai) make up between 25 and 15 percent, respectively. Other ethnic groups in the province include the Akha, Phouthai (Thai Dam and Thai Khao), Phou Noy (Phou Xang, Phou Kongsat and Phou Nhot), Lao Houy, Phouan, Ly, Yang, Ikho and Ho. Each of the 12 ethnic groups have their own language, cultural heritage and practices.

Rural communities in Lao PDR are highly dependent on natural resources such as agriculture and the forest (i.e., timber and non-timber forest products [NTFP]) for their livelihoods and subsistence. However, population growth, government policies and a shift from a centrally planned command economy to that of a neo-liberal market-driven economy is transforming rural communities and their traditional livelihoods, including downward pressures on the availability of, and access to, land and natural resources. Forests are being converted into agricultural mono crop plantations while utilization of forest resources and timber production are increasing. Development challenges abound in a rapidly changing rural context, especially in relation to ethnic groups which exhibit widespread linguistic and cultural diversity and their relationship to the land and its resources.

As discussed in Appendix A2, a number of issues and concerns were relayed during the community consultations in relation to the environment, natural resources conservation and degradation of land (particularly, agricultural land) as a result of the proposed sub-project initiatives implementation.

3.0 ENVIRONMENTAL VULNERABILITIES AND RISKS

Oudomxay Province experienced flash floods with devastating effect on infrastructure and loss of life in the provincial capital, Muang Xay, in 1945, 1985, 2008 and 2013. The most recent flash flood event occurred as a result of torrential rains on 20th to 21st August 2013 with maximum daily rainfall of 93.6 millimeters (mm). Seven districts suffered damage to infrastructure, loss of life (17 persons), and loss of agricultural produce to the value of 1,233 million kips (150,000 USD). Flood damage in the provincial capital of Muang Xay was largely caused by inundation from the Nam Kor River which passes through the provincial capital. In 2008, as a result of a diminishing tropical cyclone and heavy rainfall (maximum daily rainfall recorded was 152.7 mm), one fatality and extensive property damage was inflicted on Hagupit and Muang Xay towns.

Oudomxay provincial government and different populations understand that recurring floods are part of the natural ebb and flow of a river hydrology. Little if any urban DRM countermeasures have been undertaken in the past due to lack of knowledge and limited budget for flood control. Climate change-induced extreme weather events such as more frequent and intense cyclones which develop in the South China Sea may make landfall along central Viet Nam coast before tracking inland to Lao PDR. Although, diminishing in intensity and strength, these extreme weather events bring heavy rainfall to swollen rivers with the resultant effect of flash floods and, possibly, personal and property damage to inundated areas.

The Lao PDR DMH apprises district governors about flood risk information. However, if a flash flood event is predicted, the district governor has little recourse to disseminate early warnings other than contacting village representatives by telephone or word of mouth. The flash flood that occurred at midnight in 2013 wreaked havoc with damage to infrastructure and loss of life. In the absence of an early warning and public alert system, Muang Xay residents were not aware of the imminent danger nor accessed evacuation facilities in time.

A number of insights and lessons can be drawn from Oudomxay provincial capital Muang Xay in the wake of the 2013 flash flood event, including:

- District-level government had insufficient knowledge and capacity for dealing with a disaster;
- The provincial capital lacked sufficient flood control measures like embankments and dikes;
- Early warning and public alert system are rudimentary or non-existent;
- Lack of access to emergency budgets delayed restoration in the provincial capital and rural areas; and
- Budget limitations impeded attempts at disaster risk management.

4.0 KEY STAKEHOLDERS

The GoL supports the SEA DRM Project and actions to improve participation, public consultation, and information disclosure. Effective implementation relies on strategies, legislation and procedures that are in place in Lao PDR and will be supplemented [as necessary] with World Bank safeguards policies. These safeguards policies include guidelines for participation, consultation, and information disclosure concerning aspects of the Lao PDR SEA DRM Project as described in the ESMF, including procedures narrated in the RPF and EGEF.

The Lao PDR SEA DRM Project will pursue a process of meaningful consultation and engagement that includes national and local government, and relevant stakeholders and communities. The Project supports consultative decision making by ensuring public access to information on environmental and social aspects of the Lao PDR SEA DRM Project. In addition to ensuring that free, prior and informed consultation (FPIC) activities are undertaken in relation to potential environmental and social impacts, the consultation process will also inform and explain the proposed sub-project initiatives to affected communities, gather information from impacted populations, and conduct gender sensitive awareness-raising.

Table 1 lists national and local government bodies, key stakeholders, various publics and different populations who may be involved directly or indirectly in the Lao PDR SEA DRM Project and their respective roles and responsibilities.

5.0 INSTITUTIONAL ARRANGEMENTS AND CAPACITY

5.1 INSTITUTIONAL ARRANGEMENTS FOR PROJECT IMPLEMENTATION

In Lao PDR, the MPWT is responsible for management of public works, urban development, and land and water transport, including management of domestic water supply and sanitation in urban areas. It is a relatively large ministry comprised of key departments and institutes, namely, the Department of Roads (DoR), the DoW, the Department of Urban Development, and the Public Works and Transport Institute (PTI), among others. DoW is responsible for riverbank protection and urban flood control¹, port and navigation channels, waterways transport, inspection division and technical divisions.

Table 1 Stakeholders and various publics.

SI. No.	Entity	Key Stakeholder
1	Government and regulatory agencies	Ministry of Public Works and Transport (MPWT), Ministry of Finance (MoF), Ministry of Planning and Investment (MPI), Ministry of Natural Resources and Environment (MoNRE), Department of Public Works and Transport (DPWT) Oudomxay Waterway Sector, Department of Meteorology and Hydrology (DMH), and Oudomxay District administration
2	International Organizations	United Nations International Fund for Agriculture Development (IFAD)
2	Private sector companies	Private sector companies with the technical expertise and capacity, engineering capability to implement the sub-project initiatives. These may include both national and international companies.

¹ Flood control for agriculture falls under the responsibility of the Ministry of Agriculture and Forestry.

Table 1 (Cont'd.)

SI. No.	Entity	Key Stakeholder
3	Civil society organizations	International, national and regional non-profit associations (Plan International, World Vision, Oxfam Laos, Village Focus International), including environmental and indigenous people's organizations.
4	Local stakeholders	Local civil society organizations including community-based organizations (CBOs), municipal and district-level committees, villages (Nalao Village and Nasao Village), village chief (Nai Ban) and village-level committees, and other local groups.
5	Academic and research institutions	Environmental research groups (e.g., International Water Management Institute [IWMI]), universities (e.g., National University of Laos) and technical institutes (e.g., IWMI).
6	Beneficiaries and affected communities and households	Project beneficiaries will be consulted at community level during the preparation of sub-project initiatives. In addition, potential project affected people (PAP) and project affected households (PAH) will be consulted on potential impacts and mitigation measures of the sub-project initiatives. Particular attention will be given to different populations (i.e., ethnic peoples and vulnerable groups – women and female/male youth and children, the elderly and disabled, landless, and poor) to enhance their benefits and prevent (avoid) or mitigate adverse impacts.
7	Ethnic peoples	If proposed sub-project initiatives are planned in areas where ethnic group's communities are located then, a process of free, prior and informed consultation will be undertaken with communities in the region of influence (see EGEF).

