SANAKHAM HYDROPOWER PROJECT

Social Management and Monitoring Plan

October 2018
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP</td>
<td>Affected Person/People</td>
</tr>
<tr>
<td>CA</td>
<td>Concession Agreement</td>
</tr>
<tr>
<td>CDB</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CITES</td>
<td>Convention on International Trade in Endangered Species</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EM</td>
<td>Environmental Manager</td>
</tr>
<tr>
<td>EMMP</td>
<td>Environmental Management and Monitoring Plan</td>
</tr>
<tr>
<td>EMO</td>
<td>Environment Management and Monitoring Office</td>
</tr>
<tr>
<td>EMU</td>
<td>Environmental Management UNIT</td>
</tr>
<tr>
<td>EPL</td>
<td>Lao Environmental Protection Law</td>
</tr>
<tr>
<td>ESMI</td>
<td>Environmental/Social Monitoring and Inspection Unit</td>
</tr>
<tr>
<td>EPL</td>
<td>Environmental Protection Law</td>
</tr>
<tr>
<td>GOL</td>
<td>Government of Lao People’s Democratic Republic</td>
</tr>
<tr>
<td>ha</td>
<td>Hectares</td>
</tr>
<tr>
<td>HPP</td>
<td>Hydroelectric Power Project</td>
</tr>
<tr>
<td>IEE</td>
<td>Initial Environmental Examination</td>
</tr>
<tr>
<td>km</td>
<td>kilometers</td>
</tr>
<tr>
<td>km²</td>
<td>Square kilometers</td>
</tr>
<tr>
<td>LB</td>
<td>Left Bank (of the Mekong River)</td>
</tr>
<tr>
<td>MAF</td>
<td>Ministry of Agriculture and Forestry</td>
</tr>
<tr>
<td>masl</td>
<td>Meters above sea level</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MONRE</td>
<td>Ministry of Natural Resources and Environment</td>
</tr>
<tr>
<td>MRC</td>
<td>Mekong River Commission</td>
</tr>
<tr>
<td>MW</td>
<td>Megawatts</td>
</tr>
<tr>
<td>NBCA</td>
<td>National Biodiversity Conservation Areas</td>
</tr>
<tr>
<td>NCG</td>
<td>National Consulting Group</td>
</tr>
<tr>
<td>NESMC</td>
<td>National Environment and Social Management Committee</td>
</tr>
<tr>
<td>NTFP</td>
<td>Non Timber Forest Products</td>
</tr>
<tr>
<td>PESMC</td>
<td>Provincial Environment and Social Management Committee</td>
</tr>
<tr>
<td>RAP</td>
<td>Resettlement Action Plan</td>
</tr>
<tr>
<td>RB</td>
<td>Right Bank</td>
</tr>
<tr>
<td>RS</td>
<td>Resettlement Section</td>
</tr>
<tr>
<td>SESO</td>
<td>Standard of Environmental and Social Obligations</td>
</tr>
<tr>
<td>SDS</td>
<td>Social Development Section</td>
</tr>
<tr>
<td>SIA</td>
<td>Social Impact Assessment</td>
</tr>
<tr>
<td>SMO</td>
<td>Social Management and Monitoring Office</td>
</tr>
<tr>
<td>SMMP</td>
<td>Social Management and Monitoring Plan</td>
</tr>
<tr>
<td>STEA</td>
<td>the Science Technology and the Environment Agency</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
</tr>
<tr>
<td>Acronym</td>
<td>Organization Name</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WREA</td>
<td>Water Resource of Environmental Agency</td>
</tr>
</tbody>
</table>
1. **INTRODUCTION AND OBJECTIVES**

1.1 **THE PROJECT**

Mekong Sanakham Hydroelectric Power Project (HPP) is one of 12 projects being studied that are located on the Mekong River. This Project is being studied extensively including a technical feasibility study, environmental and social impact assessments.

1.2 **OBJECTIVES OF THE SOCIAL MANAGEMENT AND MONITORING PLAN**

This report is developed from the SIA. Public consultations have been carried out with the local community to gather the data and to learn of their initial reactions to the project as prescribed by the Government of Lao PDR (GOL) which is central to the preparation of environmental and social assessments for hydropower projects. The principles are stated in the Lao national policy (561/NPA), which encourages involvement of stakeholders at the local level to ensure that benefits reach the people concerned. The recommendation of appropriate and sufficient mitigation measures as well as management plans are required in order to make sure all anticipated or unforeseen impacts caused by the project have been taken into account and included in the project design.

