

**LAO PEOPLE'S DEMOCRATIC REPUBLIC**  
PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY

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## **The Poverty Reduction Fund II**

**ENVIRONMENTAL AND SOCIAL MANAGEMENT  
FRAMEWORK (ESMF)**

**Final draft - March 2011**

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## LIST OF ACRONYMS

CD	Community Development
CDD	Community Driven Development
CRPF	Compensation and Resettlement Policy Framework
DSPPPO	District sub-projects Proposal Outline
DRM	Disaster Risk Management
ECOP	Environmental Code of Practices
EG	Ethnic Group
EGDP	Ethnic Group Development Plan
EGDF	Ethnic Group Development Framework
EGPF	Ethnic Groups Policy Framework
EIA	Environmental Impact Assessment
EMP	Environment Management Plan
ESMF	Environmental and Social Management Framework
EU	Engineering Unit
FRALA	Framework for Resettlement and Acquisition of Land and Assets
FRM	Feedback and Resolution Mechanism
FRC	Feedback and Resolution Committee
IEC	Information, Education, Communication
IEE	Initial Evaluation Examination
ISPPF	Infrastructure Sub-Project Proposal Form
JSDF	Japanese Social Development Fund
KSPPO	Koumban Sub-project Proposal Outline
LA	Land Acquisition
LARAP	Land Acquisition/Resettlement Action Plan
LA/RR	Land Acquisition or Resettlement Report
M&E	Monitoring and Evaluation
MIS	Management Information System
MRC	Mekong River Commission
NTFP	Non Timber Forest Product
OAA	Other Aquatic Animals
O&M	Operations and Maintenance
OP	Operational Policy (of the World Bank)
POM	Project Operations Manual
PAP	Person Affected by Project
PDO	Project Development Objective
PMO	Prime Minister Office
PMP	Pest Management Plan
PMT	Project Management Team (PRF central office)
PRF	Poverty Reduction Fund
PRF I	Poverty Reduction Fund Phase I
PRF II	Poverty Reduction Fund Phase II
RAP	Resettlement Action Plan
SESG	Social and Environmental Safeguards Guidelines
SPPF	Sub-project Proposal Form
TSPPF	Training Sub-Project Proposal Form
UXO	Unexploded Ordinances
VNPA	Village Need Priority Assessment
WB	World Bank
WREA	Water Resources and Environment Administration

## INTRODUCTION

The Poverty Reduction Fund phase II (PRF II) has been designed and implemented following the community-driven approach developed during the implementation of the first phase of the Poverty Reduction Fund (2003-2011). The Project Development Objective (PDO) is to improve the access to and the utilization of basic infrastructure and services for PRF II targeted poor communities in a sustainable manner through inclusive community and local development processes.

The World Bank (WB) has categorized the PRF II as a ‘*Category B*’ project and out of the ten safeguard policies, four policies are triggered: *Environmental Assessment (OP 4.01)*; *Pest Management (OP 4.09)*; *Indigenous Peoples (OP 4.10)*; and *Involuntary Resettlement (OP 4.12)*. Given the Project’s Community Driven Development (CDD) nature, which is designed and implemented through a participatory planning process and the types of small civil works that will be supported under the project, it is not anticipated that the Project activities will create many major adverse impacts that cannot be managed by communities themselves. However small-scale civil works may require minor land acquisition and/or may create other minor negative impacts on local environment and local people although such impacts would be localized, temporally, and can be mitigated through good planning and construction practices.

To be in line with OP 4.01, OP 4.09, OP 4.10, and OP 4.12, four safeguard instruments have been prepared as a standalone documents:<sup>1</sup>

- the Compensation and Resettlement Policy Framework (CRPF)
- the Ethnic Group Policy Framework (EGPF)
- the Environmental and Social Management Framework (ESMF)
- the simplified Pest Management Plan (PMP)

This document is the Environmental and Social Management Framework (ESMF). It aims to provide the national, provincial and district government, the PRF team, consultants, village officials, private and public sector agencies and beneficiary community members with adequate guidance for effectively addressing the safeguard issues in line with OP 4.01. The process will be implemented as part of the PRF project cycle and the activities will be fully integrated into the subproject selection, approval, implementation, and monitoring and evaluation process. The ESMF is developed based on the implementation experience of the Social and Environmental Safeguard Guidelines (SESG) for the PRF I project and the scope of activities to be carried out under PRF II. The ESMF describes a safeguard screening and review process and safeguard actions, including monitoring and supervision, to be carried out and it will be applied to all investments to be financed by the World Bank for the PRF II. The screening and review will take place prior to submission of subproject proposals to the district meeting. It also includes an environmental code of practices (ECOP) for all types of civil works expected to be financed under PRF II. It is also connected to the CRPF, EGPF, and PMP.

The PRF staff at central and local levels will be responsible for implementation of the ESMF and ensuring full compliance, including keeping proper documentation in the project file for possible review by the World Bank.

This document is considered a living document and could be modified and changed in line with the changing situation or scope of the activities. Close consultation with the World Bank and clearance of the revised ESMF will be necessary.

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<sup>1</sup> These safeguards documents have been disclosed (both in English and Lao) at the World Bank InfoShop as well as at PRF offices in Vientiane, provinces, districts, and villages and at the World Bank office in Vientiane.

## SECTION I: PROJECT DESCRIPTION

The Second Phase of the Poverty Reduction Fund builds on PRFI. It will be implemented over a period of five years (2011–2016). It consists of three main components:

### Component 1 – Community Development Grants:

- Planning for community and local development The koumban planning process would be for a four year period. Villagers would prepare development plans that would be integrated at the koumban level through an inclusive process led by elected village representatives. Koumban plans would be revalidated on an annual basis through a participatory process at the village, koumban and district levels. Keeping in mind the objective of the PRF is to empower communities, due attention will be paid to further strengthening villagers' participation in sub-project planning, implementation and monitoring. PRF facilitators would play a critical role in this process.
- Community sub-projects: Sub-projects would be financed and implemented on an annual basis. This component would also support community training activities directly associated with sub-project investments. Sub-projects would be selected for financing at the koumban level by the PRF koumban committee (consisting of elected villagers including women and ethnic groups). PRF district staff, district local government and sector officials would provide technical validation of proposals. The final decision for sub-project financing would be made in a transparent manner at the koumban level by the PRF koumban committee based on criteria to be specified in the Project Operations Manual (POM). PRF II sub-projects would be required to meet appropriate technical standards for infrastructure agreed upon with relevant sector ministries. Activities to be financed under the grants would be open except for items specifically excluded through the project's negative list.
- Mainstreaming of Disaster Risk Management (DRM, "Cool CDD"): PRF II would play a stronger role in DRM at the koumban and village levels. These activities would include: (i) strengthening existing PRF-financed infrastructure at risk of natural disasters; (ii) factoring resilience into the design of new PRF sub-projects in high risk areas; (iii) assisting communities to identify disaster risks; and (iv) allowing for the flexible utilization of PRF II grants to assist community recovery efforts in case of natural disasters in PRF II target koubans.
- Mainstreaming of Gender issues: Women and men's different needs, constraints and opportunities would be further mainstreamed into PRF II and the project would develop a Gender Action Plan.

### Component 2: Local & Community Development Capacity-Building:

- Village & Koumban level: This component will support the PRF objective of empowering communities by training them in assessing their own needs, discussing these with local authorities, implementing and supervising the construction of small public infrastructure investments, procurement, financial management, operations and maintenance (O&M), and lastly monitoring outputs and outcomes at the community and koumban levels.
- District & Provincial level: The component would finance investments to strengthen the capacity of district and provincial officials to support pro-poor local and community development processes, including financing of training on community and local development planning, financial management, and procurement.
- Central level: The component would also finance strengthening of the Leading Committee to support national poverty targeting efforts, and to strengthen coordination of PRF II investments with

those of various sector ministries and other entities supporting rural development in PRF II target koumbans.

### **Component 3: Project Management and Implementation Support:**

- This component would finance the costs of implementing, monitoring, evaluating and reporting for PRF II. It would include salaries and fees of national, provincial and district PRF staff; associated equipment and operating costs; Management Information System (MIS), key studies and evaluations, accounting, procurement assessments, legal services, auditing, and other specialized areas. Critical technical assistance and implementation support would also be financed under this component.

#### **Support for improved livelihoods**

In addition to the core project, PRF II would support livelihoods improvement activities on a pilot basis through a grant (US\$2.6 million) financed by the Japanese Social Development Fund (JSDF). This would be implemented in a select number of communities, in Huaphan and Savannakhet, with a view to testing models for effective and sustainable rural livelihood improvements for poor communities. Specifically, the pilot would support:

- Formation of community self-help groups & capacity building of local service providers: This component will focus on forming self-help groups, with a focus on women's self-help groups, in ethnic communities and building these groups' capacity to articulate their own needs and to successfully implement sustainable livelihood activities. The component will also train new college graduates to serve as community facilitators, build the capacity and responsiveness of local service providers and link available technical assistance with community needs.
- Community asset creation: This component will provide grants (average of \$2,000 each) to eligible village through a competitive and participatory selection process, and support the planning, implementation and sustainability of livelihood activities. Activities under this component will focus on empowering participants with technical assistance, promote sustainability by building financial literacy, establishing links to markets and promote pro-nutrition livelihood activities.
- Participatory pro-nutrition assessment & activities: Progressive reduction of poverty rates and increased household incomes in Lao PDR have not led to significant improvements in malnutrition over the past 15 years. This component will thus seek to ensure that livelihood sub-grants to self-help groups have a positive impact on community nutrition. Participatory pro-nutrition assessment and activities will be introduced in targeted areas of the pilot to allow evaluation of the effects of linking community-based livelihood improvements with pro-nutrition activities.
- Monitoring and impact evaluation of pilot activities: This component will evaluate pilot impacts as well as efficacy of implementation and monitoring mechanisms, with lessons intended to inform the planned expansion of the Poverty Reduction Fund.

The Poverty Reduction Fund is community driven, and rests on a participatory planning process, which is an integral part of the Fund's activities. The current planning process will be updated in the Operations Manual to fit with the 3-year planning cycle (as opposed to the annual planning process which was used during PRF I).

## SECTION II: POLICY AND REGULATIONS

### **World Bank’s safeguard policy on environmental assessment (OP 4.01)**

OP 4.01 (environmental assessment) for Category “B” project requires a submission of an environmental management plan (EMP) designed to mitigate potential negative impacts of the project. Review of the safeguard issues and implementation experience from PRF I suggested that the required mitigation measures described in the SESG for PRF I appears adequate however more detailed clarification should be made to facilitate simple application at local level and this is discussed in more details in Section 4 below. This EMP is prepared in line with this policy following the principles described in the EMP of the RPF I.

### **Government regulation on EIA**

Key government regulations related to environmental assessment is the environmental impacts assessment (EIA) decree number 112, Pursuant to law on government of the Lao People’s Democratic Republic, Ref., No. 02/NA, dated 06/05/2003, the Environmental Protection Law, Ref., No. 02/99/NA, dated 03/04/1999, and based on Request from Minister to Prime Minister’s Office, President of the Water Resources and Environment Administration (WREA), Ref., No. 2843/PMO.WREA, dated 21/12/2009. The main objective of the decree is “to lay down principles and rules, and adopt measures on establishment, functions, management and monitoring (of the concerned agencies) in environmental impact assessment and ensures that all investment projects of the State and of both domestic and foreign private individuals foreign operating in Lao PDR which create or may create adverse environment and social impact, are designed with the right and appropriate environmental and social impact prevention and mitigation measures to effectively prevent, minimize and mitigate adverse environmental and social impacts derived from investment projects” (*annex 6*).

The decree 112 defines two different groups of projects based on the size of the investment/environmental and social impact:

- Group 1 refers to the small investment projects or small environmental and social impact which are subjected to an initial environmental examination.
- Group 2 that refers to the size investment projects or with significant environmental and social impact and are subject to an environmental impact assessment.

Provision has been provided to ensure that adequate actions can be carried out if an Initial Evaluation Examination (IEE) is required. A sub-project that requires a full Environmental Impact Assessment (EIA) by the Government EIA regulation will not be funded and this measure is included in the “*negative list*” (*Annex 1*).

## SECTION III: IMPLEMENTATION EXPERIENCES FROM PRF I

### Scope of work and locations

Reviewed of types and sizes of the infrastructure subprojects implemented under Cycle 1-8 (*Table 1*) suggested that most of the civil works are small and unlikely to cause adverse impacts on the local environment. This conclusion is consistent with the conclusion of the previous safeguard assessment<sup>2</sup>. Review of PRF civil work and field visits to Champasak during pre-appraisal confirmed most of PRF civil works involve community infrastructure such as schools, markets, dispensary, over-flood bridges, roads, water supply, water storage and irrigation; and construction is made using very small contractor and/or contribution from local communities. The subproject sites are located mostly in very remote area and are scattered around the following 8 provinces: Luang Namtha, Xiengkhouang, Houaphanh, Savannakhet, Saravanh, Sekong, Champassak and Attapeu. Extension of PRF coverage to additional province(s) will also be considered during the PRF II.

### Negative impacts and mitigations

Review of documents and discussion with PRF staff at central and local levels confirmed that the safeguard documents were included in the project operation manual and translated into Lao language and training on the manual was provided to the local facilitators. Actual adverse impacts have not been observed however there are needs to (a) improve reporting and recording system, (b) improve coordination among the team (technical, community development, and monitoring and evaluation), and (c) when possible make an effort to reduce indirect impacts on potential degradation of natural resources in nearby natural habitats, conservation, and/or protected area and/or enhance positive impacts of PRF project.

Table 1. Sub-projects land acquisition during Cycle 1-8 (2003-2011)

Community Infrastructure	Max size	Number of sub-projects	Total land area
Schools	5 classrooms (280 m <sup>2</sup> )	610	0.17 km <sup>2</sup>
Rural roads (km)	Width 3.5 m	480 (3,840 km)	13.44 km <sup>2</sup>
Markets	81 m <sup>2</sup>	14	0.001 km <sup>2</sup>
Dispensaries	99 m <sup>2</sup>	65	0.01 km <sup>2</sup>
Water reservoirs	7,850 m <sup>2</sup>	60	0.47 km <sup>2</sup>
Water system	400 m <sup>2</sup>	676	0.27 km <sup>2</sup>
Irrigation channels weir /renovated	200 m <sup>2</sup>	151	0.03 km <sup>2</sup>
<b>TOTAL</b>		<b>2,060</b>	<b>14.39 km<sup>2</sup></b>

### Actions to forge effective implementation of safeguards

It is expected that the civil works to be carried out under PRF II will be similar to that of PRF I, as the Community Driven Nature of the Project will remain central to all project activities. Hence, it is expected that the civil works would be limited to construction of community infrastructure and the mitigation measure would be similar to those of PRF I, (see Section V). Below summarizes measures to improve safeguard performance of PRF in responding to the key findings of safeguard performance in PRF I.

- Update the “negative list” to ensure effective implementation of the sub-projects and establish a “preference list” to mitigate the potential indirect impacts as well as promote conservation of natural resources and protection of environmental quality and public health;

<sup>2</sup> A technical assessment in 2006 and a safeguard assessment in 2010.