The sub-project initiatives will be implemented by a Project Management Unit (PMU) and the Technical Division which will be responsible for planning and supervision of safeguards measures performance and compliance and related activities. The DoW PMU will be responsible for establishment of mutually agreed environmental and social safeguards procedures, supervision and training of safeguards for MPWT and Department of Public Works and Transport (DPWT) Oudomxay Province and district-level authorities.

The sub-project will be implemented following GoL processes. As noted, MPWT will be the DIA through the DoW. Overall management and coordination will be the domain of the Department of Planning and Cooperation (DoPC). The DoW will be responsible for planning and implementation of urban flood risk management related activities falling under SEA DRM Project Components 1, 2 and 3 through a dedicated project, namely, the Lao PDR SEA DRM Project established with a mandate to coordinate an urban flood risk management plan at central and local levels. DoW will work in close coordination with and provide technical support to the provincial DPWT Oudomxay Waterways Sector tasked with carrying out the works and supervision. The DPWT Oudomxay Waterways Sector will establish a Project Implementation Unit (PIU) responsible for implementation and monitoring of environmental and social safeguards. The DoW will also be responsible for implementation of an urban flood risk management to be implemented under the Lao PDR SEA DRM Project.

The DoW PMU (under MPWT) will clarify tasks and responsibilities regarding implementation of the urban disaster risk management sub-project in Oudomxay's provincial capital, Muang Xay. The DoW will review screening reports prepared by the local DPWT PIU and prepare draft terms of reference for an environmental and social management plan (ESMP) and requirements to prepare an Abbreviated

Resettlement Action Plan (ARAP) or Resettlement Action Plan (RAP), and Ethnic Group Development Plan (EGDP), as necessary. The ESMP and planning documents (i.e., ARAP or RAP, and EGDP) will be shared with stakeholders during consultations. Issues and observations noted in the consultations will be incorporated. Documentation will also be released for public disclosure and submitted to the World Bank Group for review.



Figure 1 Government of Lao PDR SEA DRM Project institutional arrangements.

5.2 INSTITUTIONAL STRENGTHENING ASSESSMENT

The Lao PDR MPWT is in a process of transformation from a county which is land-locked to one that is land-linked through the improvement of transportation infrastructure. National government activities in the transport sector are undertaken primarily by the MPWT. Divisions in MPWT with operational responsibilities are the Department of Civil Aviation, DoW, DPWT, DoR, Department of Transport, and the Railway Authority, among others. The DoPC in MPWT is responsible for overall management of development assistance programs. The Ministry of Finance continues to play a major role in financing transport sector activities (including inland waterways) through the national budget.

MPWT also has responsibility for urban planning, housing and water supply development. As the Lao PDR SEA DRM Project will be complemented with non-structural measures including strengthening land-zoning, hydromet modernization and DRM systems, it would be appropriate for the WBG to consider conducting an institutional strengthening and capacity development assessment of the ministries and departments involved in the development and implementation of the Lao PDR SEA DRM Project. However, the WBG terms of reference (ToR) for this SEA DRM Project environmental and social management framework indicates that "...an assessment of the client's capacity for safeguards implementation should be carried out during preparation of the ESMF" (WBG SEA DRM Project ToR, p. 5).

Table 2 indicates that MPWT, DoW and sub-national government departments such as DPWT in Oudomxay Province and District level require extensive training and capacity development in environmental and social safeguards implementation and monitoring. They should be supported by a technical assistance consultant team that will assist in the implementation of the ESMF requirements while building staff capacity to address safeguards issues.

Institution/ Government Agencies	Identified Capacity Gaps
Ministry of Public Works and Transport (MPWT)	Limited consideration of environmental and social safeguards instruments and measures and limited collaboration with MoNRE.
	Limited capacity for monitoring implementation and compliance of environmental and social safeguards measures (Environment Code of Practice [ECoP], ESMP, ARAP/RAP, EGDP, etc.) during project life cycle.
Department of	Limited capacities to assess project social impacts and required mitigation measures.
Waterways	Limited consideration of environmental and social safeguards into Ministry services and limited collaboration with MoNRE.
	Lack of best practice experience on urban flood risk management.
	Limited capacities for monitoring for implementation of projects Management Plans (ESMP, ARAP/RAP, EGDP, ECoP, etc.).
Provincial	Limited capacities to assess project social impacts and required mitigation measures.
Department of Public Works Oudomxay	Limited consideration of environmental and social safeguards into Ministry services and limited collaboration with MoNRE or the Department of Natural Resources and Environment (DoNRE).
	Lack of best practice experience tours on urban flood risk management.
Office of Public	Limited capacities for monitoring environmental and social safeguards measures during implementation of projects (i.e., ESMP, ARAP/RAP, EGDP, ECoP, etc.).
Works and	Limited capacities to assess projects social impacts and required mitigation measures.
Transport - OPWT at district level:	Limited consideration of environmental and social safeguards into Ministry services and limited collaboration with MoNRE or DoNRE.
	Lack of best practice experience on urban flood risk management.

Table 2 Institutional strengthening and capacity development assessment.

Table 3 presents key responsibilities of the Lao PDR MPWT DoW and Oudomxay Provincial DPWT at different stages of the project life cycle.