1.3 **SMMP PROCESS**

As part of the outcomes of the SIA study, NCG is required to prepare a SMMP. The overall objective of the SMMP is to improve the welfare of the people living in the project area who might be adversely affected by the project. Therefore, it is important that the SMMP is developed under the following guiding principles:

- Minimize the resettlement of the project Affected People (AP).
- Provide adequate funding and support from the project to ensure that the living standard of the Project’s affected people are restored to at least the same level as prior to the Project development.
- Allow APs to participate in the design, planning and implementation of the Resettlement Action Plan (RAP).
Identify gender and ethnic group concerns and include their specific needs and perspectives to be included in all components, strategies and planned activities.

Maintain the social and cultural cohesion of villages to minimize cultural and livelihood disturbance.

Provide adequate livelihood restoration activities and infrastructure to minimize livelihood disturbance.

Have a transparent methodology for all planning, implementation and compensation tasks.

The SMMP will also include:

- Institutional responsibilities.
- Budget estimation.
- Time and duration schedules.
- Internal and external monitoring plan.
2. PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The Mekong Sanakham HPP is located on the mainstream of the Mekong River, 1.4 km upstream of Nam Heuang River, Kenthao District, Xayaboury Province, Lao PDR. The damsite is 25 km upstream from Sanakham Township, Lao PDR, 155 km upstream from Vientiane, Lao PDR, 81 km downstream from the proposed Pak Lay HPP and 1,737 km away from the Mekong River estuary in Vietnam where the river flows into the South China Sea. The damsite and other proposed projects on the Mekong River are shown in the figure below.
2.2 PROJECT FEATURES

Mekong Sanakham HPP (Figure 2) would be developed mainly for power generation and is designed with features for river navigation and fish passage. The Mekong Sanakham HPP is a run-of-river type of dam. Major structures (Figure 3) include the following: powerhouse, sluice gate, 500 ton navigation lock and fishpass. The specifications of the dam are as follows: normal water level is 220 masl; dam crest level is 230.5 masl; total installed capacity of the power plant is 684 MW; average annual energy output is 3,570 GWh with the annual utilization hours of 5,285 hours. There are 12 bulb turbines in total, with a discharge of 5,500 m$^3$/s.

The majority of the electricity produced is proposed to be transmitted to the Thailand power grid through 500 kV transmission lines and the remaining electricity will be transmitted to Vientiane through one circuit of 230 kV. The catchment area of the whole basin is 795,000 km$^2$. The catchment area above the dam site is 290,103 km$^2$. 
2.3 PROJECT COMPONENTS

Table 1: Project Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retaining Structure</td>
<td>The whole structure of the project across the Mekong River has a total length of about 893 meters with a crest elevation of 230.50 meters and a height of 57.2 meters.</td>
</tr>
<tr>
<td>Reservoir</td>
<td>Construction of the dam across the Mekong River will create an upstream reservoir area of 131.64 km$^2$ at normal pool level 220 masl with a reservoir volume of 987 million m$^3$ and a backwater length at normal pool level of 81 kilometers.</td>
</tr>
<tr>
<td>Navigation Lock</td>
<td>A single-line one stage ship lock in the left bank floodplain on the right side of sluice gate. It will consist of the following: upstream approach channel, upstream lock head, downstream approach channel, U/S and D/S berthing piers. Dimension of navigation lock is 120 x 12 x 4 meters. Maximum navigation clearance is 8 meters. The mean duration of passing the lock for a vessel is tentatively defined as 40 minutes; the daily mean passing frequency is 20. The number of navigable days is 330; the annual total dead weight tonnage of one way passing is 2.64 million tons. The daily mean water consumption is about 5.6 m$^3$/s.</td>
</tr>
<tr>
<td>Sluice Gates</td>
<td>To minimize reservoir sediment and reduce land inundation impact from the reservoir tail, 18 sluice gates will be part of the design. There will be 11 surface flood flow releasing and sand flushing sluice gates on the left bank; there will be 7 low level outlets, 4 on the right bank and 3 on left bank, which are designed for operation during the flood season and will facilitate the discharge of sediment. The dimensions of each sluice gate are 15 x 22 meters.</td>
</tr>
</tbody>
</table>
**Power House**

One power house dam section is arranged on the riverbed on the right side; it has 12 bulb tubular units with a total Capacity of 684 MW. The Power house dam section is 343 meters long.