- Provide a clear guidelines on how to integrate safeguard measures into the PRF II planning and implementation process (*Annex 2*);
- Improve effectiveness of the screening and recording system at local level by providing a clear safeguard screening and monitoring forms (*Annex 3*) as well as a clear mitigation measures (environmental code of practices, ECOP) for all type of civil works (*Annex 4*);
- Increase awareness and knowledge of Provincial and District PRF team and community leaders/facilitators to understand the potential negative impacts (social and environment) of infrastructure development, especially road and bridges, as well as the potential for enhancement of positive impacts on conservation of natural resources, local environment and public health;
- Promote active cooperation of local community in the areas that reduce potential negative environmental impact and enhance positive impacts should be encouraged through capacity building and various on-the-job training activities and community networking;
- PRF/PMT will provide periodic training and supervision to the PRF local staff so that they could provide appropriate information on various safeguard issues of the subprojects during the planning process as well as can keep proper records;
- PRF/PMT will include a section on safeguard performance in the project progress report and ensure effective coordination among various units, including monitoring and evaluation (M&E);
- The Bank will review and provide implementation support including safeguard training as needed.

## SECTION IV SAFEGUARDS ISSUES AND MITIGATION MEASURES FOR PRF II

### Key issues and actions

#### *(a) Mitigation of negative environmental impacts*

Negative impacts are expected to be minor and localized and could be mitigated during the planning and implementation of the project. There are also opportunity to enhance positive impact during the planning and selection of the sub-projects. Below summarizes the main safeguard issues and the mitigation measures to be carried out during the implementation of PRF II.

- *Impacts due to civil works:* Any investment activity/sub-project that involves construction work or changes to land or water use has the potential to generate negative environmental impacts. Given that size and location of the civil works are important, a set of criteria has been established in the SESG of PRF I and the criteria will be applied in PRF II with additional clarification on the screening process and specific actions for each type of civil works.
- *Impacts due to UXO:* Preliminary screening will also be needed to assess the presence of Unexploded Ordnances (UXOs) and the danger they may impose on local sub-project activities. As many districts throughout the Lao PDR are adversely affected by the presence of UXOs clearance may be required as a preliminary stage of sub-project activities. The PRF should seek advice from UXO Lao and local communities and authorities during the sub-projects' technical feasibility study in order to determine the levels of contamination of the sub-project sites. (No contamination, moderate and high). In the areas with no contamination, sub-project activities and construction can proceed without having to undertake any UXO screening activities. The screening process also incorporated this aspect.
- *Pest Management:* Implementation of sub-projects related to irrigation (new and rehabilitation) may involve the use of pesticides while the knowledge on safe use of chemicals is important for farmers. The PRF II will provide basic knowledge on alternative options for agriculture development and /or livelihood activities, including safe use of pesticides and other toxic chemicals if their use is made necessary. In compliance with the WB Pest Management Safeguard Policy (OP 4.09), a simplified Pest Management Plan (standalone document has been prepared and it will be applied to activities/sub-projects involving irrigation scheme and livelihood activities). Procurement pesticides exceeding the amount necessary to treat efficiently the infected area will be prohibited and this has been included in the "*negative list*".

*(b) Promotion of natural resources conservation and quality of life*

The PRF II has been designed also to promote conservation of natural resources when possible. Most of PRF sub-projects are located in remote area and sustainable use of natural resources will be critical for livelihood development and poverty reduction. If protected areas or critical natural habitats are located nearby, it is necessary to also take measures to minimize potential negative impacts and/or enhance positive impacts through the community-driven process. In this context, a “*preference list*” has been established as criteria for the subproject selection to promote the activities that could render positive impacts on natural resources and nearby habitats and/or protected areas. During the planning process, action will be carried out by the PRF staff at the local level, assisted by the PMT to identify the target villages and/or Koumban that could promote natural resources conservation and/or public health (“Green and Clean CDD”) through capacity building and training activities. Formal and informal education activities could increase awareness on money saving, HIV/Aids, impacts on drugs, sanitation, public health, natural resources conservation, protection of watershed, raising animal in a hygienic ways, and organic wastes from the market, etc. Specifically the following practices have been included in the “preference list” and “negative list” (*Annex I*):

- “*Preference list*”: promote conservation of fish habitats; promote reforestation, re-vegetation, and conservation of water sources; and increase awareness and ownership of local community to protect and management their forest areas, wetlands, wildlife, and biodiversity.
- “*Negative list*”: unsustainable harvesting of non-timber forest products (NTFP) and/or aquatic life, and those related to involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods.

*(c) Ethnic groups, gender, and disadvantage groups*

The PRF II has been designed to benefit all ethnic groups and the planning process has been designed to promote inclusion of all ethnic groups. However, the recent technical assessment and observation during field visits suggested that there are additional opportunities to ensure that ethnic peoples, including women and disadvantages peoples, understand the PRF process and receive equal benefits. Under PRF II, efforts will be made to ensure that PMT staff at central and local levels have a clear understanding on various aspects of ethnic issues, especially those related to the positive and negative impacts of the sub-projects, including the needs to address the gender and disadvantages issues. An Ethnic Groups Policy Framework (EGPF) has been prepared as a standalone document to provide guidance on consultation and mitigation measures when ethnic groups are involved. This includes a technical guideline for preparation of an Ethnic Groups Development Plan (EGDP) if adverse impacts are expected.

*(d) Land Acquisition*

The Project will not involve resettlement or large amount of land acquisition, but may require small amount of land for community infrastructure and voluntary land donation has been applied as a normal process for PRF I. A Compensation and Resettlement Policy Framework (CRPF) has been prepared as a standalone document. It comprises the voluntary land donation policy and procedure that has been applied for PRF I as well as a technical guideline regarding eligibility and entitlements, content of abbreviate Land Acquisition or Resettlement Report (LA/RR), and the consultation process, including grievance procedures and monitoring requirement. Resources access restriction will be allowed only if it is an agreement among the local community and will not resulting in adverse impacts on the livelihoods of ethnic groups and disadvantage peoples. Resettlement and demolition of houses and business will not be allowed and this has been included in the “*negative list*”.

## Negative and preference lists

To avoid PRF II potential negative impacts on local community and local environment, a list of prohibited item and/or activities that cannot be financed by the PRF II (ineligible or the “Negative List”) has been established while a “preference list” has also be prepared to promote potential enhancement of positive impacts of PRF II. Details are provided in *Annex 1* and these lists will be included in the Project Operation Manual.

## Safeguard screening and review process

In order to minimize the sub-projects’ impact on the environment, the PRF has integrated a safeguard requirement into the PRF sub-project planning and approval process (*Annex 2*) and a technical guideline is also provided (*Annexes 3, 4, and 5*). This is to ensure that screening and assessing the potential impacts of a proposed sub-project will be made before it is approved and that the measures are in place to mitigate the negative impacts of approved sub-projects during their design, construction, implementation and in utilization. Below are highlighted key descriptions of the process:

### *Step (1) Sub-project identification phase*

- (a) *Screening for negative and preference list:* before a sub-project is approved, the PRF local staff at village, kouban and district level facilitates several meetings. During these meetings, the PRF local staff informs the communities of the potential environmental risk of the sub-project, raise awareness of communities about the need for sustainable use of natural resources and protection of the environment by the communities, and gather information on areas where a sub-project will be implemented; for instance, the current land use of the site, existence of protected area, etc. If the sub-project is found to include activities specified in the prohibited activities (“negative list”), it will be screened out or reconsidered to exclude such activities. If it is in the “preference list” due consideration should be given to increase priority of the activities.
- (b) *Screening for social issues.* The PRF local staff will also screen for the need for land acquisition, resettlement, and disadvantages groups/households. All sub-projects that require land acquisition of disadvantages groups/households (*non Lao-Thai ethnic groups, poor household headed by women, poor household with elderly, handicap, and/or children*) should conduct a brief social assessment and preparation of an abbreviated Land Acquisition or Resettlement Report (LA/RR) following the CRPF and/or consult the Bank specialist(s).
- (c) *Screening for an IEE requirement:* If an IEE is required by the government EIA decree, PMT will carry out a study in line with the Government regulation and inform the Bank. The IEE report and government approval will be send to the Bank for information. The Bank may require additional mitigation measures as needed to ensure full compliance with WB safeguard policies.

(d) *Screening for Exceeding of the assessment thresholds:* If an IEE is not required but the civil works exceed the thresholds identified below, a simple environmental assessment and identification of mitigation measures is conducted by the PRF local team in close consultation with the PMT (*Annexes 4 and 5*). A draft report should be reviewed in consultation with the village members and other stakeholders to seek and incorporate their views into the sub-project design and mitigation measures. Specific requirements (good engineering practices and housekeeping) will be included in the bidding and contract document and contractor performance monitored and reported. The final draft report will be sent to the local authorities for review and approval. The report will also be sent to the Bank for possible review.

The assessment thresholds for civil works

<b>SCALE</b>	Village rural roads, tracks and footpaths (wider than 3.5 m)	> 10 km
	Small bridges and piers	> 20 m
	Village water supply	> 2,000 users
	New construction of irrigation schemes	All
	Community Buildings ( <i>halls, health centres, schools, markets</i> )	> 400 m <sup>2</sup>
	Sanitation Facilities ( <i>latrines</i> )	> 200 users
	Mini-hydro generators	All
Changes are likely to occur in water use and/or water availability		All
Protected area or area proposed for protection by the Government		All

(e) *Application of the ECOP:* For those works smaller than the thresholds, PRF local team will conduct the simple assessment and mitigation measures as described in the Environmental Code of Practices (ECOP) that has been developed for small community infrastructure roads, irrigation, water supply, and buildings with very low risk (*Annex 4*). All the records will be kept in the sub-project file for possible review by the PRF at the Central as well as the World Bank.

### **Step (2) Sub-project design phase**

(a) Sub-projects which are submitted by a village and which have been pre-selected during the Koumban and the district meetings are then designed by the villagers with the technical support of the relevant district office and the PRF team. The required mitigation measures for design stage will be incorporated into the final design.

(b) The Sub-project Proposal Form (*Annex 3*) will be used to document the design and includes a quick assessment of the potential negative impacts based on the criteria mentioned in Step (1) above which allows the team to check if there are any specific risks identified. PRF local team fill in the form based on the villagers' knowledge, on *in-situ* observations and on prior discussions with district government staff (in order, for example, to cross-check that the sub-project will not be located in a protected area). At this stage, sub-project activities specified in the "negative list" will be completely excluded from the sub-project while those from the "preference list" will be included in the sub-project.

(c) Contract templates for sub-contracted work will also be modified to include specific clauses detailing sub-contractors' obligations in terms of environmental protection. PRF will also expand the clause detailing communities' commitments in terms of environment protection in the contract signed between the communities and the sub-contractors.

### ***Step (3) Sub-project implementation phase***

(a) The implementation of mitigation measures as well as the monitoring and inspection of potential environmental risks is the responsibility of the communities with possible support and involvement of district Water Resources and Environment Office staff. Training and awareness raising activities will be conducted to ensure that communities are aware of sub-projects environmental risks and to ensure they will take actions to mitigate these risks and to increase their capacity to ensure that contractors are respecting their obligations in terms of environmental protection. Information, Education, Communication (IEC) tools will be developed before the beginning of the PRF II, and training sessions on environmental protection will be conducted by the PRF community development team at the inception and during the implementation of the sub-projects.

(b) During the implementation phase, regular technical monitoring visits will be conducted by the PRF team and relevant district offices to monitor environmental impacts and inspect the implementation of mitigation measures. When the work is sub-contracted, a final inspection visit will be organized before handing over the infrastructure to the community. The PRF team will use a specific form to assess the quality of the work during the visits, which includes an environmental monitoring and inspection checklist (see [Annex 3](#)).

### **Management of UXO related risks**

When a sub-projects proposal is prepared by communities with support from PRF team, villagers are asked whether there are UXO in the sub-project site or in its vicinity. Their response is documented in the Subproject Proposal Form (SPPF) and crosschecked with UXO Lao (Lao National Unexploded Ordnances Disposal Program) district team. Additionally, UXO Lao district team will participate in the district meeting and will provide comment on all sub-projects in relation to UXO risks. Below list the key actions:

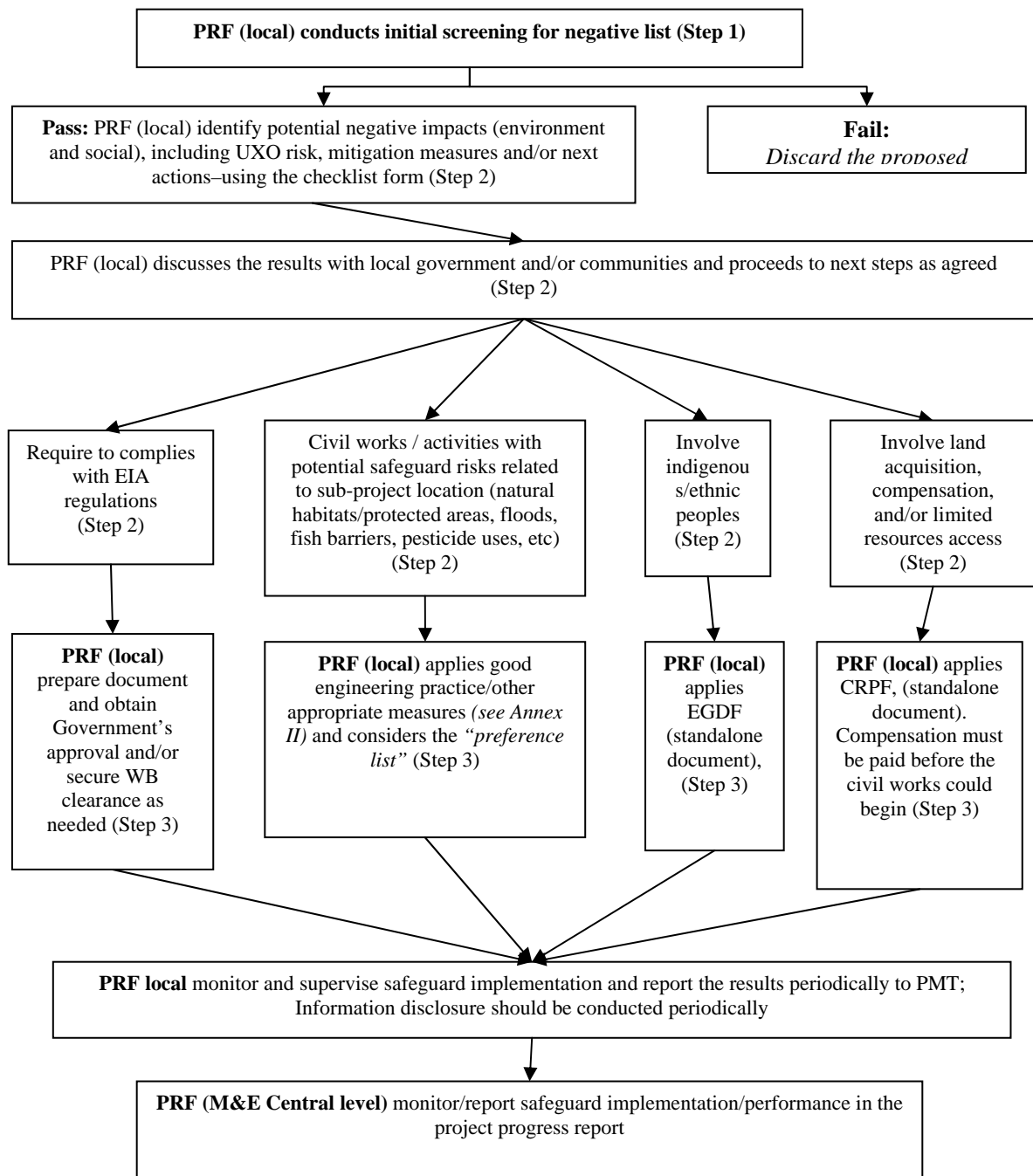
- If there is a potential risk and if the area had not been previously surveyed and / or cleared by UXO Lao, the PRF will send a letter with the list of all the sub-project sites needing to be surveyed or cleared prior to the beginning of the implementation phase to UXO Lao both at district and provincial level so that the sites are included in UXO Lao work plan.