Sub-project Cycle	MPWT/DoW	DPWT Oudomxay, Waterways Sector
Screening	Advise applicants and other stakeholders about environmental and social safeguard procedures.	(as sub-project owner) Assess any potential safeguard issues early in the preparation process, including screening for the presence of ethnic groups
	Review the concept note/idea and screen for potential safeguard issues, and advise applicants regarding the nature and content of the safeguard documents and measures to be prepared.	Describe potential safeguard issues in the safeguard screening form to be attached to the sub-project proposal.
Preparation	Advise applicants on safeguard issues, as needed.	Undertake safeguard preparation actions as required, such as consultations with local communities and/or collection of data.
		Design safeguard measures and prepare documents, such as an ESMP, ARAP/RAP, EGDP, ECoP, etc. as agreed with DoW. If applicable, disclose draft safeguard documents with the sub-project proposal to affected communities prior to final review of proposal by the MPWT/DoW.
Review and approval	Review sub-project proposals for safeguard impacts and social risks.	Submit sub-project proposal with safeguard measures and documents as agreed. If
	Assess the adequacy and feasibility of the safeguard assessment and consultation process. If needed, request further steps.	requested by the DoW takes additional steps to meet ESMF and safeguard policy provisions. Re-submit proposal with revised
	Assess the adequacy and feasibility of safeguard measures and documents. If needed, request appropriate changes to	safeguard measures and documents, as needed. All national and local legislation and regulations will be complied with. Prepare an action plan as needed if the
	these and reassess prior to final approval. If ethnic groups (equivalent to WB OP/BP 4.10) are affected, ascertain that they have provided their free, prior and informed consent to sub-project activities affecting them.	sub-project is likely to have some impacts on CSOs (non-profit associations and CBOs).
	If applicable, publicly disclose safeguard related information on the website after sub- project approval.	
Implementation	Supervise and review safeguard documents and issues during sub-project	Disclose final safeguard documents, if any, to affected communities.
	implementation. If needed, request changes to safeguard measures.	Monitor and document the implementation of safeguard measures.
	Review and approve Plan of Actions that are required to be prepared during implementation of sub-projects.	When the ethnic groups (equivalent to WB OP/BP 4.10) are affected, include them in participatory monitoring and evaluation exercises.
Evaluation	Ensure inclusion and review of environmental and social safeguard issues and outcomes in mid-term and final sub- project evaluation and reporting, including concerning any lessons learned on the sustainability of each sub-project.	Evaluate the implementation and outcomes of safeguard measures. When the ethnic groups (equivalent to WB OP/BP 4.10) are affected, include them in participatory evaluation exercises.

Table 3 Key responsibilities for ESMF implementation.

6.0 SITE-SPECIFIC POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS, RISKS, AND ISSUES

The World Bank Aide Memoire (13 May 2016) indicates that:

"..the purpose of the USD 10.0 million urban flood risk management component is to strengthen flood resilience in Oudomxay Province. It will finance flood protection infrastructure, including investments in riverbank protection and embankments, flood gates, weirs, riverside parks, and drainage canals. Such infrastructure will protect the urban core from flash floods that occur regularly and cause major flood damage. The infrastructure investments will be complemented with non-structural measures, including strengthening land-zoning. This will also take into account flood management in the river sub-basin, exploring approaches to allow room for the river in low-density areas, while protecting against flooding in high-density areas."

Potential environmental and social impacts likely to arise as a result of the Lao PDR SEA DRM Project were identified by comparing project components with the surrounding environmental and social context. As mentioned, Oudomxay Province experienced flash floods with devastating effect to infrastructure and loss of life in the provincial capital, Muang Xay, in 1945, 1985, 2008 and 2013. During the most recent flash flood, 93.6 mm of rainfall occurred in one day inflicting heavy damage to infrastructure and loss of life to seventeen persons. Flood damage in the provincial capital was largely caused by inundation of excess water from the Nam Kor River and its tributaries, including the Nam Mao, Nam Sin and Nam Hin.

It is expected that urban flood risk management investments in Oudomxay provincial capital Muang Xay will have both positive and negative (adverse) impacts that could ensue as a result of sub-project implementation of the proposed riverbank protection, drainage canal reparation, dike embankment and flood gates, and riverside park(s) infrastructure. Urban flood risk management sub-project initiatives will be beneficial for the majority of provincial capital Muang Xay residents whose properties and livelihoods will be largely uninterrupted because of proposed infrastructure investments. It is expected that construction and installation of urban flood risk management infrastructure investment will bring socio-economic, health and ecological benefits. In the latter instance, protecting the river from siltation and sedimentation as a result of runoff and riverbank erosion, and reducing the loss of lives and/or livelihoods caused by flooding will help promote an environment of safety, health and well-being for the majority of people who have suffered from the effects of flash flood events in the past.

Environmental and social effects and impacts will differ markedly depending upon the type and scope of the particular urban flood risk management sub-project initiative and its location. For construction of new infrastructure for the sub-project, it is likely that for most people, the potential negative impacts will be moderate and localized, although cumulative effects cannot be discounted. However, for people living in the areas targeted for the construction of two riverside parks, major impacts due to resettlement and/or the loss of riverine land may result. Table 4 provides a typology of potential site-specific environmental and social impacts that could be considered in relation to the urban flood risk management infrastructure sub-project initiatives.

Known safeguards risks are listed below:

 Safeguards Screening and Risks: environmental risks will be mitigated by identifying and ensuring Lao PDR environmental and social legal frameworks, and World Bank safeguards policies, are applied at the earliest stages of project preparation and planning and adhered to throughout all phases of project implementation.

- Impacts of Civil Works Activities: it is expected for an urban disaster risk management project that environmental and social impacts will be moderate to major if land contribution is required for some of the proposed sub-project initiatives are considered, in which case, mitigation and/or compensation measures need to be outlined in the ESMF safeguards plans and procedures. Some examples of effects from civil works include:
 - <u>Noise and Air Quality</u>: (e.g., dust) impacts will occur as a result of construction activities. These impacts can be mitigated using well established mitigation measures when construction is undertaken in close proximity to residential urban areas and other socially sensitive areas. Some examples of mitigation measures include: (i) watering of active construction work areas to minimize dust emissions during construction. Regular and effective maintenance of equipment will mitigate emissions. Re-vegetation of disturbed areas immediately following construction also assists in reducing dust emissions; and (ii) during construction, the use of noise barriers in sensitive areas and controlling hours of work are effective noise mitigation measures.

It is important to note that noise and air quality emissions are temporary and short-term issues that can be effectively mitigated.

- <u>Runoff from construction areas</u>: during rain events can contain high concentrations of sediment and possibly other pollutants (e.g., hydrocarbons, heavy metals, etc.). Standard operating practices outlined in the ECoP should be implemented to contain and treat runoff from the construction site. The use of silt control measures (e.g., silt fences, catch basins, temporary or permanent settling ponds, vegetated swales, etc.), when properly operated, can be very effective in protecting water quality in nearby streams during construction and during the operational phase of the flood protection civil works (i.e. dikes, drainage canal and flood gates, weirs and riverside parks) and other urban flood risk management initiatives.
- <u>Construction wastes, garbage and refuse</u>: generated during construction including waste oil and chemicals should be contained on site and ultimately disposed of off-site in an environmentally acceptable manner. Procedures for on-site management and off-site disposal need to be addressed in the ECoP. A source of fill (borrow) materials will need to be established in the area where the civil works will be implemented. If available, an established borrow pit should be employed. If a new borrow pit is needed, safeguards procedures will need to be established in the ECoP.
- Land Acquisition and Resettlement: the acquisition of land will be necessary and depending upon final infrastructure sub-project initiatives' selection, land may be acquired on a temporary or permanent basis with² or without compensation. If riverside parks are included in the final sub-project selection then, PAP or PAH will have to be relocated. Additionally, relocation of temporary buildings and roof structures and concrete floors extending from small shops, and permanent houses, crops and trees found within the conservation area boundary are anticipated. Potential land acquisition may be required due to the construction of riverbank protection, drainage canal reparation, dike embankment and flood gates, and riverside park(s). These moderate to major land acquisition requirements will be identified at feasibility and detailed design stages during implementation when the scope and design of subproject become clear.