**Fishpass**

The fishpass will be designed to connect the migratory paths of fish. The proposed design consists of an entrance, fishpass pond, resting pond, flood gate and maintenance gates at the entrance and exit. The size of fishpass opening is 5x3 meters and the overall length of the fishpass is 1455 meters.

### 2.4 PROJECTED AFFECTED AREAS

#### 2.4.1 INUNDATED AREA

The project will create a reservoir with a capacity of 987 million m$^3$ (below PMF level 222.15 masl) and 8.27 million m$^3$ (below normal water level 220 masl). The inundated land includes arable land (565.14 ha), orchards (59 ha), woodlands (1,750.74 ha) and homesteads (28.1 ha). In the project area, approximately 10,724 people (see Table 2) will be affected by project activities, either directly/severely or indirectly/partially. However, only about 2,935 severely affected APs will be required to actually resettle or relocate.

#### 2.4.2 CONSTRUCTION AREA

The land area in the vicinity of damsite will be used for office and living facilities, warehouses, electrical and mechanical equipments assembly yard, auto repair workshop, materials make up area, machinery depot, concrete batching plant, quarry sites, disposal areas and roads.

#### 2.4.3 ROAD ACCESS

A road from Sanakham Township to the dam site and a road from Kenthao Township to the dam site on the right bank will be reconstructed. In addition to constructing new bridges, any access roads must be reinforced or rebuilt to meet transportation requirements.

An access road from Pakmee Village to the dam work area totaling 24.2 km will be constructed. This includes 6.35 km going around the seat of the village of Sanakham. The access road is a highway grade III asphalt surfaced type with two lanes and a design speed
of 30 km/hour. A similar design will also be used for access to the quarry site with the total length of 1.88 km which will connect to the main access road.

### 2.5 PROJECT IMPLEMENTATION SCHEDULE

The project implementation time will be divided into 2 periods, preparation and construction:

- **Preparation**: 15 months
- **Construction**: 75 months
3. IDENTIFICATION OF POLICY FRAMEWORKS FOR SMMP

In recent years, Lao PDR with assistant from international funded projects has reviewed and updated legislation on Environmental and Social management. Below are some selected policies and legislative framework that are relevant to this SMMP but contractors are responsible for completely following all laws and regulations of the Lao PDR.

3.1 LAWS, REGULATIONS

3.1.1 ENVIRONMENTAL PROTECTION LAW

The Lao Environmental Protection Law (EPL), disseminated in 1999, established a framework for environmental management of environmental resources with the objective of preserving and facilitating the sustainable use of natural resources. The Science Technology and the Environment Agency (STEA) is responsible for the implementation of EPL. Other ministries issue guidelines for implementing provisions but ultimately STEA issues the environmental certificate.

The basic precept of the EPL is that all persons or organisations residing in Lao PDR have an obligation to protect the environment. People or parties who cause damage to the environment are responsible for the impact under the EPL. Relevant Sections of the EPL include:

Article 5: The EPL stipulates that natural resources, raw materials and energy shall be used in an economical manner to minimise pollution and waste and to allow for sustainable development.

Article 8: All development projects and activities that have the potential to affect the environment shall require an Environmental Impact Assessment (EIA).

Article 22: It is the obligation of all organisations to control pollution in accordance with the Environmental Quality Standards set forth in regulations by the various agencies involved.

Relevant Governmental Decrees, Regulations and Standards include:

- The Implementing Decree of (2002) provides the legal tool for implementation of the law.
• The **Environmental Management Standard** (2001) stipulates the minimum requirements to develop a project.

MONRE has also developed a set of regulations for conducting the Environmental Impact Assessment (EIA) of proposed hydropower projects (2000, 2001). These regulations and standards established general impact assessment requirements, including a timing of the EIA in the project development cycle. They stipulate detailed project screening, Initial Environmental Examination (IEE) and EIA requirements, including content and format of reporting, and approval of the report.

### 3.1.2 FORESTRY LAW (2007)

The Forestry Law defines the principles and regulations on the use, management, protection, conservation, regeneration, utilization and conversion of forest resources. The aim is to make forest resources a sustainable support to national, economic and social development while ensuring the protection and conservation of watersheds, guarding against soil erosion, protecting plant and wildlife species and the environment.

Three categories of forests were identified: Protection Forest, Conservation Forest (or National Biodiversity Conservation Areas) and Production Forest.