If a potential risk has been identified during the design phase, the PRF will not transfer the first budget Installment to the Koumban Team unless a clearance or survey certificate from UXO Lao is attached to the request.

### **Implementation, monitoring, and reporting**

The Figure 1 below summarizes the Implementation, monitoring and reporting measures of the PRFII related to the ESMF.

**Figure 1: Implementation, monitoring and reporting measures of the PRFII related to the ESMF**



Safeguard performance will be part of the PRF II progress report and this requirement will be included in the Project Operations Manual (POM).

## Safeguards training

*Safeguards training.* Before the beginning of cycle IX implementation, PRF will organize training to PRF teams on how to use the various checklists, table on typical environmental impacts and mitigation measures as indicated in the ECOP as appropriate. Safeguard training to PRF staff should be carried out as part of the overall training of PRF staff throughout the PRF process. Adequate budget will be allocated for safeguard training as well as for the implementation of mitigation measures. Mitigation of safeguard activities during construction will be part of the construction costs.

**Table 2. Guidance on safeguards issues and actions**

Potential negative impacts	Required mitigation actions	Remarks
(1) Permanent or temporary loss of land or resources for any households, including restriction of access to natural resources and/or impediments to movement of people and animals (Includes patrolling activities)	<p>Identify the amount and nature of land required, owner, and/or other issues and prepares a Land Acquisition/Resettlement Action Plan (LARAP) to provide compensation and/or assistance following the Compensation and Resettlement Policy Framework (CRPF) of Lao PDR.</p> <p>The project will support increasing awareness of Persons Affected by Project (PAPs) about the Feedback and Resolution Mechanism (FRM), and build capacity of those involved in existing Feedback and Resolution Committee (FRC) on the required tasks, including dealing with or mediating complaints, recording/reporting and monitoring proposed resolutions.</p>	Prior consultation with WB, proper documentation, and Post review by WB may be necessary.
(2) Potential social conflicts arising from land tenure and land use issues and/or in water supply rights or related social conflicts	<p>Develop mitigation measures for conflict resolution through close consultation with stakeholders and placed within Project processes, inherently community-based and collectively managed, not precluding the involvement of third-party/external mediators.</p> <p>Develop Village Resources Use Agreement;</p> <p>Using existing Community Conflict Resolution Mechanisms that most likely led by senior/elderly respected persons, or leaders of Ethnic Groups (EG).</p>	If the conflicts may deteriorate livelihoods or living conditions of women or the poorest families in the sub-project area or involve political influence, or likely to be escalated to higher level, the PRF team will inform the WB
(3) Likely to adversely affect ethnic groups	Carry out social assessment process through free, prior, and informed consultations and, if necessary, prepare an Ethnic Groups Development Plan (EGDP) in accordance with guidance in the Ethnic Groups Development	Prior consultation with WB, proper documentation, and Post review by WB may be necessary.

	<p>Framework (EGDF) for Lao PDR.</p> <p>The project will support increasing awareness of PAPs, in respective languages of IP groups, about the FR mechanism, and building capacity of those involved in the existing FR Committee on the required tasks, including dealing with or mediating complaints from individual and/or ethnic groups, recording/reporting, and monitoring proposed resolutions.</p>	
(4) Likely to increase the use of pesticides and/or toxic chemicals that could affect soil quality, water quality, and/or water users downstream	<p>Prohibit the use pesticides and toxic chemicals exceeding the amount required to treat efficiently the infected area.;                  Apply the simplified pest management plan and provides training to farmers/fishers.</p>	
(5) Activities to be carried out in a Protected Area, Wildlife Reserve, Buffer Zone, Wetlands, or other conservation area or activities involve civil works that may cause significant air, noise, and/or water pollution, soil erosion, and/or create public health risks, wildlife hunting, or impacts on downstream water uses.	<p>Prepare an Environmental Management Plan (EMP) to mitigate the potential negative impacts and/or to reduce safeguard risks; some guidance on the mitigation measures would be provided in the safeguard operation manual.</p> <p>Conduct consultation with local authorities and communities.</p>	<p>The PRF team at the local level and/or the project management team (PMT) will ensure that the activities are in compliance with the Government regulations.</p> <p>Prior consultation with WB, proper documentation, and Post review by WB may be necessary.</p>
(6) Unsustainable forestry utilization, including non-timber forest products (NTFPs); and impacts on riparian forests; fragmentation of forests; introduction of non-native species; causing flood to nearby area; and/or blockage of fish migration or impacts on fish spawning areas, including unsustainable use of other aquatic animals (OAAs).	<p>Consult with local community to reach an agreement on how to avoid/mitigate the potential negative impacts and when possible increase sustainable use of forestry products, fisheries, and other aquatic animals. If a new species is involved ensure that the new species is already present in the vicinity or is known from similar setting to be non-invasive. Ensure careful consideration of location and design of irrigation systems to ensure minimum impact on fish and aquatic resources. Minimise fragmentation of forests by following existing alignments of foot paths, tracks, electricity lines e t c wherever possible. If restriction of natural resources, social conflict, and/or ethnic groups as indicated in (1), (2), (3) follow the mitigation measures identified in (1), (2), (3).</p>	<p>Excluding sustainable logging and unsustainable harvesting or processing of timber products.</p> <p>Close consultation with WB safeguard specialists is recommended.</p>
(7) Involve UXO risk?	If yes, contact responsible agency and	PMT to take the lead in

	complete the clearance before conducting project activities.	securing safety of the project area
(8) Activities involve small civil works that may cause small amount of air, noise, and/or water pollution, soil erosion, and/or create public health risks, wildlife hunting, or impacts on downstream water uses.	Apply good engineering and/or good housekeeping with close monitoring and supervision, including maintaining close consultation with local population. The contract will also include a special clause on “ <i>chance find</i> ”.	PRF team at the local level and PMT will ensure that the appropriate mitigation measures are included in the contract and that the contractor effectively implements required mitigation measures.
(9) Opportunity to enhance environmental benefits, mainstream environmental issues, and/ or synergy with other project activities	Closely coordinate with other projects during the project implementation. Continually improve and expand the ‘preference list’ and use it to encourage environmental protection and disaster risk minimization in village needs assessment, planning and selection.	Enhance positive impact of the project.

## **Annex 1: The “Preference List” and “Negative List”**

1. This annex provides a list of prohibited item and/or activities that cannot be financed by the PRF II (ineligible or the “Negative List”) and a list of activities that should be promoted and supported by PRF II (preference or the “Positive List”).

### **A1.1 Preference list**

2. The PRF supports all activities at community level through a participatory process, related to access to basic infrastructure, to social services and improved livelihood while enhancing positive impacts on the local environment such as:

(a) protected areas; (b) community conservation of fish habitats and riparian forests; (c) reforestation; (d) re-vegetation and/or protection of soil or river bank erosion; (e) conservation of water sources, including construction of check dams in the upper part of the watershed; (f) strengthening ethnic groups’ participation, (g) awareness, ownership of local community to protect, to manage their forest areas, wetlands, wildlife as well as biodiversity, (h) cleanliness, hygienic condition, and other public health, (i) road safety conditions within communities, including those related to awareness, knowledge, cooperation among local people, (j) communication and capacity building linked to the above.

### **A1.2 Negative List (Prohibited Activities)**

- (i) To avoid adverse impacts on the environment and people, the following activities are explicitly excluded from PRF II funding:
- (ii) Relocation and/or demolition of any permanent houses or business.
- (iii) Use of PRF investment or subproject as an incentive and/or a tool to support and/or implement involuntary resettlement of local people and village consolidation.
- (iv) Land acquisition that affect more than 200 persons or 20 households.
- (v) New settlements or expansion of existing settlements inside “Total Protected Zone” as defined in a government decree (see actions in Table 3 of ESMF).
- (vi) Likely creation of adverse impacts on ethnic groups within the village and/or in neighboring villages or unacceptable to ethnic groups living in an ethnic homogenous village or a village of mixed ethnic composition.
- (vii) Imposing ideas and changing priorities identified by the community and endorsed at the Koumban level meeting without community consultation, prior review and clearance from the PMT.
- (viii) Damage or loss to cultural property, including sites having archeological (prehistoric), paleontological, historical, religious, cultural and unique natural values.
- (ix) Resources access restriction that could not be mitigated and will result in adverse impacts on the livelihoods of ethnic groups and disadvantage peoples.
- (x) New roads, road rehabilitation, road surfacing, or track upgrading of any kind inside natural habitats and existing or proposed protected areas.

- (xi) Purchase of guns; chain saws; asbestos, dynamites, destructive hunting and fishing gears and other investments detrimental to the environment.
- (xii) Purchase pesticides, insecticides, herbicides and other dangerous chemicals exceeding the amount required to treat efficiently the infected area. However, if pest invasion occurs, small amount of eligible and registered pesticides in Lao PDR is allowed if accompanied with a training of farmers to ensure its safe uses and World Bank's clearance is needed.
- (xiii) Forestry operations, including logging, harvesting or processing of timber and non-timber products (NTFP); however support to sustainable harvesting and processing of NTFPs is allowed if accompanied with a management plan for the sustainable use of the resources.
- (xiv) Unsustainable exploitation of natural resources.
- (xv) Introduction of non-native species, unless these are already present in the vicinity or known from similar settings to be non-invasive.
- (xvi) Significant conversion or degradation of natural habitat or where the conservation and/or environmental gains do not clearly outweigh any potential losses.
- (xvii) Production or trade in any product or activity deemed illegal under Lao PDR laws or regulations or international conventions and agreements, or subject to international bans.
- (xviii) Labor and working conditions involving harmful, exploitative, involuntary or compulsory forms of labor, forced labor<sup>3</sup>, child labor<sup>4</sup> or significant occupational health and safety issues.
- (xix) Trade in any products with businesses engaged in exploitative environmental or social behavior.
- (xx) Subprojects that require full EIA will not be funded.

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<sup>3</sup> Forced labor means all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

<sup>4</sup> Harmful child labor means the employment of children that is economically exploitive, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health, or physical, mental, spiritual, moral, or social development.

## Annex 2. Integration of Safeguard Measures into PRF Process

**Table 3. Integration of safeguard into PRF process\***

PRF II CYCLE	CONTENTS RELATED TO SAFEGUARDS	REPORTING	RESPONSABILITIES
(1) Introduction of PRF II concept and training of PRF staff, local authorities, volunteers, and communities	Knowledge on key issues and required mitigation measures (negative list, Social and environmental guideline including Framework for Resettlement and Acquisition of Land and Assets (FRALA), compensation / Voluntary contribution rules, mitigation of impact on physical resources and inclusion of vulnerable ethnic groups).	Meeting and training form (PDKV_MT); Meeting reporting Form. Training evaluation form.	PRF Community Development (CD) & Engineering Unit (EU) National level
Training of koumban facilitators and PRF staff	Knowledge on preference list and its associated benefits as well as key issues and required mitigation measures (preference list negative list, Social and environmental guideline including FRALA, compensation / Voluntary contribution rules, mitigation of impact on physical resources and inclusion of vulnerable ethnic groups) and details on mechanism, methodology, forms.		PRF CD & EU Provincial level
Training of Koumban Representatives and Koumban Teams	Training on preference list Social and Environmental Guidelines (FRALA, compensation system, physical cultural resources, inclusion of vulnerable ethnic groups), Gender and Ethnic Groups sensitization (Facilitated by the PRF), sustainable Natural Resources Management (NRM) and type of prohibited activities.		PRF CD & EU District level
(2) Village Needs Prioritization Assessment (VNPA)	Review the Social and environmental guideline including FRALA, compensation / Voluntary contribution rules, mitigation of impact on physical resources and inclusion of vulnerable ethnic groups), presentation of the negative list; Pre-checking on the feasibility of the sub-projects selected by the community regards to environment and social safeguard.	Meeting and training form (PDKV_MT); Meeting reporting form (Number of potential safeguards issues identified).	PRF EU & CD District level
(3) Participatory Planning Meeting at koumban level (4 years plan validated on yearly basis)	Review types of prohibited activities, Social and Environmental Guidelines (FRALA, compensation system, physical cultural resources, and inclusion of vulnerable groups). Selection of infrastructures proposal (for bridges, irrigation schemes, and gravity-fed water system that required a longer design	Meeting and training form (PDKV_MT); Attendance sheet (number of koumban Feedback & FRC member at the koumban level);	PRF EU & CD District level

	period as water need to be measured during both the rainy and dry season, the sub-project will only include the survey activities)	Koumban Sub-project Proposal Outline (KSPPO).	
(4) Design and preparation of sub-projects	<p>Conduct survey and simple environmental and / or physical cultural resources assessments (when necessary); Environmental checklist; Physical cultural resources checklist (spirit forests, temples, graveyards); Documentation (in the 'Contribution and Compensation Form') of resettlement, land acquisition and other voluntary contribution (if any) and of the calculation of the compensation paid by communities.</p>	<p>Training Sub-project proposal form (TSPPF); Infrastructure Sub-project Proposal Form (ISPPF); Contribution and compensation form; Land Acquisition and Resettlement Report Form; Simple Environmental Assessment Form; Simple Physical Cultural Resources Assessment Form;</p> <p>Sub-projects' design reflects villagers' needs and priorities, is feasible and respects social and environmental guidelines</p>	PRF EU & CD district level (assisted by PRF provincial level for key step)
(5) District Meeting to endorse koumban integrated development plan	<p>Presentation of designs: budgets, villagers' contribution and compensation, land acquisition and resettlement reports (if any), procurement methodologies, disbursement schedule, Operation and maintenance plan, environmental and social checklists (detailed assessments if necessary);</p> <p>Discussion and confirmation of the size of the infrastructures; Discussion and confirmation of community contribution and compensation arrangements.</p> <p>Verification by PRF technical advisors that the final design respect PRF standards; Review of the number of people affected by resettlement of land acquisition (if any).</p> <p>Review potential issues related to safeguard by provincial and district representatives.</p>	<p>Meeting and training form (PDKV_MT).</p> <p>Meeting and training form (PDKV_MT); District sub-projects Proposal Outline (DSPPO).</p> <p>Final options retained for the design of the pre-selected subprojects presented, discussed and approved.</p> <p>Identification of the number of potential breath of safeguards</p>	PRF CD & EU National level, provincial and district level
	<p>Presentation of designs: budgets, villagers' contribution and compensation, land acquisition and resettlement reports (if any), procurement methodologies, disbursement schedule, Operation and maintenance plan, environmental and social checklists (detailed</p>	<p>Meeting and training form (PDKV_MT).</p> <p>Final options retained for the design of the pre-</p>	PRF CD & EU National level

(6) Implementation of sub-projects	<p>assessments if necessary); Discussion and confirmation of the size of the infrastructures; Discussion and confirmation of community contribution and compensation arrangements.</p> <p>Verification by PRF technical advisors that the final design respect PRF standards; Review of the number of people affected by resettlement of land acquisition (if any).</p>	selected subprojects presented, discussed and approved.	
(7) Training of Koumban and Village Implementation and Maintenance Teams (Construction techniques and Supervision)	<p>Regulations and rules linked to each type of infrastructure; Training on Final inspection process; Regular inspections of the infrastructures sub-project during the implementation stage.</p>	<p>Meeting and training form (PDKV_MT); Training evaluation form.</p>	PRF EU & CD District level
(8) Subprojects monitoring and inspection by Quality Control Teams	<p>Visit of subprojects sites; Final technical inspection.</p>	Final Inspection Report form (FIR).	PRF EU & CD District level for regular visit. PRF EU&CD at National, Provincial and district level for final technical inspection
(9) Official transfer of infrastructures to communities			
(10) Validation of the integrated development plan (Step 3) and evaluation of the activities of the previous year	<p>Discussions about overall performance (including respect of some of the key development indicators); Presentation by District Feedback Resolution Committee of issues arisen and actions taken so far;</p>	<p>Meeting and training Form (PDKV_MT).</p> <p>Review of the safeguards issues met during the sub-projects implementation (if any)</p>	PRF CD & EU District level
Independent Assessments	<p>Independent technical assessments and audits are carried regularly. These assessments include a PRF Technical Assessment.</p>	<p>Assessment report with Identification of adverse environment impact and mitigation measures in place, activities promoting environmental protection during implementation.</p>	External consultants

*\*The be further refined and updated in the PRFII operations manual.*

### Annex 3 – Subproject Proposal and Monitoring Forms

1. This annex provides a sample subproject proposal and monitoring forms to guide proper screening and documentation. A guideline for simple impact assessment of subprojects is provided in Annex 4.