² World Bank financing cannot, and will not, be used to pay for compensation. Any cash compensatory settlement must come from the national exchequer or other source.

- Dam-like Structures: the proposed urban flood risk management sub-project initiative(s) include construction of a dike, flood gates and weir. World Bank financed projects that include the construction of dam-like structures including new dikes, flood gates or weirs, require that the structures be designed, supervised and constructed by experienced and competent professionals. The borrower is required to adopt and implement certain dike, floodgates and weir safety measures for the design, tendering, construction, operation and maintenance of dikes, flood gates and weirs and associated works. As a dike or weir failure could prove catastrophic, the ESMF includes guidelines for a dike and weir safety assessment (see ESMF Appendix A5).
- Ethnic Groups: ethnic groups may be directly or indirectly affected by the proposed sub-project urban flood risk management works and, therefore, an EGEF is included as part of the current ESMF.
- Physical Cultural Properties and Sensitive Areas: for the most part, local hospitals, schools, temples and markets are to be found outside the conservation area boundary so, the civil works would not cause major impacts to these sensitive areas. However, the detailed and site-specific Environmental and Social Management Plan (ESMP) including chance findings and good civil engineering practices (e.g., ECoP) will be applied to mitigate potential adverse impacts induced by the Lao PDR SEA DRM Project proposed sub-project.

Cumulative impacts are those that result from the incremental impact of the sub-project when added to other past, present and reasonably foreseeable future actions. Effects should be assessed in terms of the capacity of the water resource, ecosystem and/or affected communities to accommodate such impacts.

No.	Sub-projects Associated Activities	Potential Environmental and Social Impact Issues	Expected Significance
1	Dikes, flood gates and	Air and noise pollution	Minor
	weirs	Water pollution	Moderate
		Soil erosion	Moderate
		Alteration of hydrological regime	Minor
		Destruction of flora and fauna habitat	Moderate
		Involuntary resettlement	Major
		Land take	Major
		Spread of diseases	Minor
		Potential dike/weir failure	Moderate
		Waste management	Minor
		Land take	Major
2	Access roads	Dust and noise pollution	Major
		Water pollution	Moderate
		Solid waste disposal	Moderate
		Waste oil/fuel disposal	Moderate
		Public health and safety	Major
		Land take	Major
		Waste management	Moderate

Table 4 Potential environmental and social impacts of the proposed sub-projects.

Table 4 (Cont'd.)

No.	Sub-projects Associated Activities	Potential Environmental and Social Impact Issues	Expected Significance
3	Riverside parks	Water pollution	Moderate
		Soil erosion	Moderate
		Flooding	Major
		Alteration of hydrological regime	Major
		Destruction of flora and fauna habitat	Major
		Involuntary resettlement	Major
		Land take	Major
4	Agriculture	Water pollution	Major
	development	Flooding	Moderate
		Alteration of hydrological regime	Moderate
		Destruction of flora and fauna habitat	Major
		Involuntary resettlement	Major
		Soil and land degradation (salinization)	Moderate
		Agro chemical usage	Major
		Pest management	Major
		Groundwater pollution	Moderate
5	Specific social issues	Livelihood loss	Major
		Community disruption	Moderate
		Cultural heritage site destruction	Moderate
		Increased marginalization of landless people	Moderate
		Loss of access to biodiversity resources (for food, economic activities or medicine)	Major
		Marginalization of local communities to the benefit of large investors	Major
		Increased spreading of waterborne diseases	Major
		Increased HIV/AIDS infection rate due to increased and itinerant working population	Major
6	Specific gender issues	Increased work burdens of women and children	Major
		Low access to natural resources including land and NTFPs for women	Major
		Exclusion from decision-making for planning and implementation	Moderate

7.0 ASSESSMENT OF ALTERNATIVES

The GoL through the MPWT DoW have proposed several infrastructure sub-projects including riverbank protection works, dike, drainage canal and flood gates, weir and riverside park(s) in Oudomxay's provincial capital of Muang Xay. Although final design and costing has not been completed, it is possible that the budget will be insufficient to complete all of the proposed sub-project initiatives, in which case, it would be prudent to consider alternatives and establish priorities.

Alternative options and measures to the current Lao PDR SEA DRM sub-project urban flood risk management infrastructure initiatives and/or activities that the MPWT DoW could consider for Oudomxay provincial capital and vicinity include:

- 1. Zero option the do nothing alternative;
- 2. Remove two proposed riverside parks from the current list of proposed sub-project initiatives;
- 3. **Include more Oudomxay provincial town drainage** options for Muang Xay to prevent or mitigate the effects of flash flood and heavy rainfall;
- 4. **Include community-based DRM approaches** to address local resilience priorities through participatory and community-led planning approaches; and
- 5. **Include green solutions for storing water** by means of vegetation, soil and porous surfaces and wetlands.

Ultimately, the project economist conducting the feasibility study will consider different alternatives in the cost-benefit analysis calculus, including sensitivity analysis to determine return on investment for the GoL and the World Bank Group.

8.0 PARTICIPATORY SOCIAL ASSESSMENT GUIDELINES

Community consultations will be based on free, prior and informed consultations to gauge support for the proposed Lao PDR SEA DRM sub-project initiatives. Objectives of community consultations are to: (i) provide background information to various stakeholders and different populations; (ii) receive feedback from CSOs including non-profit associations, CBOs, local leadership and other publics on perceived issues and concerns; and, (iii) discuss methods and resources to maximize the Lao PDR SEA DRM proposed sub-project initiatives' environmental and social performance. These participatory and consultative meetings will provide DoW with an opportunity to discuss grievance redress mechanisms and monitoring for those different populations and communities which may be impacted adversely from implementation of the proposed sub-project initiatives.

Ensuring that the project impact assessment includes a participatory and gender-responsive social analysis is an important element of each stage or level of the project lifecycle. The starting point for effective gender mainstreaming in infrastructure sub-projects is to undertake the required gender analysis. A gender analysis typically involves examining potential impacts of the project intervention on women and men, and may include the collection of sex-disaggregated or gender-sensitive information. A gender analysis examines the different roles, rights and entitlements, and opportunities of men and women and relations between them (i.e., the economic and social relationships between females and males which are constructed and reinforced by social institutions). It also identifies disparities, examines why such disparities exist, determines whether they are a potential impediment to achieving results, and looks at how they can be addressed (USAID 2011). Measures must be proposed to address these issues, along with SMART (specific, measurable, achievable, relevant and time-bound) indicators to monitor the intended [and unintended] social benefits and development outcomes and risks of the project.