Other aspects of the forestry law are as follows:

• Implementation responsibilities of the Ministry of Agriculture and Forestry (MAF) at the national level, provincial and district forestry offices, including responsibility for issuing land-use certificates at the district level.

• That forest and forest land can be converted to other uses (e.g., for national infrastructures projects such as transmission line rights-of-way, etc.) when necessary and if in the public interest, and subject to the approval by the government representative under the proposal from the responsible authorities.

• An individual or organization given permission to convert forest to another use is responsible for payment of a conversion fee, land reclamation and tree planting.

• Provision for allowing long practiced activities such as collecting wood for fences and fuel, non-timber forest products (NTFP), hunting and fishing for non-protected species for household consumption, and other customary uses.
• Provision for setting up a fund for activities such as protection and conversion of
toys, tree planting, and forest regeneration to protect and conserve watersheds,
the environment and wildlife.

The Amended Forestry Law also states that:

• Compensation is based on the areas (ha) of forest and/or volume of timber (m³) of a
given class or species of tree that will be cut down. Compensation is only paid for
timber removed from private forestry plantations. No compensation is paid for
timber removed from natural forests on public lands. Nor is any compensation paid
for removal of any kind of natural NTFPs, except for villagers’ planted NTFPs such
as bamboo and other products.

• There is no requirement to replant trees on degraded land located away from a
transmission line corridor, as compensation for removing trees to create a
transmission line right-of-way. Such forms of compensation only apply to reservoir
clearing projects, where it is necessary to plant trees to stabilize slopes that could
otherwise fail through a process of mass wasting.

• Compensation rates range from US$23/m³ for lesser qualities and grade of timber
species, up to a maximum of US$999/m³ for superior qualities of timber species.
These rates are established by the GOL as a schedule within regulations under the
Forestry Law.

• During the alignment survey, the Department of Forestry in collaboration with
Provincial or District forest office staff will assess the volume of natural or
plantation forest that will be removed by a project. An assessment report is
prepared and sent to the Department of Forestry in Vientiane, which is responsible
for evaluating requests for timber removal and providing approvals.

• Timber removed from a project infrastructure site by a proponent will be sold
according to the regulations concerned under the Industry and Commerce Sector. If
timber is removed from a private tree plantation, the Project Proponent is
responsible for compensating the owner of the plantation.

• During transmission line construction, the Provincial Forestry Section or District
Agriculture and Forestry staff will demarcate the boundary along the two sides of
be levied against the contractor for any timber that is cut and does not receive a timber mark from the forestry department. This is aimed at preventing illegal logging.

The Project Proponent is responsible for paying for all costs incurred by the Department of Forestry, including costs of preparing timber cutting assessments during alignment surveys, and timber scaling and marking during construction.

### 3.1.3 WATER LAW

The Water Law (1996) is intended to assure the sustainable use of water. The Water Resources Committee under the Prime Minister’s Office administers the Water Law and is responsible for the review and evaluation of EIAs related to use of Water resources.

Relevant sections of the Water Law (1996) include:

- **Article 14** divides water use into small, medium and large-scale uses.
- **Article 4** defines the rights obligations and procedures for gaining approval for use of water resources.
- **Article 18** establishes the requirements for the preparation of an EIA for any large-scale use of water.
- **Article 17** states that medium and large-scale uses of water resources are restricted to permitted reservoir developments.

Note: The Lao Water Law does **not** require the development of a Basin Management Plan for Hydroelectric projects.

### 3.1.4 ELECTRICITY LAW (2008)

In December, 2008 National Assembly adopted the updated Electricity Law. This updated law provided more clear terms and definitions of the electricity services. The articles of law below are relevant in the development of Electricity projects and the maintenance and management of the environmental and social conditions where the projects are located.

**Article 5:** Government policy on the electricity

The government of Lao PDR encourages private individuals, organizations and internal and international entities to invest in electricity development activities of the
country including the generation, transmission, distribution and service of electricity resources, especially for hydropower projects which directly protect the watershed and provide electrical service to remote areas; where possible, the government will give incentives on taxes, custom fees, or the right to use natural resources (according to laws and regulations).

The GOL promotes the development of electricity services that are safe, efficient, sustainable, and that use modern methods and advanced technologies while minimizing any environmental or social impacts.

The GOL also wishes to provide electricity due to the need for national socio-economic development, contribution to national security and defense, and the improvement of the living conditions of local people.