#### A3.1 Sub-project proposal form

a) <u>Environmental Impact</u>			Environmental Assessment
<b>SCALE</b>	Rural roads, tracks and footpaths	> 10 km	(YES – Tick ✓)
	Bridges, ramps and piers	> 20 m	(YES – Tick ✓)
	Domestic Drinking Water systems	> 2000 users	(YES – Tick ✓)
	Irrigation schemes	ALL	(YES – Tick ✓)
	Buildings ( <i>community halls, health centres, schools, markets</i> )	> 400 m <sup>2</sup>	(YES – Tick ✓)
	Sanitation Facilities ( <i>latrines</i> )	> 200 users	(YES – Tick ✓)
	Mini-hydro generators	ALL	(YES – Tick ✓)
Changes are likely to occur in water use and/or water availability			(YES – Tick ✓)
Protected area or area proposed for protection by the Government			(YES – Tick ✓)
Involve sustainable harvest/use of NTFP, fishes, and other aquatic life, etc.			(YES – Tick ✓)
Promote conservation of natural resources (water, forest, soil, biodiversity) and habitats			(YES – Tick ✓)
Promote cleanliness, hygienic, road safety, and/or public health			(YES – Tick ✓)
Others <i>Specify</i> _____ _____			(YES – Tick ✓)
b) <u>Impact on pest management</u>			Assessment of Impact on PCR
Procurement of pesticides			(YES – Tick ✓)
Training on safe use of pesticides			(YES - Tick ✓)
Promoting non-chemical uses			(YES - Tick ✓)
Others <i>Specify</i> _____ _____			(YES - Tick ✓)
c) <u>Land Acquisition and Resettlement</u>			Specific meeting and use of the Contribution and Compensation Form
Subproject involving voluntary contributions			(YES - Tick ✓)
			Submission of a Land Acquisition and Resettlement Report

Subproject involving the voluntary resettlement of more than 100 persons	(YES - Tick ✓)
Subproject involving the voluntary contribution by at least one individual of more than 10% of their holdings	(YES - Tick ✓)
Subproject involving displacement of more than 5 households or structures	(YES - Tick ✓)

### A3.2 – Environmental Monitoring and Inspection Form (Template)

	<b>Environment checklist</b>	<b>Yes / No</b>	<b>Remarks</b>
1	Compliance with the planned mitigation measures and environmental obligations		
2	Occurrence of notable environmental pollution such as dust, water pollution, noise		
3	Encroachment to natural habitats and physical cultural properties		
4	Improper operation and maintenance of construction equipment, fuels and oils		
5	Occurrence of complaints		
6	Site cleaning upon completion		
7	Disposal of construction wastes		
8	Removal of temporal access roads upon completion		
9	Erosion prevention measures for used borrow pits		
10	Removal of temporary water flows' diversions or blockages upon completion		
11	Removal of construction camps upon completion		

## Annex 4. Simple Mitigation Measure for Small Subprojects

1. This annex provides technical guidelines for a simple impact assessment and mitigation measures of subprojects. Section A3.1 provides environmental code of practices for the civil works that can identified during appraisal for the subproject identification (location), construction, and operation phases. Section A3.2 provides guidance for a larger civil works.

### A3.2 Environmental code of practice (ECOP)

**Table 4.1 ECOP for Community/Village Roads including bridge, culvert, track improvement, etc.**

Key issues to consider	Mitigation measures	Remarks
<b>Location</b>		
- Conservation area	No animal killing	
	No land occupation	
	No forest cutting	
	Solid waste Management	
	No camping	
- Flooding area	Provide adequate drainage system	
	Include appropriate measure to accommodate flood	
- Mountainous area	Design slope should be less than 17%	
	Side drain	
	Slop protection	
	Guard rail (simple type)	
- Community area	Speed limit sign	
	Dust control	
	Accident prevention	
- Land property	Minute of meeting on conflict resolution and attached the land certificate	
	Cultural area, history etc...	
-Fish spawning areas and migration routes	Avoid negative impacts such as disposal of spoil and tree uprooting which could silt up water courses Ensure optimal design.	
<b>Construction phase</b>		
- Borrow pit	Select the suitable site	
	Avoid new open the borrow pit	
	Back fill instructed by Engineer	
- Erosion risk	Design/provide adequate slop protection	
	Provide maintenance procedure	
- Solid waste	Provide appropriate waste collection and disposal	
- Waste Oil	Do not allow to drain into soil and river	
- Camp	Secure agreement with local community	
	Provide water supply, mosquito net, and adequate sanitation (toilet, washing space, etc), and good housekeeping to prevent rodents, insect, etc.	
- Storage the construction	Storage in proper area toxic wastes and materials will be stored in safe place.	

material		
<b>Operation phase</b>		
Public health, road safety, and other social negative impacts in the village		
- Speed control,	Install measures to control speed limit (sign, bumper, etc), education campaign	
- Dust control	Control speed limit, periodic watering, plant appropriate trees, surfacing	
- Accident	Awareness training in cooperation with the Police Office	

**Table 4.2 ECOP for Community/Village Water Supply (<1,000 users), including Dug well, Drilled well, Gravity Flow System**

Subproject Issues	Mitigation Measures	Remarks
<b>Location</b>		
-Land property	Minute of meeting on conflict resolution and attached the land certificate	
-Protected area	Approved by concern sector	
-Flooding area	Detail study and proper design	
-Water source protection	Set up regulation and principle	
-Community zone	Establish the water user regulation	
-Close to borrow pit/quarry, waste disposal sites	Water testing	
<b>Construction</b>		
-Solid waste generation	Provide appropriate waste collection and disposal	
-Waste Oil	Do not allow to drain into soil and river	
-Camp	Secure agreement with local community Provide water supply, mosquito net, and adequate sanitation (toilet, washing space, etc), and good housekeeping to prevent rodents, insect, etc.	
-Storage of construction material	Storage in proper area; toxic wastes and materials will be stored in safe place Storage in proper area	
<b>Operation</b>		
-possible contamination of water	Establish measure to protect quantity and quality of water sources. Fencing water tape	

**Table 4.3 ECOP for Village Irrigation System (<150 ha), including weir, irrigation channels, repaired weir, small reservoir**

Issues to consider	Actions	
<b>Location</b>		
Down stream		
- Impact water user	Community consultation (resolution)	
- Fertilizer	Data from community	
	Introduction to community	
- Erosion	Proper design	
- Block fish passage	Consultation with community	
Up stream		
- Safety at reservoir area	Install the protected sign	
- Fish protection	Establish the fish protection area	
- Water recourse protection	Set up management regulation	
<b>Construction phase</b>		
- Borrow pit	Select the suitable site	
	Avoid new open the borrow pit	
	Back fill instructed by Engineer	
- Erosion location	Design the suitable slop protection	
	Provide Maintenance procedure	
- Solid waste	Allocate suitable area for waste.	
	Separate recyclable waste	
- Wasted lubrication	Do not allow to drain into soil and river	
- Camp	Let community allocate	
	Provide sanitation, waste water and allocate the soiled waste site	
- Storage the construction material	Storage in proper area	
<b>Operation</b>		
- Potential increase use of pesticide	Provide training on safe use of pesticides	
-	Promote the use of no-chemical agriculture	

**Table 4.4 ECOP Buildings (including school, market, health center, community hall, sanitary facilities)**

Subproject issues	Mitigation measure	Remarks
Land property	Land use certificate	
Water system	Detail study and proper design	
Drainage system		
Location		
Land slide		
Construction		
Waste materials		

Safety		
Operation		
Waste management,	Set up committee	
	Allocate suitable area for waste	
	Separate recyclable waste	
	Set up rules and regulations	
Water system, drainage system	Detail study and proper design to protect rivers and underground water	

**Table 4.5 ECOP for Micro-Hydro-generators**

<b>Construction phase</b>		
- Borrow pit	Select the suitable site	
	Avoid new open the borrow pit	
	Back fill instructed by Engineer	
- Erosion location	Design the suitable slop protection	
	Provide Maintenance procedure	
- Solid waste management	Allocate suitable area for waste	
- Wasted lubrication	Do not allow to drain into soil and river	
- Camp	Let community allocate	
	Provide sanitation, waste water and allocate the soiled waste site	
- Storage the construction material	Storage in proper area	
<b>Location</b>		
- Reservation or protection area	No animal hunting	
	No land occupation	
	No forest cutting	
	No rubbish management	
	Camping	
- Flooding area	Drainage system	
	Raising the road alignment	
- Mountainous/rolling area	Slop less than 17%	
	Side drain	
	Curve sign	
	Guiderail	
- Community area	Speed limited area	
	Dust control	
	Accident control	
- Land property	Minute of meeting on conflict resolution and attached the land certificate	
	Cultural area, history etc...	
<b>Operation</b>		
<b>Safety</b>	Training, installation of danger sign,	

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	fencing, etc.	
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## **Annex 5. Good Engineering Practices and Some Mitigation Measures**

### **Good engineering and housekeeping practices**

The practice of housekeeping involves proper storage, use, cleanup, and disposal of the various materials used during construction for human and environmental safety. The following good housekeeping practices are required for all M-IWRM-funded activities:

#### **DO:**

1. Limited working hour during the day time, especially in residential areas, and control driving speed;
2. Minimize earth excavation and appropriate disposal of spoil;
3. Minimize opening of new borrow pits and ensure proper closure;
4. Minimize traffic congestion, dust and noise generation;
5. Proper maintenance of construction equipment and vehicles;
6. Provide appropriate safety sign (day and night) and closely inform local residents;
7. Avoid spill of used oil and other toxic materials, including safe transportation and storage;
8. Apply good housekeeping in the construction and/or storage sites to ensure safety of workers and peoples (Gather up and remove debris to keep the work site orderly and safe; Plan and implement adequate disposal of scrap, waste and surplus materials; Keep the work area and all equipment tidy. Designate areas for waste materials and provide containers; Keep stairways, passageways and ladders free of material, supplies and obstructions; Secure loose or light material that is stores on roofs or open floors; Keep materials at least 2m (5ft) from openings, roof edges, excavations or trenches; Remove or bend over nails protruding from lumber; Keep hoses, power cords, welding leads, etc from laying in heavily traveled walkways or areas; Ensure structural openings are covered/protected adequately; Provide the appropriate fire extinguishers for the materials found on-site. Keep fire extinguisher stations clear and accessible; etc.)
9. Ensure access to clean water and latrines by workers and provide mosquito net.
10. Avoid social/cultural conflict between workers and local population.

#### **DO NOT:**

1. Do not permit rubbish to fall freely from any locations of the project and/or access by animals (dogs, cats, pigs, etc.). Use appropriate containers.
2. Do not throw tools or other materials.
3. Do not raise or lower any tool or equipment by its own cable or supply hose.
4. Use grounding straps equipped with clamps on containers to prevent static electricity buildup.
5. Do not allow hunting of animals by workers in protected areas.

#### **SPECIAL NOTE ON FLAMMABLE/EXPLOSIVE MATERIALS:**

1. Store flammable or explosive materials such as gasoline, oil and cleaning agents apart from other materials.
2. Keep flammable and explosive materials in proper containers with contents clearly marked.
3. Dispose of greasy, oily rags and other flammable materials in approved containers.
4. Store full barrels in an upright position.
5. Store empty barrels separately.
6. Post signs prohibiting smoking, open flames and other ignition sources in areas where flammable and explosive materials are stored or used.
7. Store and chain all compressed gas cylinders in an upright position.
8. Mark empty cylinders and store them separately from full or partially full cylinders.
9. Ventilate all storage areas properly.
10. Ensure that all electric fixtures and switches are explosion proof where flammable materials are stored.

5.2 The following “*chance find*” procedures to be included in all civil works contract:

If the Contractor discovers archeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor shall:

- Stop the construction activities in the area of the chance find;
- Delineate the discovered site or area;
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities or the National Culture Administration take over;
- Notify the supervisory Project Environmental Officer and Project Engineer who in turn will notify the responsible local authorities and the Culture Department of Province immediately (within 24 hours or less);
- Responsible local authorities and the Culture Department of Province would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists of National Culture Administration. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
- Decisions on how to handle the finding shall be taken by the responsible authorities and Culture Department of Province. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
- Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities; and
- Construction work could resume only after permission is given from the responsible local authorities or Culture Department of Province concerning safeguard of the heritage.

### (a) Environmental Effects and Mitigation Measures for Road Subprojects

Activity	Potential Effects	Possible Mitigation Measures
<b>Planning, Design and Land Acquisition</b>		
Setting Design Standards	If standards are too high excessive earthworks can cause other effects. (See activities under “3 Construction”)	Set standards appropriate for class of road, traffic and terrain, objective of project
Design – General	Land requirements affect local people	Minimize land acquisition and resettlement in selecting alignment.
	Existing buildings, possibly constructed within the subproject site could be affected	Attempt to negotiate a fair design or compensation solution, which does not cause undue hardship.
	Work on roads, bridges and culverts can affect existing trees.	Minimize impact on trees and replant when work is completed.
	Access roads and bridges can have impacts on wildlife, virgin forest areas, cultural relics etc.	Avoid such areas as much as possible in the design.

	Roads, bridges and culverts can cause an increase in traffic speeds and accidents affecting road users, local people and animals.	Ensure a safe design including speed restriction and warning signs, to control livestock as necessary and where possible discuss possible designs with local people.
Design – Drainage	Can alter hydrological regimes and affect flooding and existing irrigation systems.	Ensure culvert, bridge and road are suitably designed to minimize effects on hydrology.
	Can cause negative impacts of concentrating water and increasing scour and soil erosion.	Ensure design improves the drainage system by rectifying any existing problems such as scour of adjacent lands, which should be checked for during the monsoons. Include tree planting in design where possible.