Conducting a gender analysis when designing a new project or activity will help to:

- Analyze gender roles in project design;
- Identify root causes of existing gender inequalities in that context so that they can be addressed in the project design;
- Identify different needs and priorities of men and women in both the near and long term;

- Collect sex-disaggregated baseline data;
- Avoid perpetuating traditional power imbalances; and
- Enhance the likelihood of strong and sustainable project results.

As indicated, MPWT DoW have proposed sub-project initiatives for urban flood protection management in Oudomxay's provincial capital, Muang Xay, and proximity. The proposed investments would entail riverbank protection, dikes, drainage canals and flood gates, weirs and riverside parks. The Lao PDR SEA DRM Project team comprised of both national and sub-national level government and the Consultant visited Oudomxay's provincial capital, Muang Xay, and proximity between 21-24 June 2016. As the public and community consultations occurred mainly in an urban and close proximity setting, specific ethnic groups were not distinguished as a distinct subset of the larger population.

The list of consulted stakeholders is shown in Appendix A1. Focus group discussions (FGD) were held in two villages, Nalao Village and Nasao Village, on 16 June 2016. In order to ensure that community discussions complied with WBG requirements for FPIC, government staff were asked to not participate in the FGDs. The FGDs were held in the village community centers and, for the most part, it was not possible to visit individual households. The Consultant team split into two groups with the female team leading the FGD for discussions with women-only groups, and the male team leading the FGD with men-only groups. Respondents were generally supportive of the proposed sub-project initiatives for urban flood risk management but, also realized that some PAH would be impacted adversely, either on a temporary or permanent basis, during implementation.

9.0 STAKEHOLDER CONSULTATIONS

9.1 IMPORTANCE OF STAKEHOLDER CONSULTATIONS

Public consultations occur at all stages of sub-project preparation and planning of feasibility studies and detailed design. To ensure that World Bank consultation and disclosure policies are followed, PAP and communities in the region of influence will be engaged through free, prior and informed consultation to gauge support for the proposed sub-project initiatives. In this manner, stakeholders, various publics and different populations will be consulted during several stages of sub-project preparation, including:

- Project Identification: preliminary consultations were conducted during sub-project identification whereby national and local government authorities were consulted to ensure that the Lao PDR SEA DRM Project aligned with national policies and legal frameworks, sectoral and local plans and strategies. Relevant stakeholders were consulted during development of the ESMF. Documented records of engagement and community consultations in Oudomxay's provincial capital of Muang Xay and close proximity are illustrated in Appendix A2: Stakeholder Consultations.
- Project Preparation: consultations will be conducted during preparation of the feasibility and design studies to: (i) obtain detailed background information; (ii) conduct environmental and social surveys; and (iii) informing and collecting opinions of key stakeholders, various publics and different populations on potential environmental and social impacts.
- Project Implementation: for projects under World Bank Category "A" that might be nationally controversial, a Communication Plan including a grievance redress mechanism will be developed for the proposed sub-project initiatives and implemented prior to implementation. Participation of local leaders in disseminating information and resolving any disputes will be important.

 <u>Monitoring and Reporting</u>: national and local level government, stakeholders, various publics and different populations should participate throughout the proposed sub-project development, implementation and operational period. Participation mechanisms should be assessed during the feasibility and design phase.

9.2 SITE-SPECIFIC CONTEXTURAL GENDER INFORMATION

Field visits were conducted from 21-24 June 2016 at the sub-project site. Community consultations took place with a variety of subnational and local government officials, civil society organizations including non-profit associations and different populations (see Appendix A1 and A2 for list of stakeholders and other publics consulted and stakeholder comments, respectively).

During the community consultations that took place as part of the field work to develop the ESMF, specific gender-related questions were included as part of the public consultations. Results from the women FGDs showed that generally, the people interviewed believe that women and men will have equal benefits from the proposed urban flood risk management sub-project initiatives. The women believed the construction of the infrastructure would result in an increase in job opportunities for both women and men in the area, either directly in construction or as indirect spin-off opportunities such as food provision. The women appear to have more decision-making power in their villages, although men still dominate in the public sphere outside of the family structure.

When questioned about the potential for an increase in sexually-transmitted diseases, harassment, sexual exploitation or human-trafficking, a representative from the Lao Women's Union suggested that any company contracted to undertake the Lao PDR SEA DRM sub-project initiatives' work should have policies in place to ensure their workers did not contribute to any adverse health impacts on women and female youth or children.

Suggestions for best practices for mainstreaming gender into DRM projects were provided by the community consultations and with civil society organizations in Oudomxay Province, and supplemented with recommendations from DRM projects in the region. Examples of these best practices include the following:

- Consult with a socially and economically representative cross-section of affected women and men during participatory needs assessments and consider their different cultural roles and needs in the design and planning process;
- During community consultations, men often manage the discussions, therefore holding discussions with separate female and male groups will help women feel more comfortable;
- Develop a gender checklist to guide the team in mainstreaming gender in all project activities;
- Continue collecting sex-disaggregated data and analyze and report on it on a quarterly basis;
- Ensure the Monitoring and Evaluation (M&E) system captures the qualitative progress of gender equality promotion and reflect this progress in reports;
- Review all project activity guidelines to ensure gender perspectives are considered in the documents, in collaboration with the project team with technical support from the Senior Gender Officer;
- Conduct regular site visits and provide technical assistance to the project team on how to integrate gender into DRM activities;

- Gender Sensitization Training for the borrower agency, their staff and their local partners needs to be included in DRM projects to ensure greater recognition and understanding of the importance of addressing gender issues in disaster management;
- Strengthening women's access to and ownership over resources improves decision making power;
- Involve grassroots level networks of women to work in collaboration with authorities for positive change:
- Setting up and including a community-based organization representative of the people helps to generate confidence that concerns and grievances will be heard and addressed;
- A multi-stakeholder and learning platform, including MoNRE and MAF, can be a useful forum to discuss issues:
- Every meeting and consultations should include women representation for local people and at least one person from each ethnic group;
- Sensitive issues, particularly among women, can be addressed by using the "close friend" approach, and the close friend can represent the person during discussions and negotiations;
- During planning and implement meetings and consultations, men will often exclude women, saying that the topic of discussion is of no concern to women. To ensure women's participation, make sure that they are formally invited and stress how it is important to include women and children as well;
- Opportunities created in post disasters or post conflict situations can be used to challenge existing inequitable norms to move towards inclusivity;
- Where traditional or customary law is favorable to women, these should be used, as women are more comfortable engaging with it; and
- Women's own knowledge can be effectively utilized in DRM and Resilience Building strategies.

APPENDICES

Appendix A1

List of Consulted Stakeholders

Table A1.1 List of consulted stakeholders.