**Article 6**: Principles of the electricity infrastructure development

Providing the service of electricity has to follow these principles:

1. Complement the socio-economic development plan.
2. Be efficient, safe and sustainable.
3. Protect the existing social, economical and environmental situation, especially forests and watershed.

**Article 29**: Concession for electricity projects consist of a pre-feasibility study, memorandum of understanding, detailed survey, project feasibility study, environmental and social impact assessment, estimation of the project cost, project development agreement and concession agreement.

**Article 30**: Feasibility Study for electricity projects which consists of:

1. Project feasibility in term economic and technical details.
2. Determination of the maximum electricity generation possible.
3. Estimation of the project cost.
4. Estimation of the project life and maintenance cost of the dam and all associated project components.
5. Estimation the price and market for the electricity.
6. Development and implementation plan including: construction, installation and time of commissioning.
Article 31: Environmental and social impact assessment of the project which consists of:

1. Prediction of the environmental impact using different scenarios by proposing the method, mitigation, or reduction measures to the project and any negative impacts to environment, water courses, surface and underground soil, ecology, biodiversity and fish and wildlife habitats.
2. Assessment of the losses and resettlement from the project development.
3. Details of the reduction of the water volume going downstream including the cumulative impact that may directly result in flooding during the rainy season or the diversion of water to other rivers (or other methodologies may be proposed).
4. All costs resulting from any mitigation measures relating to steps 1, 2 and 3 above (Article 31) will be included in the project investment cost.

Article 40: Land use of electricity projects as to be as follows:

1. Project developers have to clearly define project land area; methods of land compensation and resettlement has to be included in the project feasibility study, and environment and social impact study of the project.
2. The Energy and Mines sector will have to cooperate with the land management administration, other concerned sectors and local administration in terms of land use planning of any concession granted land.
3. Land administration will hand over land use right to Project Developers according to the Land law of Lao PDR after project approval.

Article 41: Contribution to a fund.

Project Developers not only pay taxes and royalty to government as per an agreement, they will also have to contribute to the fund for the protection of the environment in project concession area, surrounding area, watershed, downstream area of the project and to the infrastructure and social development of the local area of project.

3.1.5 LAND LAW

In 2003, the Land Law of Lao PDR was amended and the following articles are newly defined and the following are relevant to the development projects.
environmental and social management of
Article 3 (New): Land Ownership.

Land of the Lao PDR is under the ownership of the national community as prescribed in Article 17 of the Constitution in which the State is charged with the centralized and uniform management of land throughout the country and with the allocation of land to individuals, families and economic organizations for use.

Article 4 (New): Promotion of Land Development.

The State promotes all economic sectors and parts of society to contribute to land development by the following:

- Laying down policies and methods.
- Education and training.
- Creation of funds for conservation and improvement of land.
- The promotion of investment in labor, equipment, capital, technology, infrastructure.
- Effective administration so that land may become of better developed and increase in value.

Article 8 (New): Land Management Organization.

The land management organization in the Lao PDR consists of:

- National land management authority.
- Provincial, city land management authorities.
- District, municipality land management authorities.
- Village land units.

Article 9 (New): Land Management.

The State is in charge with the management of land for the whole country in a centralized and uniform manner in which the government assigns management responsibilities to the national land management authority as prescribed in Article 10 of this law and coordinates with concerned sectors and local administrations, assigns responsibility for the management of land use to concerned sectors such as the following: Ministry of Agriculture and Forestry; Ministry of Energy and Mines; Ministry of Communication; Ministry of Transport; Ministry of Post; Ministry of
Social Management and Monitoring Plan

Public Works and Transports; Ministry of Information and Culture; Ministry of National Defense; Ministry of Security.

**Article 10** (New): Rights and Duties of Land Management Authorities.

The land management authorities have the following rights and duties:

1. To study and develop drafts of policies, laws, Presidential edicts, decrees, regulations, and rules and principles on land management.
2. To undertake land survey, land classification and land use planning at the local, regional and national levels.
3. To coordinate with concerned sectors and local administrations to plan the use of land, to protect and develop land, to classify land, to assess the quality of land, to define land areas for certain uses and to monitor such land use.
4. To allocate land use rights, to lease or grant concessions, and to withdraw the right to use land.
5. To develop land registers, make land evaluations, conduct land registration, issue land titles, and collect land statistics.
6. To collect land tax.
7. To settle land disputes.
8. To manage State land and protect the environment.
9. To define policies on the management of its organization and transactions for the sale and purchase of rights to use land.
10. To develop a data and information system on land.
11. To define policies and regulations to protect people who perform their professions on land such as: land surveyors; land values assessor; brokers or representatives of land sellers or buyers.
12. To exercise such other rights and performs such other duties as assigned by the government.