### Construction Preparation

Mobilizing equipment	Air and noise pollution for any nearby settlements.	Control contractors' vehicle speeds and noise.
Mobilizing workforce	The introduction of an outside workforce can have a negative impact on the health and social well being of local people.	Contractor employs local people where possible.
	Possible solution cause by domestic sewage and solid wastes.	Contractor installs and maintains a septic tank system and a system of disposing of solid wastes.
	Possible excessive or uncontrolled use of fuel wood in labour camp.	Contractor supplies alternative fuel for cooking and heating in the labour camp.
	Possible development of labour camp into a permanent settlement.	Contractor removes the labour camp at the completion of the contract.
	Possible hunting of wildlife for food.	Prohibit poaching and make contractor responsible for his workers.
Establishment and Operation of Base Camp and Workshop.	Air and noise pollution for any nearby settlements.	Locate base camp and workshop away from any residential settlements.
	Possible surface water and ground water contamination by oil, grease, and fuel in yards.	Collect and recycle lubricants. Avoid spills and have a ditch around the area with a settling pond, oil trap at the outlet.
	Possible ground and water contamination by bitumen or solvents.	Avoid spills but surround area with a ditch with a settling pond/oil trap at the outlet.
	Cutting down trees to use as fuel for heating bitumen and stones.	The contractor does not use wood for heating during the processing of any materials.
Operating a borrow Pit.	Noise, vibration and dust could affect nearby settlements or other sensitive areas.	Locate plant away from any residential or other environmentally sensitive areas such as hospitals, intensive livestock production areas or wildlife breeding areas. Also avoid farmlands or forests as much as possible. Restrict work to daylight hours and limit the

		size and frequency of blasting.
	Changing the riverbed could affect local fishing areas.	Discuss proposed locations with local people/fishermen and insist contractor obtains their approval.

**Construction**

	Possible noise and vibration, especially if earthworks involve blasting, could affect nearby settlements or other sensitive areas.	Restrict work to daylight hours and limit the size and frequency of any blasting near settlements (especially hospitals) near intensive livestock production and wildlife breeding areas.
	Historical remains or cultural items could be uncovered.	Contractor to ensure all such finds are reported and discussed with representatives of the local people.
Drainage Improvement Works	Works can have temporary affects on irrigation or washing/drinking water supplies.	Ensure contractor takes into account local water uses. Temporary drainage may have to be constructed.
	Effect on traffic and pedestrian safety.	The contractor uses safe traffic control as necessary and causes the minimum possible disruption to all traffic.
Bituminous Surfacing.	Possible pollution of waterways or groundwater by bituminous products or solvates.	Strict control to avoid spills or clean up immediately after and prohibit work in rain.
Transport of Subproject Materials.	Air and Noise pollution for any nearby settlements and damage to existing roads.	Control contractor's vehicles speeds, noise and weight of loads and control dust and flying debris by covering loads or wetting material if necessary. Construct temporary roads if necessary. Use locally available construction material wherever possible to minimize transport distances.

**(b) Environmental Effects and Mitigation Measures for Public Buildings (Markets, schools, health centers etc.)**

Activity	Potential Effects	Possible Mitigation Measures
<b>Before construction starts</b>		
Brick moulding	Disturbance of habitats Loss of land Land degradation Air pollution from dust Pressure on existing water resources	Reallocation of farming land Possible use of cement block as an alternative Provision of boreholes
Brick curing	Deforestation Pollution from smoke	Afforestation (tree planting) Quotas per construction (school, dispensary, markets etc.) community based woodlots
<b>Construction</b>		
Civil works building	Noise and air pollution	Establishment of additional possible

	Pressure on existing water resources Creation of borrow pits	water sources Landscaping
Carpentry	Deforestation Noise	The provision of timber by the community should be approved by the local authorities  Use of alternative materials (bamboo, steel, reinforced concrete)  Afforestation (tree planting) Quotas per construction (school, dispensary, markets etc.) community based woodlots
Labourers	Faecal / other wastes	Provision of latrines

**Operations**

Provision of desks / furniture	Deforestation	The provision of timber by the community should be approved by the local authorities  Use of alternative materials (bamboo, steel)  Afforestation (tree planting) Quotas per construction (school, dispensary, markets etc.) community based woodlots
Disposal of medical wastes	Contamination and pollution in surrounding environment	Include incinerator in health centre subproject proposal

### Environmental Effects and Mitigation Measures for Boreholes

Activity	Potential Effects	Possible Mitigation Measures
Sitting	Loss of land Land degradation Nuisance and aesthetic impacts	Consultation with communities Reallocation of land Landscaping (planting of trees / crops)
Drilling	Disturbance of stream channels, aquatic fauna Social disruption by construction workers Construction hazards New diseases (STD)	Re-vegetation Establish settlement location for workers out of village to mitigate social interactions
Pump installation	Ground and surface water contamination by oil, grease etc.	Experienced drillers only Enforcing standard safety procedures
Civil works	Waste water Solid wastes	Proper disposal Drainage, soaking pits
Operation	Reservoirs may be breeding areas for water born diseases (worms, mosquitoes etc.) Water may be contaminated during transport or storage Spills and leakage contamination of water Reduction in water quality because of decomposed matter Over pumping of ground water causing a lowering of ground water table Disruption to downstream hydrology	Incorporate health and sanitation Education programme Ensure adequate provision for the operation management and maintenance of facilities (Including proper staff and community training)

### (c) Potential Negative Impacts and Mitigating Measures for Irrigation Schemes

Potential Negative Impacts	Mitigating Measures
Soil Erosion	Proper design and layout of furrows or field avoiding too steep a gradient. Land Levelling Design of terraces on hillsides minimizing surface erosion hazard. Maintain vegetation Cover
Water logging of soils	Regulation of water application to avoid over-watering. Installation and maintenance of adequate drainage system. Use of lined canals or pipes to prevent seepage. Accurate calculation of delivery of irrigation requirements.
Salinization of soils	Measures to avoid water logging: Leaching of salts by flushing soils periodically

	Cultivation of crops with salinity tolerance.
Scouring of canals	Design of canal system to minimize risk Use of canals lined with rocks
Clogging of canals by sediment	Measures to minimize erosion on fields Design and management of canals to minimize sedimentation. Provision of access to canals for removal of weeds and sediments.
Leaching of nutrients from soils	Avoidance of over-watering Replacement of nutrients by fertilizer and/or crop rotation. Accurate calculation of fertilizer requirements.
Algal blooms and weed proliferation.	Appropriate application of fertilizers (timing and quantity).
Clogging of canals by weeds.	Design and management of canals to minimize weed growth. Provision of access to canals for treatment or removal of weeds.
Deterioration of river water quality below irrigation subproject and contamination of local ground water (higher salinity, nutrients, agrochemicals) affecting fisheries and down stream users.	Improved water management; improved agricultural practices and control of inputs (particularly pesticides and chemical fertilizers). Imposition of water quality criteria.
Seawater intrusion into freshwater systems.	Location of Scheme Appropriate water management
Reduction of downstream flows affecting flood plain use, flood plain ecology, riverine and estuarine fisheries, users of water, dilution of pollutants.	Relocation or redesign of subproject. Regulation of takeoff to mitigate effects. Compensatory measures where possible.
Encroachment on swamps and other ecologically sensitive areas.	Chose subprojects' site to avoid or minimize encroachment on critical areas. Establishment of compensatory parks or reserved areas.
Threat to historical, cultural or aesthetic features.	Chose subprojects' site to prevent loss. Salvage or protection of cultural sites.
Alteration or loss of flood plain vegetation and disturbance of coastal ecosystems (e.g. mangroves)	Chose subprojects' site to less vulnerable area. Limitation and regulation of water take-off to minimize problems to extent possible.
Introduction or incidence of water-borne or water-related diseases.	Use of lined canals or pipes to discourage vectors Avoidance of stagnant or slowly moving water Installation of gates at canal ends to allow complete flushing Filling or drainage of borrow pits along canals and roads Water testing Disease prophylaxis and treatment

Disease and health problems from use of wastewater irrigation.	Wastewater treatment (e.g. settling ponds prior to use). Establishment and enforcement standards for wastewater use.
Conflicts over water supply and inequalities in water distribution throughout service area.	Means to ensure equitable distribution among users and monitor to assure adherence. Establishment of effective water users associations
Over-pumping of groundwater.	Limitation of withdrawal so that it does not exceed "safe yield"(recharge rate).
<b>External</b>	
Water quality deteriorated or made unusable by upstream land use and pollutants discharge.	Control of land use in watershed areas. Control of pollution sources Water treatment prior to use.
Failure of upstream dams or reservoirs on which the subproject activities depend.	Check of dam or reservoir safety prior to subproject implementation



## **Annex 6: Lao PDR Decree 112 on Environmental Impact Assessment**

### **Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity**

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Prime Minister's Office

No 112/PM

Vientiane Capital, Date: 16 February, 2010

## **DECREE ON ENVIRONMENTAL IMPACT ASSESSMENT**

- Pursuant to law on government of the Lao People's Democratic Republic, Ref., No. 02/NA, dated 06/05/2003.
- Pursuant to Environmental Protection Law, Ref., No. 02/99/NA, dated 03/04/1999.

Based on Request from Minister to Prime Minister's Office, President of the Water Resources and Environment Administration, Ref., No. 2843/PMO.WREA, dated 21/12/2009,

### **The Prime Minister decrees:**

#### **Part I**

#### **General Provisions**

##### **Article 1: Objectives**

This Decree has the following objectives:

- To disseminate and implement Article 8 of the Environmental Protection Law, in relation to Environmental Impact Assessment;
- To lay down principles and rules, and adopt measures on establishment, functions, management and monitoring (of the concerned agencies) in environmental impact assessment;
- To ensure that all investment projects of the State and of both domestic and foreign private individuals foreign operating in Lao PDR (hereafter the 'investment projects') which create or may create adverse environmental and social impact, are designed with the right and appropriate environmental and social impact prevention and mitigation measures or the environmental management and monitoring plan (EMMP) and the social management and monitoring plan (SMMP);
- To effectively prevent, minimise and mitigate adverse environmental and social impacts derived from investment projects;
- To contribute to the national socio-economic development, to make it sustainable.

##### **Article 2: Scope of Application**

This Decree is applied to all investment projects which are categorized two groups by coordination of Water Resources and Environment Administration with line ministry concerned for providing elaborate account period by period,

- Group 1: refers to the small investment projects or small environmental and social impact which are subjected to do initial environmental examination;
- Group 2: refers to the big sized investment projects those are intensity or big significant environmental and social impact which are subjected to do environmental impact assessment.

### **Article 3: Interpretation**

The words are utilized in this Decree, have following meaning:

- 1) **Initial environmental examination (IEE)** means initial study, survey and analysis of data to predict impact on environment and society including impact on health derived from investment projects provided in group 1 of Article 2 of this Decree together with provision of environmental and social impact prevention and mitigation measures;
- 2) **Environmental impact assessment (EIA)** means the process of study, survey, analysis and prediction of positive and negative impacts may cause on environment and society including both short and long term impacts on health from investment projects provided in group 2 of Article 2 of this Decree together with determination of appropriate alternatives, provision of environmental management and monitoring plan (EMMP), social management and monitoring plan (SMMP) to protect and mitigate the impact may be caused from investment projects in construction and operation.
- 3) **The ones who are affected by the investment project** refer to a natural person, legal entity, or organisation who/which are directly or indirectly affected by the investment project due to requisition of lands or real estate, changes of land category, and impacts on the ecological and environmental system in the their settlement areas.
- 4) **The host village** refers to a village which accepts migration of the people who affected by the investment project.
- 5) **Migration and restoration of living condition** refers to:
  - Measures to minimise the negative impacts on the society, as well as on the people who suffer , in whole or in part, from the investment project, including payment of compensation to those who lose their assets and incomes, by restoring rights, providing direct assistance in preparing (pioneering) new cultivation land in the new allocated settlement area.
  - Assistance to those who are severely affected, due to the loss of assets, residence, cultivation land, incomes and jobs, required to be compensated those losses appropriately, including provision of facilities with purpose to improve living standard further, or at least, not worse than before the existence of the investment project.
- 6) **An environmental certificate** refers to a legal document which approves a report on initial environmental examination or a report on environmental impact assessment, an environmental management and monitoring plan (EMMP), and a social management and monitoring plan (SMMP).
- 7) **An ongoing project** refers to the project which is under constructing or mining, and producing.

- 8) **A complicated project** refers to the investment project which has enormous impacts on the environment and society, including impact beyond territory or accumulated impact on other investment project, and in which complicated technology is applied.

#### **Article 4: General Principles**

In assessing the impact on the environment, ones must follow the following principles:

- (1) For the investment projects classified in Category 1 and Category 2, including the project provided in Article 6(2) of this Decree, before endorsing any contract of mining and extracting of mineral substances, or constructing, or prior to issuing any business license, the project developer must, first, obtain environmental certificate, and then they can start clear the area, construct or implement the project.
- (2) Any initial environmental examination or environmental impact assessment must be conducted only by a Consultant Firm or by a Consultant who is registered at the Water Resources and Environment Agency. The initial environmental examination or the environmental impact assessment must be composed of several options, so that the best option can be selected: study on impacts on antiquities, culture, and custom-tradition, planning to solve the negative impacts on environment and society, participation of the people who are<sup>5</sup> (will be) affected by the investment project and other stakeholders in the discussion process, at various levels, and in drawing up budget for those activities.
- (3) Ensuring the participation of the public and discussion with the local administration at all levels, with those who are (will be) affected by the investment project and other persons involved in preparing and reviewing the report on initial environmental examination or the report environmental impact assessment;
- (4) An individual, legal entity or organisation who wish to render services on environmental impact assessment in Lao PDR must comply with the following procedures:
  - The Consultant Firm must be licensed and registered at the Water Resources and Environment Agency;
  - The domestic Consultant must be registered as Environmental Consultant at the Water Resources and Environment Agency;
  - Consultant Firm or Foreign Consultant who has already got a license to do this kind of business in a foreign country must register its business with the Water Resources and Environment Agency, before it can render its service on assessment of the impacts on environment.
- (5) A project developer must be liable for:
  - The accuracy of the data and information contained in its report on initial environmental examination or report on environmental impact assessment;

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<sup>5</sup> The literal meaning of the Lao text is 'the people who are affected by...' but, in fact, it should be 'the people who will be affected by...' because at the time the initial environmental study or assessment is being conducted, there is no impact yet, except a investment project which has been operated without environmental certificate, in which initial environmental examination is conducted after the project has been implemented for a certain period of time - translator.

- Every expense incurred in the process of preparing and reviewing of a report on initial environmental examination, including measures to prevent and minimise impacts on the environment and society or a report on the environmental impact assessment, an environmental management plan, a social management and monitoring plan, as well as implementing and overseeing the implementation of measures to prevent and minimise the impacts on the environment and society, or an environmental management and monitoring plan, and a social management and monitoring plan;
  - In the case of a new investment project which is likely affected other investment projects, there must be cumulative impact assessment, in conjunction with the existing investment projects;
  - For an investment project which is likely to create impacts beyond the border, a trans-boundary environmental impact assessment must be conducted.
- (6) Organisations involved in deliberation of a report on initial environmental examination or a report on environmental impact assessment are obliged to monitor the outcomes of the implementation of measures to prevent and minimise impacts on the environment and society or an environmental management and monitoring plan of the investment project, done by the local administrations, who have duties to monitor the implementation of the management and social monitoring plan.