Date	Time	Stakeholders	Location	Methodology
21 June 2016	1:30 – 3:30	 Concerned subnational government representatives from Provincial DPWT Oudomxay: Head of Department of Public Works and Transport (Oudomxay Province) Head of Waterways management sector (Oudomxay Province) Department of Waterways (from Vientiane) World Bank Representative from DoNRE (Oudomxay Province) Representative from Housing and Urban Planning sector Representative from Department of Public Works and Transport (Oudomxay Province) 	Xay District	Arranged meeting with introduction of Lao PDR SEA DRM Project and Q and A
22 June	8:30 - 12:00	Site visits		
	14:00 – 16:00	 Oudomxay Department of Public Works and Transport and District Governor: Deputy district governor of Xay district Concerned personnel from Xay district office Representative from Lao Women's Union of Xay district office Representative from DoNRE (Oudomxay Province) Head of Waterways management sector (Oudomxay Province) Department of Waterways (from Vientiane) World Bank 	Muang Xay	Arranged meeting with Q and A
23 June 2016	8:30 – 12:00	 Village # 1: Nasao: Naiban (President of the Committee) Deputy Naiban Chief of the Village Unity Union Chief and representatives of the Village Women's Union Chief of the Village Security Unit Chief of the Village Youth Union Most respected elderly people Representative from village Head of Waterways management sector (Oudomxay Province) Department of Waterways (from Vientiane) World Bank 	Nasao Village, Xay District	Arranged meeting to introduce Project and then split into male and female assemblages for focus group discussions (FGD)

Date	Time	Stakeholders	Location	Methodology
23 June 2016	13:30 - 16:00	Village # 2: Nalao:	Nalao Village,	Arranged meeting to introduce
Cont'd.		 Naiban (President of the Committee) 	Xay District	Project and then split into male and
		 Deputy Naiban 		female assemblages for focus group
		Chief of the Village Unity Union		discussions (FGD)
		 Chief and representatives of Women's Union 		
		Chief of the Village Security Unit		
		Chief of the Village Youth Union		
		 Most respected elderly people 		
		 Representative from village 		
		 Head of Waterways management sector (Oudomxay Province) 		
		 Department of Waterways (from Vientiane) 		
		World Bank		
24 June 2016	8:30 - 10:30	Meeting with Plan International	Muang Xay	Arranged meeting with Q and A
		(Mr. Thipphavanh Malaithong, WASH Manager.)		
	10:30 - 11:30	Meeting with IFAD	Muang Xay	Arranged meeting with Q and A
		(Mr. Keo Phetsomphou, Manager)		
	13:30 - 16:00	PAP living within proximity of the proposed dike embankment (weir)	Muang Xay	Arranged meeting with Q and A

Appendix A2

Stakeholder Consultations

	Responses			
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016	
How have you been impacted by floods and other hazards in your village?	There were many flood incidences, both minor and major, occurred in the past four flash flood events. The most severe flood occurred in 1985 which created a lot of damage to public facilities, homes and structures. Many people also died as a result. Unfortunately, the provincial authority doesn't have data or statistics on this floods.	As I am aware and experienced, there were four severe floods occur (1945, 1985, 2008, 20013) in Xay district in general and in Nalao village in particular. The most severe one occurred in 1985, which created a lot of damage to homes and structures in the village. Many people also died as a result. The villages had greatly suffered during the floods and aftermath. No sufficient support had been provided by the government.	As he is aware and experience, there were four severe floods occur (1945, 1985, 2008, 20013) in Xay district in general and in Nalao village in particular. The most severe one occurred in 1985, which created a lot of damage to homes and structures in the village. Many people also died as a result. Many households not only in this village but also in other villages had severely suffered during the floods and aftermath.	
Have hazard and flood mitigation solutions been proposed and/or implemented before?	No mitigation measures and flood mitigation solutions project had been proposed or implemented because we know any mitigations measures would require a lot of budget, which the provincial government doesn't have.	No mitigation measures and flood mitigation solutions project had been proposed or implemented.	No mitigation measures and flood mitigation solutions project had been proposed or implemented.	
What do you think about the proposed sub-projects? Do you think there is a need or demand for these to be built?	I am very pleased to see you coming here to collect the data and conduct general assessment.	We are very happy to hear that there will be this flood mitigation project. We think it is a great project. There have been many flood incidences occurring and some of them were very devastating. No mitigation solutions have been heard or proposed until recently when provincial authority invited me (Naiban) to participate in the meeting to inform me about the project. We are also hearing about this project today in more detail. So we are very pleased and very supportive.	I am very happy to hear that there will be this flood mitigation project. I think it is a useful project. There have been many flood incidences occurring and some of them were very devastating. No mitigation solutions have been heard or propose.	

Table A2.1 Notes from consultation meetings with provincial officials and villages in Xay District.

	Responses			
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016	
Cont'd.	This flood mitigation project was initiated based on constant request made by local residents to the provincial government to address the floods in town.	I understand that some households might be impacted by the project. They might lose their houses, agriculture land or garden. But I hope they understand the general benefits that they project will bring and hopefully the government can somehow make compensation for them.	As a Naiban, I was invited to participate in a meeting to inform me about the project. So we are very pleased and very supportive. We very much appreciate the government's effort in trying to address this flood issue for us. I know that some households will be impacted by the project. They might lose their houses, agriculture land or garden. But I hope they understand the general benefits that they project will bring and hopefully the government can make compensation properly and accordingly.	
	If this project doesn't proceed, development in the district will be difficult.	I have one piece of land, about one hectare, located along the river bank of Nam Mao River. I lose small part of my land year by year as a result of land erosion. I am glad to hear that river bank protection will be constructed though my land. This will help not only to protect my land but also to project the river bank and all the land along the river bank in general.	I have no objection about the project. I am particularly happy to hear about construction of the park. Of course it will make our town more beautiful and can attract a lot of people to come to our town.	
	The provincial government will provide the support and cooperation as needed.	Yes, it is a good project. We are all happy to hear. My only concern is the compensation. We want to get involved in managing the budget as much as	I have a piece of land where the dike will be constructed. I have no problem if some of my land will be acquired for the project. I hope the	
	If we don't do this project now, it will even more difficult to do later because people will build more houses and structures.	possible. In the past, the impacted people only see the financial compensation on paper but in reality they did not receive compensation according to written figures. We want this project to be implemented in transparent manner.	government will provide some kind of compensation for me. I do believe that other people will also have no problem if they have to give some part of their land for the project. It is common benefit and they have to understand.	