**Article 11** (New): Classification of Land Regions and Land Categories.

Land in the whole country is divided into the following zones, regions and categories:

1. Classification of zone:

Plain zone, plateau zone and mountainous zone consisting of:
• Municipal zone
• Rural zone
• Specific economic zone
• Special economic development zone

2. Classification of land categories:

• Agriculture
• Forestry
• Wetland
• Industrial land
• Communication land
• Cultural land
• Land for national defense and security
• Construction land

**Article 12** (New):

The government is charged with the zoning and demarcation of boundaries for each land category throughout the country and, thereafter, with their submission to the National Assembly for approval.

Local administrations are charged with the determination of land categories which are under their jurisdiction in accordance with the determination of boundaries for land categories made by the State and, thereafter, with their submission to the higher administrative authorities for consideration and approval.

**Article 27** (New):

Industrial Land: Industrial land is the land area or region which is determined by the State to be the location of workshops and factories, including the housing for workers. Also including the following: industrial centres; industrial zones; industrial estates; places for industrial, technical and scientific research; waste-water treatment stations; industrial waste disposal sites; energy sources; electricity transmission lines; energy and gas pipe-lines; pipe-lines for water supply; mining areas, and other land used for industrial purposes.

**Article 28:**
Management of Industrial Land: The Ministry of Industry and Handicrafts (now Ministry of Energy and Mines) is charged with the managing of industrial land, and with studying and developing the regulations on the management, protection, development, and use of this category of land, including environmental protection, and, thereafter, submitting to the government for consideration and approval.

In the case of the management of land used for electricity transmission lines, energy and gas pipelines, and pipe-lines for water supply, it is required to coordinate with the transport, post and construction sector and other concerned sectors.

**Article 29**: Regulations on the Use of Industrial Land: Individuals and organizations using industrial land shall comply with the following conditions:

1. Have been authorized by the industry and handicrafts sector.
2. Have been authorized by the town planning organizations.
3. Cause no harm to any other person, to the public or to the environment.
4. Repair and restore the land to its previous condition after using the land for mining.

### 3.1.6 ARCHAEOLOGY LAW

Under Lao law all potential archaeological sites are Protected Areas until approval for development of such sites is given by the Ministry of Education and Culture. It is necessary to obtain approval for development of the reservoir area from the Ministry of Education and Culture.

### 3.1.7 LEGAL STATUS OF ETHNIC GROUPS IN LAO PDR

The Lao PDR Constitution (1991) and other legislation recognize the unity and equality of ethnic groups in the political process and protect their rights to preserve and improve their unique traditions and culture (Articles 1, 2, 3, 8 and 22). All ethnic minorities are Lao citizens, possess family books and identity cards, have the right to use native languages and to practice traditional customs and religion (Const., Articles 8 and 9). The Constitution prohibits any act that discriminates against or divides ethnic groups (Article 8). Ethnic groups maintain land tenure user rights equal to all Lao citizens with certain specifications (see Section 3.1.5.1) and even preferential access and customary user rights to certain forest products (Forestry Law, Article 30; MAF Regulation 535; MAF Orders 54 and 377).
As the primary legal document in Lao PDR, the Constitution provides a framework and minimum rights to be implemented in legislation. However, since the court system remains underutilized, it is difficult to enforce such rights or resolve conflicts between ethnic groups and the government or other stakeholders. Legislation in Lao PDR recognizes primary land tenure and resource user rights for ethnic groups, but most of them remain unaware of these rights under national legislation due to the inability of the government to provide extension to remote ethnic villages. Thus any project within the Watershed Management Area should focus on providing extension of legislation and rights to the ethnic groups and assist in establishing village based rules, zoning and management.

The National Assembly has a special Committee on Ethnic Affairs to draft and evaluate proposed legislation to ensure that the concerns of ethnic minorities are incorporated and not infringed upon. The lead institution for ethnic affairs in Lao PDR is the Lao National Front for Construction (LNFC), which has an Ethnic Affairs Department. Research on ethnic groups is the responsibility of the Institute for Cultural Research under the Ministry of Information and Culture.