## **Part II. Environmental Impact Assessment Procedure**

### **Chapter 1. Environmental Impact Assessment Process and Investment Project Screening**

#### **Article 5: Environmental Impact Assessment Process**

Initial environmental examination or environmental impact assessment, as well as deliberation to approve a report on initial environmental examination or a report on environmental impact assessment, must be carried out in accordance with the procedural circle of investment projects, in consistent with the laws of the concerned agencies.

#### **Article 6: Investment Project Screening**

In screening an investment project, ones must comply with the following instructions:

- (1) The project developer must utilise the investment project account which is divided into Category 1 and Category 2, being basis for determining the category of the proposed project, and then conduct initial environmental examination or environmental impact assessment in accordance with the type and size of the investment project, either in Group 1 or Group 2, in consistent with the investment project approval procedure of the concerned agencies.
- (2) For the investment projects which are not within Group 1 or Group 2, as mentioned in paragraph 1 above, but is likely to affect environment and society, the project developer must submit investment application to the Water Resources and Environment Agency (WREA), so as to deliberate, as follows:

- New investment projects which are not within Category 1 and Category 2; but it is likely to have severe impacts on environment and society or create cumulative or trans-boundary impact;
  - The investment project which is allowed to operate, but later on expand and increase its production power or shift production process;
  - The investment project which is likely to create impacts on the conservative forest, protective forest, and productive forest, biological, cultural and historical preservation areas, and other conservation zones.
- (3) In coordination with the concerned sectoral agencies, the Water Resources and Environment Agency screens the investment project, as prescribed in paragraph 2 above, and informs the project developer in writing, within 15 public working days, accordingly:
- The investment project (project developer) must conduct an initial environmental examination;
  - The investment project (project developer) must conduct an assessment of its impacts on the environment;
  - The investment project does not require any initial environmental examination or environmental impact assessment.

## Chapter 2

### Participation

#### **Article 7: Rights and duties of the ones who are affected by an investment project, and of other stakeholders**

The residents who are (will be) affected by the investment project and other stakeholders have rights and duties as follows:

- (1) To receive information on the development plan of the investment project, the benefits that they will receive and impacts on environment and society which may arise from the investment project;
- (2) To give information and data on local environment and society in the area of the project and in the nearby location, to be used in preparing the report on initial environment assessment, consisting of measures to prevent and minimise the impacts on the environment and society, or in preparing the report on environmental impact assessment, environmental management and monitoring plan, and social management and monitoring plan;
- (3) To receive information on the initial environmental examination, including the measures to prevent and minimise impacts on the environment and society, or the report on environmental impact assessment, environmental management and monitoring plan (EMMP), and the social management and monitoring plan (SMMP), as well as the report on the progress in implementation of the measures to prevent and minimise the impacts of the investment project;

- (4) To participate in the village consultation meetings to deliberate the report on initial environmental examination or the report on environmental impact assessment, the environmental management and monitoring plan (EMMP), and the social management and monitoring plan (SMMP).
- (5) To participate in discussions on payment of compensation, migration, and restoration of the living condition of the local residents who are affected by the investment project;
- (6) To participate in the discussion on implementation of the environmental and social activities, as well as the environmental management and monitoring plan (EMMP), and the social management and monitoring plan (SMMP) of the investment project;
- (7) To make a written proposal to solve the environmental and social problems incurred by the investment project to the local administrations, at each level, to solve the environment and social problems, or directly to the Water Resources and Environment Agency, in case the problems have not yet been solved.

#### **Article 8: The Process of Participation**

The Water Resources and Environment Agency, local administrations, the sectoral bodies who are in charge of investment, and the project developer have collective responsibility to ensure the participation of the people who are (will be) affected by the project, and other stakeholders, in consistent with the process of the initial environmental examination or environmental impact assessment, as follows:

- (1) At the time of collecting information to prepare the report on the initial environmental examination or the report on environmental impact assessment, the local administrations and the project developer must organise village meetings to inform the villagers, in various forms, of the development plan of the project and the impacts on the environment and society, as well as to collect the opinion of the local residents who are (will be) affected by the investment project;
- (2) At the time of preparing and examining the initial environmental examination, including the measures to prevent and minimise the impacts on environment and society or the report on the environmental impact assessment, the environmental management and monitoring plan (EMMP), and social management and monitoring plan (SMMP), the Water Resources and Environment Agency, local administrations, the sectoral bodies who are in charge of investment, and the project developer must organise consultation meetings at village, district, and province level, to use as a forum and give opportunity to the residents who are (will be) affected by the investment project and other stakeholders to share their opinions and give comments on the report and plans, since the first draft until the final draft.
- (3) During the exploration, construction and operation of the project, the project developer must inform the local resident who are (will be) affected by the investment project and other stakeholders of the activities which are likely to affect the environment and society, such as clearing the ground surface, destroying rocks, transporting, using and storing of the dangerous chemical objects and substances, discharging of water from the reservoir, etc. At the same time, the project developer must allow the residents

who are (will be) affected by the investment project and other stakeholders to access general information of the project.

### **Chapter 3**

#### **Initial Environmental examination**

#### **Article 9: Duties of the Water Resources and Environment Agency, local administrations, sectoral bodies in charge of investment, concerned sectors, and the project developer on initial environmental examination.**

(1) The Water Resources and Environment Agency has duties:

- a. To issue environmental certificate to approve the initial environmental examination proposed by the sectoral bodies in charge of investment;
- b. To participate in the field inspection and participate in the consultation meeting at district level. The Water Resources and Environment Agency may nominate Provincial or Prefectural Water Resources and Environment Divisions to participate on its behalf.
- c. To coordinate with the concerned sectoral bodies and issue guideline on practical implementation;

(2) Local Administrations have duties:

- a. To issue environmental certificate to certify the report on initial environmental examination, based on the verification of the Water Resources and Environment Agency;
- b. To cooperate with and facilitate the project developer in surveying and collecting information to prepare the report and organise consultation with the local residents who are affected by the investment project and other stakeholders;
- c. To cooperate in the information dissemination process, and encourage the local residents who are affected by the investment project to access the objectives of the project, expected benefits and the environmental and social impacts which might occur from the project;

(3) The sectoral bodies in charge of investment project have duties:

- a. To lead field inspection (if needed), and together with residents who are affected by the investment project and other stakeholders, participate in consultation meetings, at the village and district level, which are organised by the project developer, in the cooperation with the local administration.
- b. To review the report on initial environmental examination, in coordination with the local administrations and concerned sectoral bodies, and then collect the opinions/comments and report to the Water Resources and Environment Agency.

(4) The sectoral bodies have duty to give technical comments on the report on initial environmental examination and can assign that duty to their respective offices in provinces or prefecture to perform on their behalf.

(5) The project developer has duty as follows:

- a. To conduct overall physical, biological and socio-economic aspects, including expect the potential impacts which may arise from the development of the project, referring to the data and information gained from the concerned sectors, local administration and other sources, including data and information collected in the field survey and from consultation with the residents who are affected (will be affected) and other stakeholders, at village and district levels;
- b. To follow the Guideline on Involvement without the use of threat, coercion, force, violence, bribery and deception;
- c. In coordinate with the local administration and the sectoral bodies in charge of investment, to organise dissemination meeting at village level so as to explain development plan of the investment project, benefits which will gain from the investment project and the impacts on environment and society which may arise from the development project, as well as summarise and take note of the residents' comments in the meeting to incorporate in the report on initial environmental examination;
- d. To prepare a report on initial environmental examination consisting of measures to prevent and minimise the impacts on environment and society;
- e. In coordination with the local administration, the sectoral bodies in charge of investment, to organise consultation meeting at village level, with participation of the residents who are (will be) affected by the investment project, and other stakeholders, in order to deliberate the first draft of the report on initial environmental examination and then revise the report in accordance with the resolution of the meeting, and then disseminate it to the residents who are affected by the investment project and the stakeholders to comment on it, before organising consultation meeting at the district level;
- f. In collaboration with the local administration and the sectoral bodies in charge of the investment, to organise consultation meeting at district level, with participation of the representatives of the residents who are affected by the investment project from each village, in order to deliberate the revised draft of report on the initial environmental examination which has been revised in accordance with the resolution of the village consultation meeting, and again revise it in accordance with the resolution of the meeting. The revised report must be made in Lao if it is a domestic investment, or both in Lao and in English if it is a foreign investment, and then submit it to the sectoral bodies in charge of investment to review further;
- g. The report on initial environmental examination which will be proposed to review must be attached with the minutes of each meeting signed by the consultation firm who prepare the report and the project developer.

#### **Article 10: Reviewing of the report on initial environmental examination**

The process of reviewing of the report on initial environmental examination are as follows:

- (1) The project developer must make an application and send a copy of the report which is revised after the consultation meeting at district level to the sectoral bodies in charge of investment;
- (2) The sectoral bodies in charge of investment would review the report within 10 working-days and inform the project developer in writing, as follows:
  - a. The project developer to send it 15 hardcopies of the report, as well as its soft copy, in case it sees that the report on initial environmental examination is correct and comprehensive;
  - b. The project developer to revise the report further, in case it found that the report on initial environmental examination is not comprehensive enough.
- (3) Reviewing of the report on initial environmental examination must be carried out within 50 working days, since the day the project developer submits the application in full as provided in 2(a), excluding the period of time the project developer take the application back for revision, which has procedure as follows:
  - a. The sectoral bodies in charge of investment will send the initial environmental examination to the local administration and concerned agencies within 5 working days for comments;
  - b. The concerned agencies must send their comments to the sectoral bodies in charge of investment within 20 working days. If they do not send their comments within that period of time, it would deem that they agree with the study or the right to give comments would be forfeited;
  - c. The sectoral bodies in charge of investment will organise a workshop to allow the project developer to clarify the report and have a field survey, if necessary, as well as summarise those final comments and send them to the Water Resources and Environment Agency to consider whether should issue the environmental certificate or not;
  - d. The Water Resources and Environment Agency will consider and choose to act in one of the following manners:
    1. To issue the environmental certificate to approve the report on initial environmental examination;
    2. To demand the project developer to take the following actions:
      - To re-amend the report on initial environmental examination ;
      - If the development project is complicated or would have severe impacts on the environment and society, to continue to assess the impact on the environment;
    3. To object the report in one of the following cases:

- When the data and information does not correspond to the facts, conceal or hide risk and the potentially severe impacts on the environment and society which may occur;
- When it has sufficient evidence to prove that data and information of the initial environmental examination is not from actual study of the project, but copied from other investment projects;
- There is no scientific evidence to prove the accuracy of the specified impacts;
- The report fails to identify comprehensively the measures to prevent, minimise, and solve the impacts on environment and society;
- The project would cause more negative impacts than positive impacts;
- The project developer does not comply with the laws, guidelines, and did not undertake the involvement process.

## Chapter 4

### Environmental impact assessment

#### **Article 11: Determining the scope of the study and terms of references**

The project developer must determine the scope of the study and terms of reference in the assessment of the impacts on environments and submit it to the Water Resources and Environment Agency to consider and approve before conducting the assessment.

The Water Resources and Environment Agency must complete its review and examination of the scope of study and the terms of references within 15 working days and notify the project developer of its comments, in writing.

#### **Article 12: Duties of the Water Resources and Environment Agency, the concerned agencies, local administration, and the project developer in assessment of the impacts on environment.**

(1) The Water Resources and Environment Agency has following duties:

- a. To give technical suggestion on preparation of the report on the environmental impact assessment, the management and monitoring plan (EMMP), and management and social monitoring plan (SMMP);
- b. In collaboration with the local administration and the concerned agencies, to conduct field survey, and together with the residents who are affected by the project and other stakeholders, to participate in the discussions at village and district level;
- c. To be an active coordinator in organising discussion meetings at provincial and prefectural level, and review the report on the environmental impact assessment, the management and monitoring plan (EMMP), and management and social

monitoring plan (SMMP), consider and issue environmental certificate to approve the report and plans.

(2)The concerned agencies has following duties:

- a. To give technical comments on preparation of the report on the environmental impact assessment, the management and monitoring plan (EMMP), and management and social monitoring plan (SMMP);
- b. To participate in the discussion meeting, at district level (provincial or prefectural sectoral offices participate), at provincial or prefectural level (ministerial sectoral offices participate);
- c. Together with the Water Resources and Environment Agency, to participate in the field survey.

(3)Local administrations have the following duties:

- a. To cooperate with and facilitate the project developers in their survey of the field and in collecting data and information to prepare the report;
- b. To organise consultation meeting with those who are affected by the investment project and other stakeholders;
- c. To disseminate to the people of the objective of the investment project, the benefits which they will get, the impacts on the environment and society which may arise from the investment project and the measures to prevent and minimise those impacts;
- d. To deliberate the management and monitoring plan (EMMP), and management and social monitoring plan (SMMP) before the Water Resources and Environment Agency will issue the environmental certificate to approve those plan.

(4)The project developer has the following duties:

- e. To comply with the scope of the study and the terms of references approved by the Water Resources and Environment Agency;
- f. To collect information on general situation of the investment project such as physical, biological and socio-economic aspects, from the sectors and local administration, or by conducting field survey and consultation with the residents who are affected by the investment project and other stakeholders, at village, district, and provincial or prefectural levels;
- g. To carry out study and determine the direct and indirect impacts on the residents living around the project area, given attention to impacts on health, loss of assets and shelters, impacts on living condition, usage of natural resources and other impacts on environment and society such as soil, water, climate, forest and biology, including architectural and cultural heritages and antiques, and include them in the report on the environmental impact assessment;

- h. In collaboration with the local administrations such as the Water Resources and Environment Offices of districts, provinces or prefectures, to organise dissemination meeting at village level to explain of the general situation of the investment project, as well as the benefits, impacts on the environments and society which may arise from the investment project, the measures to prevent and minimise the impacts on environment and society, and summarise the comments and opinion given in the meeting to incorporate them into the report;
- i. To prepare the report on the environmental impact assessment, the management and monitoring plan (EMMP), and management and social monitoring plan (SMMP) which include the assessment of the impacts on health and health management measures;
- j. In collaboration with the local administrations like the District Water Resources and Environment Offices, to organise meetings at villages, with participation of the residents who are affected by the investment project and other stakeholders to deliberate the first report on the environmental impact assessment, the management and monitoring plan (EMMP), and management and social monitoring plan (SMMP) and then revise the report and the plans in accordance with the resolution of the meetings, and then disseminate them back to the villagers who are affected by the investment project and other stakeholders and to revise them before district meetings;
- k. In collaboration with the local administrations like the Provincial or Prefectural Water Resources and Environment Offices, to organise district-level meetings, with participation of the representatives of those who are affected by the investment project, from each village, the concerned provincial or prefectural offices, mass organisation and other district organisations to deliberate the report which was revised in compliance with the resolution of the village meeting. The district-level-revised report must be made either in Lao or in English in which the abstract, the environmental management and monitoring plan (EMMP), and the management and social monitoring plan (SMMP) must be made in both Lao and English, before submitting them to the Water Resources and Environment Agency to review;
- l. The report on the environmental impact assessment, the environmental management and monitoring plan (EMMP), and the social management and monitoring plan (SMMP) to be submitted for reviewing must be enclosed with the minutes of each meeting and must be signed by the project developer and the consultation firm which prepare the report.