	Responses				
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016		
Cont'd.	Small number of people will be impacted, while the large number will benefit from the project.				
	We already informed local people that some of them will be impacted.	-			
What benefits and adverse effects do you foresee from sub-projects and what concerns do you have, particularly on land acquisition, compensation and resettlement?	There are some houses located in the proposed project area. Some of the houses are located in the provincial land so the provincial authority has the right to legally acquire if needed. We have made notification to them that they can live in the provincial land now but once the project starts they will have to move out. People who have a legal title will be compensated.	It is clear to me that for those who have land certificate, they will certainly receive compensation for the loss of their land. I am concerned about those who don't have land certificate, I mean, those who live on the provincial land, have their house built in the provincial land, for instance. The provincial and village authorities have not issued land certificates for them and hence they don't have land certificates. However, these household might strongly resist moving out unless proper compensation is received. I am curious to know how the provincial authority will handle this.	There are many houses located in the proposed park area. It is a provincial land so the provincial authority has the right to legally acquire if needed. I hope those households living in the park area understand. For compensation, I don't know it is up to the provincial government to decide.		
		Our village still has conservation land along the main road (50 m from the main road with the approximate total length of 3,000, or about 15 hectare). We also have large wetland area. Poor justified family or household within the village can apply to use or locate somewhere within this conservation land or wetland based on consideration and decision of village authority.	If those households located in the park area have to be resettled, I don't know where we will move them to. Our village doesn't have vacant or conservation land in the town. We only have vacant land located in the mountains and it is very far away from the town. I don't think they want to move there.		

	Responses			
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016	
Cont'd.		For this proposed flood mitigation project, the village authority still can allocate the area of land for resettlement/relocation purpose if requested or approved by district and provincial authorities. Our village will be happy to serve as the host village. But again, all this will much depend on the decision of the provincial government. Whatever they say, decide or instruct, we have to follow.	I feel pity for those who have to move out from the proposed park construction area. But they know that it is not their land and they should understand the common benefit. I don't know how the government will address this issue.	
		For those who already have land with land certificate but have to give their land for the project, and if they have to be resettled somewhere within our village land, the village authority can also certify and approve for them to apply for getting land certificate with concerned district authority.		
What do you think about gender equality? Will women and men benefit equally from these sub-	No specific thoughts have been given towards any gender considerations. In the	We don't differentiate between men and women, we are sure that the project will equally benefit both men and women.	We don't differentiate between men and women, we are sure that the project will equally benefit both men and women.	
projects? If not, who will benefit more, and why? Will women and men have different benefits and adverse impacts?	and that discussed sexual abuse,	Usually the head of the household/family will have the access to project information. The Head of the village will communicate directly with the head of the household to inform about the project.	Usually the head of the household/family will have the access to project information. The Head of the village will communicate directly with the head of the household to inform about the project.	
		For me, I still think that men should the one who makes the decision in the family. It is our tradition and it would be strange if a woman makes decision.	I think both wife and husband have equal right in making decision. It depends on the issue as well.	

	Responses			
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016	
Cont'd.		For me, I think we have equal right in making decision. When I have to make final decision on certain important issue, I always consult with my wife and then we agree among ourselves and then make final decision. If my wife doesn't agree, I cannot make final decision. So I would say the decision in the family is made equally between husband and wife based on mutual understanding and agreement. I hope this is also the case for other families in our village.		
How many ethnic groups in your village?	There are multiple ethnic groups as this is the capital city with a majority of Khmu.	We have seven ethnic groups living in the village:	We have seven ethnic groups living in the village:	
		1. Leu (60%)	1. Lao Loum (40%)	
		2. Lao Loum (20%)	2. Khmou (45%)	
		3. Hor (8%)	3. Other (5%)	
		4. Khmou (5%)		
		5. Tai Dam (3%)	_	
		6. Phou Noy (2%)	-	
		7. Nmong (2%)		

	Responses				
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016		
Could you tell us about the importance of Nam Kor and Nam Mao rivers, especially for those who live downstream of the proposed sub-projects in terms of water consumption, fisheries and agriculture?	Nam Kor and Nam Mao have not been used much by local communities living downstream, particularly for drinking. Most of them use water from taps. They mainly use the river far agriculture or gardening purposes. Fisheries have also not been so active. However, we will work closely with the construction contractor, especially during the construction phase to ensure the impact on water quality is minimized.				
Since the construction of the proposed sub-projects, especially of dikes and riverbank protection will requires a lot of construction material like rock, gravel, soil, etc., do you have an idea, where this material can be obtained from?	We have many vacant places where the project can use as quarry or borrow pit to get the material like rock and soil for construction purpose. These places are far away from town and they are not within the protected areas or close to the villages or communities. We will work closely with construction contractor to ensure that no major impacts are created, especially during extraction and transportation of these materials.				

	Responses				
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016		
Since most of the proposed sub- projects are located in town, we are concerned about the access to each site. We are not sure if the construction contractor can access to each site through existing road or new access will be needed or constructed. Could you share your opinion on this?	We believe that we have access to all sub-project sites and we don't need to build new access road. We will work with construction contractor to ensure that the generation of dust and noise is minimized.				
Does the Xay district have any landfill? What do you think about waste management in Xai district?	We have a landfill in town so the construction contractor can use this landfill to dump their waste.	We have a landfill in the district but not all people use it. Some people just dump their waste everywhere.	We have a landfill in the district but not all people use it. Some people just dump their waste everywhere.		
	We work with construction contractor to make sure that they have regulations and measures in place to manage the wastes they produce.		The Chinese motorbike manufacturing company always dumps their waste in the vacant village land. We've urged the concerned authority to address waste management issues more seriously. We are concerned that if a project really happens, the construction company will do the same.		
Have you been involved in the social and environmental monitoring and reporting of any projects in the community? Do you think involvement in monitoring of the project is important? If yes, why?		Our experience with the previous projects is that, as a Naiban, I was invited to join district and provincial officials in doing inspections only during the project approval stage, where the permission or approval from our village authority is needed to locate the project site in the village area. I mean I only joined in inspecting project location to see if nothing is wrong with the site that the project developer selects to locate the project. After that or when project started up, the village authority has not been invited to involve in design or monitoring of the project.	As a Naiban, I was invited to join district and provincial officials in doing inspections only during the project approval stage, where the permission or approval from our village authority is needed to locate the project site in the village area. I only joined in inspecting project location to see if nothing is wrong with the site that the project developer selects to locate the project. After that or when project started up, the village authority has not been invited to involve in design or monitoring of the project.		

	Responses			
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016	
Cont'd.		It would be great to have representative from the village to get involved with monitoring the project. Our experience with the previous road construction projects in our village is that we were not given the chance to get involved, although all households have to provide financial contributions and some households had donated some part of their land. The agreement was made at a higher level. As a result, the road got damaged just after few years of completion. We believe this project had not been implemented in transparent manner.	It would be good idea to have representative from the village involved in monitoring the project. I don't have much idea of how we can get involved. We don't have experience in involving in the project. It is would be something new for us.	
		We want to get involve in budget monitoring, especially the budget to be used for compensation. We want the government officials to be sincere and honest with us. For the past projects, we felt that we had been cheated or treated unfairly in terms of providing financial compensation. The authority agreed to give financial compensation for impacted households only on paper, but in reality households did not receive real money or received lesser amounts than specified in the agreement. At the end of the day, village authorities have to take responsibility to handle the issue correctly. We think if we could get involved in using or managing the budget, this kind of issue would not occur.		