The country's new constitution, enacted in August 1991, ensures equal rights for both sexes in the political, economic, cultural, social fields, and family affairs. The role of the Lao Women's Union (LWU) is also recognized in the constitution with an information gathering and service delivery role. Among the 21 other laws which have been enacted since January 1992, some are related to gender issues. Among these are Property Law, Inheritance Law, Insurance Law, Labour Law, Family Law and Election Law.

3.1.8 LAO PDR ENVIRONMENTAL IMPACT ASSESSMENT GUIDELINES, NOVEMBER 2011

This guideline defines requirements and methodology for Environmental and Social Impact Assessment in Lao PDR.

3.1.9 STANDARD OF ENVIRONMENTAL AND SOCIAL OBLIGATIONS (SESO), MONRE, LAO PDR, APR 2012.

SESO is a set of laws, rules, guidelines etc. that define project development requirements of contractors in Laos; this includes the time frame of before, during and after a project has been completed.
3.2 DECREES

The key issues of Decree on Compensation & Resettlement of the Development Project, No. 192/PM, dated 07/07/2005 include:

- Project owners shall compensate project affected people (AP) for their lost rights to use land and for their lost assets (structures, crops, trees, and other fixed assets), affected in full or part, at replacement cost.

- When possible land held by APs that is to be used for a project such as agricultural, residential or commercial land, shall be compensated through provision of “land for land” arrangements of equivalent size and productivity and be acceptable to APs and project owners.

- If the house or structure is unviable for continued use or the remaining area is less than the minimum house size, the AP shall be entitled to be compensated for the entire structure at replacement cost without depreciation or deduction for salvage materials. In case the remaining structure is viable for continue use, project owners shall provide compensation for the lost portion and assistance in cash or material for restoration of the remaining structure.

- APs whose land or assets are temporary taken by the implementation of the project shall be fully compensated for their net loss of income, damaged assets, crops, trees, etc. Also, the project owners shall ensure that the land or assets are returned to their pre-project state.

- Tenants, who have leased a house or structure for any purpose and are affected by the project, shall be compensated for their lost assets in the amount equivalent to three months rental allowance, and shall be assisted in finding alternative rental accommodation.

- APs who are living in rural or remote areas, who do not have any legal Land Use Certificate or any other acceptable proof indicating land use right to the affected land and assets they occupy shall be compensated for their lost assets at replacement cost and provided additional assistance to ensure they are not worse off due to the project.
• All APs, regardless of land use right, will be entitled to compensation for lost assets (structures, crops, trees) at replacement cost, and provided with other assistance during the transition period, as well as economic rehabilitation assistance to ensure that they are not worse off due to the project.

• All previous claims and unresolved issues related to tenure status and ownership of land and other assets affected by the sub-project or components shall be resolved prior to initiating any new land acquisition measures on the representatives from all stakeholders in order to assess the loss to the APs.

• Prior to the commencement of project construction, APs shall be fully compensated and resettled, and rehabilitation measures shall be in place, although not necessarily completed yet.

APs displaced and/or affected due to the loss of income and livelihood shall be provided with the following assistance until their income levels and living conditions can be stabilized:

(a) Transport allowance or assistance in kind to transfer to the resettlement site or their choice of relocation.

(b) Food allowance, in cash or in kind to compensate for income lost, during the transition period.

(c) Suitable development assistance after displacement during the transition period until they are able to restore their income or improve their living standards.

(d) All APs severely affected by the project due to loss of 20% or more of productive income generating assets (loss of agricultural, industrial or commercial resources shall be entitled to sustainable income restoration measures in addition to their entitlement for compensation and other allowances enabling them to attain pre-project livelihood levels.

(e) For displaced persons whose land based livelihood are affected due to the project, preference shall be given to land-based resettlement strategies, or where land is not available, options built around opportunities for employment or self-employment.
(f) For displaced persons whose businesses are affected due to the project, in addition to compensation for lost land, structures, and income, assistance shall be given to finding replacement sites for business as appropriate.

(g) These rehabilitation measures shall specifically focus on vulnerable groups. Adequate assistance, in addition to compensation for affected assets and other allowances, shall be provided to enable such APs to achieve household income targets set above the national poverty line.

(h) Project owner shall restore or repair community facilities and infrastructure that are damaged due to the project, at no cost to the community.