### **Article 13: The environmental management and monitoring plan**

- (1)The project developer must design the environmental management and monitoring plan to be incorporated into the report on the environmental impact assessment, which contain the following contents:
  - a. The implementation monitoring plan, main activities and persons who are responsible for the implementation of the environmental management and monitoring plan:
    - The monitoring plan of the project developer;

- The monitoring plan of the concerned national agencies.
  - b. The measures to prevent, minimise, and solve problems, and to restore environmental condition which stipulated in the report on the environmental impact assessment throughout the phase of construction and operation of the project;
  - c. The plan to avoid and minimise the risks, including plan to prevent and solve any accident or emergency which may arise, as well as allocation of sufficient fund to implement the plan;
  - d. The plans for plantation of trees, restoration of forest and conservation of the forest areas where is the source of water;
  - e. Timings and budget for implementation of the environmental management and monitoring plan, including financial mechanism and the fund available for each activity;
  - f. In the case of hydropower project, there must be a plan to clean out the biological substances from the reservoir area, a plan to manage the flow basin, a plan to manage the reservoir, a plan to manage and develop the river basin, a plan to manage fishery and other plans if necessary;
  - g. In the case of mining, there must be: a plan to cover up the site, a plan to restore environment in the exploration areas, as well as budgeting for the implementation of the plan;
  - h. Other necessary information
- (2)The project developer must strictly implement the environmental management and monitoring plan approved by the Water Resources and Environment Agency. In the case it assign the task to another company, it must incorporate the terms and conditions of the plan into the contract to ensure that the sub-contractor implement the plan comprehensively;
- (3)During the construction and operation period, if the Water Resources and Environment Agency found that the problems are not identified and the measures to minimise and solve the problems are not comprehensively provided in the environmental management and monitoring plan, as it actually is, or fail to achieve the goal, the Water Resources and Environment Agency will notify the project developer in writing and set the deadline for the project developer to revise the plan and re-submit it to the Water Resources and Environment Agency to review;
- (4)Six months before the operation, the project developer must evaluate the implementation of the environmental management and monitoring plan in the survey-exploration phase, as well as improve the environmental management and monitoring plan, making it suitable for the project operation phase and then submit it to the Water Resources and Environment Agency to consider and issue operation license. During the project operation phase, the project developer must review and improve the environmental management and monitoring plan in each period, 2 - 5 years (the period for reviewing and improving the environmental management and monitoring plan depends on the complexity of the

investment project which will be stipulated in the environmental certificate) and then submit it to the Water Resources and Environment Agency to consider and approve;

- (5) In the case of mining project, before closing the mining site, the project developer must improve the plan to close the sites and restore the mining area and then submit it to the Water Resources and Environment Agency to consider and approve before implementation of the plan.

#### **Article 14: The social management and monitoring plan**

- (1) The project developer must design the social management and monitoring plan to be incorporated into the report on the environmental impact assessment, which contain the following contents:
- a. Measures to prevent and minimise the direct and indirect impacts of the investment project on the society as provided in the report on the environmental impact assessment throughout the project's construction, operation, and termination period;
  - b. Measures to prevent and minimise the risks including prevention and solutions to any accident or emergency which may arise and allocating sufficient fund and identifying the source of fund for implementation of the plan and solve such problems;
  - c. Measures to compensate the loss, resettlement and improvement of the living condition of the residents who are affected by the development project;
  - d. The draft of social development plan for the site closing period and termination of the investment project;
  - e. The plan to monitor the implementation of the social management and monitoring plan;
  - f. The monitoring plan of the project developer and the monitoring plan of the concerned national agencies;
  - g. The institution and responsibilities of the agency which will implement the social management and monitoring plan, and other related plans;
  - h. Timing and budgeting for the implementation of the social management and monitoring plan, as well as financial mechanism and allocation of fund into each task and activity;
  - i. Other necessary information.
- (2) The social management and monitoring plan must be consistent with the Decree and Regulations on Compensation and Movement, and consists of re-settlement plan for the residents who are affected by the investment project, social development plan and plant to restore the living condition, given particular attention to healthcare of those who are affected and etc;
- (3) The project developer must strictly implement the social management and monitoring plan approved by the Water Resources and Environment Agency, in coordination with the concerned local administration, particularly the Committee of Re-settlement and Restoration of Living Condition. In the case it assign the task to another company, it must

incorporate the terms and conditions of the plan into the contract to ensure that the sub-contractor implement the plan comprehensively;

- (4) Six months before the operation, the project developer must evaluate the implementation of the environmental management and monitoring plan in the survey-exploration phase, as well as improve the environmental management and monitoring plan, making it suitable for the project operation phase and then submit it to the Water Resources and Environment Agency to consider and issue operation license. During the project operation phase, the project developer must review and improve the environmental management and monitoring plan in each period, 2 - 5 years (the period for reviewing and improving the environmental management and monitoring plan depends on the complexity of the investment project which will be stipulated in the environmental certificate) and then submit it to the Water Resources and Environment Agency to consider and approve;
- (5) During the construction and operation period, if the Water Resources and Environment Agency found that the problems are not identified and the measures to minimise and solve the problems are not comprehensively provided in the environmental management and monitoring plan, as it actually is, or fail to achieve the goal, the Water Resources and Environment Agency will notify the project developer in writing and set the deadline for the project developer to revise the plan and re-submit it to the Water Resources and Environment Agency to re-consider and approve;
- (6) In the case of mining project, the project developer must finalise the social development plan for the post-closing period of mining site and such plan must be approved by the Water Resources and Environment Agency before project termination.

**Article 15: Examine the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan**

Examination of the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan must be carried out in compliance with the following procedures:

- (1) The project developer must submit an application, as well as the report on the environmental impact assessment, the environmental management and monitoring plan, the social management and monitoring plan, amended after district consultation meeting, to the Water Resources and Environment Agency to review and consider to issue environmental certificate;
- (2) The Water Resources and Environment Agency examines the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan, within 15 working days, to ensure that they are correct and comprehensive, and then notify the project developer in writing, as follows:
  - (a) In case the report on the environmental impact assessment, the environmental management and monitoring plan, the social management and monitoring plan are correct and comprehensive, the project developer must send 15 hardcopies and a softcopy of the report and those plans to the Water Resources and Environment Agency;

- (b) In case the report on the environmental impact assessment, the environmental management and monitoring plan, the social management and monitoring plan are not correct and comprehensive, the project developer must revise or prepare/design new report and plans.
- (3) The Water Resources and Environment Agency examines the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan, in general, within 15 working days and 120 working days for the investment project which is complex, since the date the project developer submitted the documents stipulated in 2(a) above, excluding the period of time the project developer takes the documents back to revise, which has following procedure:
- a. Within 5 working days, the Water Resources and Environment Agency sends the report on the environmental impact assessment, the environmental management and monitoring plan, the social management and monitoring plan back to the sectoral body in charge of the project, the relevant sectoral office and local administration for comment within 30 working days, since the date of reception. If those organisations do not give comment within that period of time, their right will be forfeited;
  - b. The Water Resources and Environment Agency organises a technical workshop within 10 working days, since the date it received those documents to listen to the brief presentation on the the report on the environmental impact assessment, the environmental management and monitoring plan, the social management and monitoring plan, with participation of the concerned sectoral offices;
  - c. The Water Resources and Environment Agency to conduct field survey within 20 working days, after the brief presentation given as stated in 3(b), in coordination with the concerned sectoral offices and local administration;
  - d. The Water Resources and Environment Agency to organise a joint technical workshop with the project developer, with the participation of the local administration and the sectoral offices, to deliberate and comment on the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan, within 5 working days, since the date it received comments from the related sectoral offices and local administrations, as stated in 3(a). The Water Resources and Environment Agency will then summarise the comments in writing and give it to the project developer to improve the report and plans and then return them to the Water Resources and Environment Agency to re-consider;
  - e. After completion of examining of the report and plan as provided in (d), the Water Resources and Environment Agency to notify the project developer in writing, to ask the latter to organise a provincial or prefectural consultation meeting, in coordination with the local administration. The project developer must finalise the improvement of the report in conformity with the resolution of the provincial or prefectural consultation meeting and

then send them to the Water Resources and Environment Agency to consider and issue the environmental certificate;

- f. The Water Resources and Environment Agency to re-examine the finalised report on the environmental impact assessment, the finalised environmental management and monitoring plan, the finalised social management and monitoring plan and then send the finalised environmental management and monitoring plan and the finalised social management and monitoring plan to the local administration to consider and approve within 15 working days, before issuing the environmental certificate. The Water Resources and Environment Agency will re-examine those documents within 15 working days after it received confirmation from the local administration, in the following circumstances:
  - 1) To issue an environmental certificate to approve the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan or notify the project developer of the need to revise those report and plans;
  - 2) To reject the report on the environmental impact assessment, the environmental management and monitoring plan, the social management and monitoring plan of the investment project on the following grounds:
    - (a)The data and information contained in the report is not corresponded to the facts, there is cover-up or concealment of the risks and severe impacts on environment and society which may arise;
    - (b)The report on the environmental impact assessment still lack careful study, particularly on risks and possible impacts;
    - (c)The report on the environmental impact assessment did not derive from an actual study carried under the project, but copied from another investment project, which there is sufficient evidence to prove its actual copying;
    - (d)There is no scientific evidence to prove the accuracy of the specified impacts;
    - (e)There is no sufficient data and information in the environmental management and monitoring plan and the social management and monitoring plan;
    - (f) The project would cause more negative impacts than positive impacts;
    - (g)The project developer does not comply with the laws, guidelines, and did not undertake the involvement process.

**Article 16: Re-examining of the report of the investment project which complex**

For the investment project which is complicated which requires experts of that specific field to examine the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan, the Water Resources and Environment Agency must proceed as follows:

- (1) To establish a team of experts to examine the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan within 30 working days, since the date the project developer handed over all necessary documents as stipulated in Article 15, 2(a), by giving priority to the domestic experts or foreign experts to be appointed in the team of expert;
- (2) The team of expert must consists of experts who are specialist in respective scientific fields depending on the actual need, who have no connection with and have no direct and indirect interest in the investment project. The team of experts has duty to examine and comment on the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan in writing and give it to the Water Resources and Environment Agency within 30 working days and must keep that information confidential;
- (3) The Water Resources and Environment Agency to examine the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan within 120 working days, since the date the project developer handed over all required documents, as stipulated in Article 15, 2(a), excluding the period of time the project developer revises the documents. The report and plans must be revised by following the procedure provided in Article 15 of this Decree.

## **Chapter 5**

### **Environmental Certificate**

#### **Article 17: Issuing of Environmental Certificate**

The Water Resources and Environment Agency issues the environmental certificate to approve the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan, as provided in Article 10 and Article 15 of this Decree.

Based on the confirmation from the Water Resources and Environment Agency, with consent from the sectoral bodies in charge of investment project, the local administrations may issue environmental certificate to approve the initial environmental examination.

The environmental certificate may contain some conditions which the project developer is obliged to perform.

#### **Article 17: Expiry date of the environmental certificate**

The environmental certificate is valid through the concession period of the investment project.

If the investment project does not start to operate within 2 years, from the date it obtained the environmental certificate, the certificate would be automatically expired and cannot be used. 3 months prior to the expiry date, if the project developer wishes

to continue its investment project, it can request the Water Resources and Environment Agency to re-consider;

After the investment project gets the environmental certificate, 6 months prior to the termination of the investment project, the project developer must sum up and evaluate implementation of the measures to minimise the impacts on environment and society or the environmental management and monitoring plan, the social management and monitoring plan during the period of construction and operation of the investment project, as well as improve the measures to minimise impacts on environmental and society or the environmental management and monitoring plan, and the social management and monitoring plan for the operation period of the project and then request the Water Resources and Environment Agency to approve. During the operation of the project, the project developer must review and improve measures to minimise the impact on environmental and society or the environmental management and monitoring plan, and the social management and monitoring plan in each period, 2 - 5 years (the period for reviewing and improving the environmental management and monitoring plan depends on the complexity of the investment project) and then submit it to the Water Resources and Environment Agency to consider and approve.

**Article 19: Issuing environmental certificate to an investment project which is under operation**

For the investment project which is under operation without an environmental certificate prior to the effective date of this Decree must comply with the following procedure:

- a. The local administrations to enlist the businesses which are located within their administration areas, under their respective categories and sizes of the investment project, in either group 1 or group 2, and then send the list to the Water Resources and Environment Agency within 90 working days, after this Decree becomes into effect;
- b. The Water Resources and Environment Agency considers it with reference to the degree of impacts on the environment and society of the investment project:
  - For the project which has no impact on the environment and society, the Water Resources and Environment Agency will notify the project developer to continue its operation;
  - For the project which has impacts on the environment and society, under the class and size of the investment project, either Group 1 or Group 2, the Water Resources and Environment Agency will notify the project developer in writing to demand the project developer to prepare and finalise the environmental management and monitoring plan, and the social management and monitoring plan within 90 working days, for the investment project which falls under Group 1, and 120 working days for the investment project which falls under Group 2, since the date of notification. If the plans cannot be finalised within that specified period, the measures provided in Article 35, 38, 39, and 40 of this Decree will be respectively imposed on the investment project, depending on their circumstances.

For the investment project which the Water Resources and Environment Agency approved the scope of study and task for the environmental impact assessment, and the investment project of which its report on initial environmental examination or report on the environmental impact assessment, but have not yet received environmental certificate, before the date this Decree becomes into effect, that project developer can follow the Regulatory Provisions on Environmental impact assessment in Lao PDR No.1770/STEA.PMO, dated October 3, 2000 or this Decree.

## **Chapter 6**

### **Obligatory Contribution of Fund for Initial Environmental examination or Environmental impact assessment and Management of Fees and Service Charges**

#### **Article 20: Obligatory Contribution of Fund for Initial Environmental examination or Environmental impact assessment**

The project developer must liable for all expenses incurred in preparation and examination of the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan, as well as in implementation and monitoring measures on prevention and reduction of the impacts on environment and society or the environmental management and monitoring plan, and the social management and monitoring plan as follows:

- (1)Field survey;
- (2)Project dissemination meetings, consultation meeting on the initial environmental examination or the report on the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan, at all level (village, district, province or prefecture);
- (3)Fees and service charges in compliance with laws and regulations;
- (4)Implementation of measures on prevention and reduction of impacts on environment and society or the environmental management and monitoring plan, the social management and monitoring plan, and monitoring;
- (5)Hiring domestic and/or foreign experts to examine the environmental impact assessment, the environmental management and monitoring plan, and the social management and monitoring plan;
- (6)Strengthening and supporting the local and central public staffs(government officers) the equipments/tools, necessary vehicles for monitoring the environmental and social management issues;
- (7)Usual monitoring and go on a tour of inspection and environmental and social emergency cases.

#### **Article 21: Fee and Service Charge**

Water Resources and Environment Administration or Local Authorities which approve environmental certificate are responsible to charge for the environmental and

social fees and services identified in Presidential Provision on Fees and Service, No. 03/P, dated November 19, 2008 as followed:

- All fees are given to Public Budgets;
- Service Charge is needed to be determined, find out expenditures and revenues collected into Annual Budget Plan of Water Resources and Environment Administration or Local Authorities as well as compliance with Public Financial Regulation; and under managed by Water Resources and Environment Administration or Local Authorities and Financial Sectors.

### **Part III**

## **Management and Monitoring**

#### **Article 22: Establishment of Management and Monitoring**

Managing and monitoring the implementation of the environmental and social impact prevention and mitigation measures or environmental management and monitoring plan (EMMP), social management and monitoring plan (SMMP) of Investment Project are included:

- a) Monitoring by Project Developer;
- b) Monitoring by State Organization;
- c) External Monitoring.