	Responses			
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016	
If these sub-projects get approved for construction, how you would like to see the communication channel between your community and the project? Do you need to have a Dissemination Meeting before the project starts?		Our current common practice for communication on and dissemination of project information is that the village authorities (either Naiban or Deputy Naiban) will be invited through a letter to attend consultations and a dissemination meeting. At that meeting, the concerned district officials will discuss and provide key information on the project. When the Naiban and Deputy Naiban get information, they will inform or communicate project information to the villagers by verbally inviting (knocking door by door) representatives from each household to attend the meeting which is usually held at the village office.	Our current common practice for communication on and dissemination of project information is that the village authorities (either Naiban or Deputy Naiban) will be invited through a letter to attend consultations and a dissemination meeting. At that meeting, the concerned district officials will discuss and provide key information on the project. When the Naiban and Deputy Naiban get information, they will inform or communicate project information to the villagers by verbally inviting (knocking door by door) representatives from each household to attend the meeting usually held at village office.	
		Since almost every household or person has a cellphone, the communication sometimes is done through a phone call.	Since almost every household or person has a cellphone, the communication sometimes is done through a phone call.	
		It would be good if poster can be made available and put in the place such as in the village office, in the temple, or in the market.	If you all have cell phone, you or your children can get access to the project information on the website.	

		Responses	
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016
What do you think about water quality in the Nam Mao and Nam Kor rivers?		There had been an issue regarding water quality of Nam Mao. The Chinese battery manufacturing company used to discharge untreated waste water from its factory into Nam Mao river. There was a fear and complaint among local communities that such discharge will create the adverse impacts on fishes and other aquatic species and on human health. The village had sent a letter of complaint to district authority and after few months the factory ceased operations. I am not sure about the reason. Maybe the district authority instructed them to cease operations or it was not profitable business and they decided to stop operation.	The water quality is poor compare to 10 or 20 years ago. The water color was very clear in the past but it is not the case anymore now. Many factories have been built along the river and I am not sure if officials manage the discharge from those factories.
		Not too many people use the both Nam Mao and Nam Kor rivers anymore compared to the past. Almost all people use tap water. They only use water from the river for small gardening.	
Do you have any other environmental concerns or suggestion?		We have concerns about dust generation, about waste management. We hope that the project will have rules and regulations in place to address environmental issues. Suggestions were also made to include more tree planting along the riverbank, and a drainage canal and sewage system.	We have concerns about dust generation, about waste management. We hope that the construction contractor has rules and regulations to address environmental issues.

		Responses	
Questions	Provincial Officials June 22 2016	Nalao Village June 23 2016	Nasao Village June 23 2016
Do you know if there are any grievance mechanism procedures in place? If yes, what is the process?		The village has the Grievance Mediation Committee consisting of seven members from various village organizations as follow:	The village has the Grievance Mediation Committee consisting of seven members from various village organizations as follow:
		1. Naiban (President of the Committee)	1. Naiban (President of the Committee)
		2. Deputy Naiban	2. Deputy Naiban
		3. Chief of the Village Unity Union	3. Chief of the Village Unity Union
		4. Chief of the Village Women Union	4. Chief of the Village Women Union
		5. Chief of the Village Security Unit	5. Chief of the Village Security Unit
		6. Chief of the Village Youth Union	6. Chief of the Village Youth Union
		7. Most respected elderly people	7. Most respected elderly people
		The village does not have grievance box in which people can drop their complaints. Villagers who want to make complaint or have a dispute, must to come to the village office and raise the issue. For small issues, the Naiban and Deputy Naiban can mediate and resolve the issue directly with the complainer or disputer. For more serious or complicated issues, the Naiban will request all members of Mediation Committee to get involved. The appointment and meeting will be organized to mediate the issue. If a one-time meeting is not enough to resolve the issue, another meeting will be set up. If the issue fails to be resolved at village level, the village authority will submit the issued to be addressed at the district level.	The village does not have grievance box in which people can drop their complaints. Villagers who want to make complaint or have disputes, must to come to the village office and raise the issue. For the small issue, the Naiban and Deputy Naiban can mediate and resolve the issue directly with complainer or disputer. For more serious or complicated issue, the Naiban will request all members of Mediation Committee to get involved. The appointment and meeting will be organized to mediate the issue. If a one-time meeting is not enough to resolve the issue, another meeting will be set up. If the issue fails to be resolved at village level, the village authority will submit the issued to be addressed at the district level.

Appendix A3

1st Public Consultation Meeting Sign-up Sheets

Figure A3.1 Provincial officials, Xay District sign-up sheet.

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Figure A3.2 IFAD sign-up sheet.



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Figure A3.3 Nalao Village, Xay District sign-up sheet.

Figure A3.4 Nasao Village, Xay District sign-up sheet.
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Appendix A4

2nd Public Consultation Meeting Sign-up Sheets

Appendix A5

Terms of References for PESA

ToR for Preliminary Environmental and Social Assessment

The Consultant will assist the borrower implementing agencies in the preparation of a Preliminary Environmental and Social Assessment (PESA) for Lao PDR. The PESA should include the following aspects:

- Assess general vulnerability to natural disaster for various population groups, with a focus on poor, ethnic minorities and vulnerable communities;
- Assess the institutional arrangements, both formal and informal, at central, provincial, district and village level for providing assistance in response to natural disasters, particularly for rural communities with ethnic minorities and other vulnerable communities;
- Assess the institutional arrangements for project management including the mechanisms and responsibilities for environmental and social screening for sub-project investments and measures to enhance project benefits to vulnerable communities such as ethnic minorities;
- In sample communities (at least two communities in each country depending on likely investment scenarios), identify the views and priorities of ethnic minorities and other vulnerable groups concerning prevention and/or response to natural disaster;
- Assess potential impacts and benefits from proposed project subcomponent activities, including rehabilitation, expansion and improvements of infrastructure;
- Identify key safeguards policy considerations to be imbedded into terms of reference for any technical assistance subcomponents involving development of disaster risk financing strategies to effectively manage the costs of disasters and the development of strategic investment plans for disaster and climate resilience;
- Assess potential impacts and issues concerning land acquisition or voluntary land donations in relation to proposed project-financed activities. Identify scope of the physical impacts of the various sub-projects proposed and assess potential impacts;
- Identify potential measures the project can take to avoid any potential adverse impacts and measures to enhance project benefits to ethnic minorities and other vulnerable communities for site-specific project activities, including: (i) consultation and participatory planning process;
 (ii) environmental and social assessment; and (iii) selection criteria to enhance benefits and equitable access to disaster risk management and response activities; and
- Assess existing grievance mechanisms available to people potentially affected by and/ or benefit from the project, and propose potential measures to strengthen them.