#### **Article 23: Monitoring by Project Developer**

Project Developer shall proceed as follow:

- 1) The investment project in group 1(one): project developer shall proceed to implement the monitoring the implementation of the environmental and social impact prevention and mitigation measures by self, and then usually report to Water Resources and Environment Administration, investment project responsible ministry, line ministries and local authorities concerned;
- 2) The investment project in group 2(two): project developer shall establish the owned environmental and social management office for responsibilities of the implementation and monitoring the result of implementation of the environmental management and monitoring plan (EMMP), social management and monitoring plan(SMMP), then usual reporting for Water Resources and Environment Administration, investment project responsible ministry, Line Ministries and Local Authorities Concerned;

#### **Article 24. Monitoring by State Organization**

State Organization shall proceed as follow:

- 1) the investment projects in group 1 (one) :

- Organization that reviews report on initial environmental examination responsible monitoring the result of the implementation of the environmental and social impact prevention and mitigation measures by using budget provided in report on initial environmental examination, then report regularly to Water Resources and Environment Administration, Local Authorities;
- Water Resources and Environment Administration is responsible to go on a tour of inspection about the implementation of the environmental and social impact prevention and mitigation measures; and to coordinate with line ministries and local authorities concerned to extremely pressing inspect, and also to report to the National Environmental Committee.

2) The investment projects in group 2 (two) :

- Water Resources and Environment Administration coordinate with Line Ministries and Local Authorities Concerned are responsible monitoring the implementation of the semi-annual environmental management and monitoring plan(EMMP) or as requires; then to usually report to the National Environmental Committee;
- National Environmental Committee is responsible monitoring and going on a tour of inspection about the implementation of the environmental management and monitoring plan (EMMP), social management and monitoring plan (SMMP) of Investment Projects;
- Local Authorities coordinate with Water Resources and Environment Administration are responsible to establish the environmental management unit in the district where the investment projects located, to regularly monitoring the implementation of the environmental management and monitoring plan (EMMP) and then to report to local authorities and Water Resources and Environment Administration or to urgently report in the emergency cases;
- Local Authorities coordinate with Water Resources and Environment Administration are responsible to establish the resettlement and livelihood restoration unit which takes action as:
  - a) A secretariat of resettlement and livelihood restoration unit;
  - b) An inspector of the implementation of the Social Management and Monitoring Plan(SMMP); a coordinator with project developer to report to the Local Authorities and Water Resources and Environment Administration regularly or emergently.
- Water Resources and Environment Administration is responsible to give technical advising, strengthen and train to the environmental management unit by taking into account of Plans and Budget in each time, which grant initially came from the concession agreement or the environmental management and monitoring plan

(EMMP), social management and monitoring plan (SMMP); and from the budget of state.

**Article 25: External Monitoring**

External Monitoring aims to inspect the implementation of the environmental and social issues of investment projects. External Monitoring includes:

- 1) Monitoring of National Assembly identified in the Law on Monitoring of National Assembly;
- 2) Auditing of State Audit Agency identified in the Law on State Audit;
- 3) Auditing of State Audit Administration identified in the Law on Audit;
- 4) Monitoring of Expert Committee, in emergency case.

## **Part IV**

### **Steering Committee for giving directions to the project and the implementation of the Environmental and Social Management and Monitoring Plan**

**Article 26: National Steering Committee**

A lot of impacted and intensive investment projects, the government names the National Steering Committee that has following rights and duties:

- 1) Giving directions, encouraging and monitoring the phase of construction and/or activities operation of investment projects beside to the attention of monitoring the implementation of the environmental management and monitoring plan(EMMP), social management and monitoring plan (SMMP) to report to the government regularly;
- 2) Establishing Expert Committee or qualified condition consultant companies for monitoring the implementation of the environmental and social works of investment projects;
- 3) National Steering Committee has the budget which come from investment projects, State Budget of Investment Project Responsible Ministry and other sources.

**Article 27: National Steering Committee Institutional Structure**

National Steering Committee Institutional Structure features:

- 1) A Minister of Investment Project Responsible Ministry is chairperson;
- 2) A Deputy Minister of Investment Project Responsible Ministry is deputy chairperson and also being stationed person;
- 3) A Deputy Minister to the Prime Minister's Office, Deputy Head of Water Resources and Environment Administration and vice governor of related provinces or capitals are deputy chairpersons;

- 4) Line Ministries Concerned Representative, Lao Frontier and Institutional Committee are committees;
- 5) Project representatives are committees;

National Steering Committee has owned secretariat for being chief of staff; the secretariat features departments, equivalent departments of investment project responsible ministry, Department of Environmental and Social Impact Assessment which is under the Water Resources and Environment Administration; Resettlement and Livelihood Restoration Committee Secretariat of province and capital.

**Article 28: Resettlement and Livelihood Restoration Committee**

Government names Resettlement and Livelihood Restoration Committee at province or capital level. Resettlement and Livelihood Restoration Committee has following rights and duties:

- 1) Giving directions, encouraging and monitoring the implementation of resettlement and livelihood restoration of the people who affected by investment project that located in province or capital; those of the operations are to compliance by Social Management and Monitoring Plan(SMMP);
- 2) Closed coordination with the Line Ministries Concerned and project developer for consideration and solution for people' grievance then regularly reporting to the government;

This committee has the budget which come from the investment projects, State Budget and other sources.

**Article 29: Resettlement and Livelihood Restoration Committee Institutional Structure**

Resettlement and Livelihood Restoration Committee features:

- 1) Governor of provinces or capital is chairperson;
- 2) Deputy governor of provinces or capital is deputy chairperson and also a stationed person;
- 3) Governor of the connected districts, connected section representatives, provincial or capital Lao Frontier, Institutional Committee and project developer representatives are committees.

Provincial or capital resettlement and livelihood restoration committee has owned secretariat for responsible to be the chief of staffs which is named by the resettlement and livelihood restoration committee.

## **Part V**

### **Change of Investment Project Owner**

**Article 30. Change of Investment Project Owner**

The project developer who wants to transfer the investment project (henceforth called existing developer) to the key individuals (henceforth called new developer), shall submit to the line ministries concerned for approval. This line ministries concerned will be able to approve for the transfers till the existing developer and the new developer approved by common consent of the agreement of continued environmental and social obligation.

The investment project that has not get the environmental compliance certificate, the new developer shall continue to do the initial environmental examination or the environmental impact assessment and prepare an environmental management and monitoring plan (EMMP), a social management and monitoring plan (SMMP) according to the context of the present decree.

The investment project that already has the environmental compliance certificate, the new developer shall operate the owned approved environmental and social obligation and shall has the budget for the implementation of environmental management and monitoring plans (EMMP), social management and monitoring plan (SMMP) based on official agreement between the existing developer and the new developer.

## **Part VI**

### **Information Disclosure**

#### **Article 31: General Information Disclosure**

The General Information Disclosure shall operate as followed:

- 1) Water Resources and Environment Administration has responsible to manage information on the environmental and social of the investment project by coordinating to the line ministries concerned and project developer including facilitating for the stakeholders together with people who directly affected by the investment project to access those information;
- 2) Project developer has responsible to manage information on the environmental and social impact prevention and mitigation measures or the environmental management and monitoring plan (EMMP), the social management and monitoring plan (SMMP) and to facilitate for the people who directly affected by the investment project and the stakeholders to access those information. The investment project in group 2(two), the project developer shall build information centers around the area of investment project and several connected districts.

#### **Article 32: Information Non-Disclosure**

To non-disclosed information shall be operated as followed:

- 1) Water Resources and Environment Administration reserve right of revelation of country's stability concerning information in report on initial environmental examination and environmental and social impact prevention and mitigation measures or report on environmental and social impact assessment, environmental management and monitoring plan (EMMP), social management and monitoring plan (SMMP);
- 2) Reference to formal submission of project developer, Water Resources and Environment Administration consider to reserve right of disclose of confidential information in report on initial environmental examination and report on environmental and social impact prevention and mitigation measures or report on environmental and social impact assessment; environmental

management and monitoring plan (EMMP), social management and monitoring plan (SMMP) as followed:

- a) Human right information;
  - b) Asset information;
  - c) Trading right information;
- 3) In the case that the project developer does not need to disclose some information in the above item, project developer shall submit the request which attached by those information then send them to Water Resources and Environment Administration. With in 25 official days, Water Resources and Environment Administration will make decision that all or some of those information provided as non-disclosed information;
- 4) In the case that the submitted information considered as non-disclosed information, those information shall be kept as confidential information for 4 years. With in 60 official days, project developer enable to extent time of those confidential information before them expired otherwise those confidential information keeping will be expired.

## **Part VII**

### **Environment and social settlement disputes**

#### **Article 33: Dispute Types**

Environmental and social dispute can be shown as:

- 1) The right and responsibility for natural resources exploitation management and their usage mainly are water, earth, mines, forests, non-timber products and biodiversity at investment project sites;
- 2) The determination of pollution original cause, environment degradation which exert impact on people's lives and assets including dispute over responsibility for settlement, maintenance and compensation for damage caused by the said phenomena.
- 3) The level of financial or other compensation, including land, housing, services, and dispute over payment or provision of any agreed compensation.

#### **Article 34: Parties of Dispute**

Environmental and social dispute may occur between:

- 1) Project developers together;
- 2) Project developers with people affected by investment project;
- 3) Project developers with state organizations or international organization and local administrations.

#### **Article 35 Dispute Settlement**

Dispute settlement shall be carried out as:

- 1) In case that the dispute between project developers together, they shall establish effective settlement mechanism by initial negotiation, conciliation. In case of agreement impossibility each side has to request Arbitration for consideration on settlement of dispute; In case of settlement impossibility each side has the right to request Population Court of Lao PDR for consideration on settlement of dispute by procedure, if those enterprise contracts are not stimulated in another;
- 2) In case the dispute between Project developers with people affected by investment projects:
  - a) Project developer shall consider the requests and also settle the several environmental disputes based on clear discussing, compromising; In case of settlement impossibility each side has the right to request environmental and social management and monitoring administrations and local authorities step by step for consideration on settlement of dispute. If environmental and social management and monitoring administrations and local authorities impossibility settle that dispute each side has the right to Population Court for consideration on settlement of dispute by procedure;
  - b) Project developer hear grievances and shall find out social settlement methods by compliance to decree of prime minister no. 192/PM, dated 7 July 2005 on Compensation and Resettlement of People Affected by Development Projects and Regulation no. 2432/STEA, dated 11 November 2005 for Implementing Decree on Compensation and Resettlement of People Affected by Development Projects and other regulations switched.
- 3) In case that the dispute between project developers with state organizations or international organization and local administrations, they shall be compliant to Laws of Lao PDR or treaties or agreements which Lao PDR is partner involved or autograph together (if any).

## **Chapter 14**

### **Policy for merit and measures for offenders**

#### **Article 36: Policy for merit**

Individuals, entities or any organizations which have excellent merit in investment project environmental and social impact prevention and mitigation measures or environmental management and monitoring plan (EMMP), social management and monitoring plan (SMMP) managerial activities and compliance legislations in Lao PDR shall be duty-bonded to be commended and requested for other policy practiced as appropriate.

#### **Article 37: Measures towards offenders**

Individuals, entities or any organizations which violate this Decree shall be warned, educated, fined, civil disciplinary imposed on or prosecuted by Penal Code depending on severity of committed crime and shall compensate for loss.

#### **Article 38: Warns and educates measures**

In case that monitorig results indicates that the environmental and social impact prevention and mitigation measures or environmental management and monitoring plan (EMMP), social management and monitoring plan (SMMP) are not to be completely implemented. Water Resources and Enviornment Administration will

formally warn and also advise project developer to implement those measure or plans strictly in order to the unresolved problems to be resolved on time with in accurated life time. Warning document shall be featured as:

- a) Problems will cause or is likely to cause to violation;
- b) Procedures and period of time to be used for resolution.

### **Article 39. Fines measures**

Individuals, entities or any organizations which has the following action will be fined by legislation concerned as followed:

- a) Making false or misleading statement in report on initial environmental examination and environmental and social impact prevention and mitigation measures or report on environmental impact assessment and environmental management and monitoring plan (EMMP), social management and monitoring plan (SMMP), including any monitroing reports required under this Decree;
- b) In case that inpector has already informed, but prevent or other interfere with an inpector carrying out inspections, including;
  - Preventing or other interfering access;
  - Preventing taking of samples or key evidence for monitoring environment;
  - Preventing or interfering taking pictures or interfering interviewing any person regarding invesment project.
- c) To fail to provide information to the authority regarding environmental and social emergencies in time or at all;
- d) to commence the area clearance, to excavate or to carry on construction of an investment project to which this Decree relates without an ECC;
- e) to commence operation without improvement of environmental and social impact prevention and mitigation measures or environmental management and monitoring plan (EMMP), social management and monitoring plan (SMMP) provided in this Decree;
- f) to make a significant environmental and social impact to the investment project area or expansion of the investment project without addistional studying initial environmental examination and providing environmental and social impact prevention and mitigation measures or environmental impact assessment and establishing environmental management and monitoring plan (EMMP), social management and monitoring plan (SMMP);
- g) to fail to comply with any conditions included in the ECC, environmental and social obligation provided in the Concession Agreement;

- h) to fail to completely implement environmental and social impact prevention and mitigation measures or environmental management and monitoring plan (EMMP), social management and monitoring plan (SMMP);
- i) to fail to comply with any conditions and advisions those provided in the warning document;
- j) to fail to comply with any environmental quality standarts and polluted discharge standards provided;

Water Resources and Environment Administration shall set out the specific legistaion for the detial of the rate of fines separately.

**Article 40: Additional Penalties**

Exept to the penalties provided in Article 37, 38, 39, individuals, entities or any organizations which operate several investment projects, the following penalties may also be imposed for violation of this Decree:

- a) confiscation of vehicle or equipment used involved in the production;
- b) temporary suspension of part or all of the investment project in accordance with the order of Water Resources and Environment Administration together with coordination with line ministries and local authorities concerned;

In determining the additional penalties to be imposed, including the period of any temporary suspension, the following factors shall be taken into account

- a) the affect of violation on the environment and society;
- b) the seriousness of the polluting event of violation;
- c) that environmental and social impacts is the foreseeable ability but without provision of mitigation measures or is the unforeseen ability;
- d) any previous violation history of the project developer;
- e) any previous violation history from the investment project;

If the violation creates damage on environment, the project developer may be ordered and required to be responsible for expense for clean up or remedy the environment.

## **Chapter IX Final Provisions**

**Article 41: Impementatoin of Decree**

The Water Resources and Enviornment Administraiton assigned to be a central coordination with line ministries and local authorities concerned to implement, desiminate and effectively comply this Decree.

Government and private individuals, entities and any organizations concerned shall realize and comply strictly this Decree.

**Article 42: Effectiveness**

This Decree is effective afterward 30 days from the date of signature; any previously issued agreements, provisions and regulations which are in contradiction with this Decree are hereby annulled.

Signed and Sealed

**Prime Minister of Lao PDR,**

**In the event of an emergency** or where, in the opinion of the working unit there is a violation of the ECC, the project owner shall grant access to the working unit at any time.

**Scoping for TOR** means process of determination of essential impact that requires study, collection of necessary data to make up report on assessment of impact on environment and society which WREA will inspect and approve as framework.