(i) Any impact or restriction on access to resources managed by affected community as a common property shall be mitigated by arrangements ensuring access to improved or at least equivalent resources on a continuing basis. Attention shall also be paid to directly affected APs if their benefits are affected due to the loss of access to common property resources.

3.3 OTHER LEGISLATION RELEVANT AND INTERNATIONAL REQUIREMENTS

Mekong Sanakham Hydroelectric Power Project is applying World Bank (WB) Safeguard Policies into its implementation of the Environment and Social Management and Monitoring. Below are some key WB policies:

Two policies cover social safeguards including involuntary resettlement and indigenous people.

a) Involuntary Resettlement

The WB’s safeguard policy on Involuntary Resettlement – OP 4.12 (December 2001) – seeks to ensure that impoverishment risks due to involuntary resettlement are addressed and minimized.

The policy has the objectives to:

1) Avoid resettlement where possible, and otherwise minimize through alternative project designs.

2) Resettlement should be conceived and executed as a sustainable
development program.

3) Affected people should be meaningfully consulted, and encouraged to participate in planning and implementing resettlement plans.

4) Displaced people should be assisted to improve, or at least restore their livelihoods and standards of living.

The policy covers direct economic and social impacts that result from the following:

- The involuntary taking of land resulting in the following:
  - relocation or loss of shelter.
  - loss of assets or access to assets.
  - loss of income sources or means of livelihood, whether or not the affected persons must move to another location.

- The involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of APs.

Where impacts on the affected population are minor, an abbreviated resettlement plan may be prepared. For projects causing significant resettlement (more than 200 people are displaced or will lose 10% of productive/income generating assets), a full resettlement plan is required. The resettlement plan will include measures to ensure that people are informed about their options and rights pertaining to resettlement; consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives; and provided prompt and effective compensation at full replacement cost for losses of assets attributable directly to the project.

The policy requires that in the resettlement planning process:

1) Affected people and their communities, as well as host communities, are provided timely and relevant information, consulted on resettlement options, and offered opportunities to participate in resettlement planning, implementing, and monitoring;

2) At new resettlement sites, infrastructure and public services are provided as necessary to improve, restore, or maintain accessibility and levels of service. Alternative or similar resources are provided to compensate for the loss of
access to community resources (such as fishing areas, grazing areas, fuel, or fodder); and

3) Patterns of community organization appropriate to the new circumstances are based on choices made by the affected people, and existing social and cultural institutions of those people are preserved.

To achieve the objectives of the policy, WB requires that particular attention be paid to the needs of vulnerable groups among those displaced, especially those below the poverty line, the landless, the elderly, women and children, ethnic minorities, or other displaced persons who may not be protected through national land compensation legislation.

b) Indigenous People

The WB’s safeguard policy on Indigenous People – OP 4.10 (January 2005) – recognizes that there is no universally accepted definition of indigenous peoples, and does not try to define the term. Indigenous Peoples may be referred to in different countries by such terms as “indigenous ethnic minorities,” “aboriginals,” “hill tribes,” “minority nationalities,” “scheduled tribes,” or “tribal groups.”

For purposes of the safeguard policy, the term “indigenous peoples” is used in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the following characteristics in varying degrees: (a) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others; (b) collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories; (c) customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and, (d) an indigenous language, often different from the official language of the country or region.

Experience of the WB has shown that resettlement of ethnic minority people with traditional land-based modes of production is particularly complex and may have significant adverse impacts on their identity and cultural survival. For this reason, the WB requires that the borrower/project developer has explored all viable alternative project designs to avoid physical displacement of these groups.
When it is not feasible to avoid such displacement, preference is given to land-based resettlement strategies that are compatible with the cultural preferences of the groups, and such plans or strategies are prepared in consultation with them.

c) Comparison of National Law and World Bank Policy

The recent changes in legislation related to compensation and resettlement in development represents a significant improvement in the rights of citizens when their livelihoods, possessions and society are affected by development projects.

The Decree, similar to WB’s OP 4.12, requires that APs are compensated and assisted to improve or maintain their pre-project incomes and living standards, and are not worse off than they would have been without the project.

1) Both Lao Law and WB policies entitle APs to compensation for affected land and non-land assets at replacement cost. However, definition of severely affected APs varies between WB’s OP 4.12 at 10% and the Government’s Decree 192/PM (Article 8) at 20% of productive and/or income generating assets affected. However, in accordance with Decree 192/PM (Article 6) which entitles all APs to economic rehabilitation assistance to ensure they are not worse off due to the Project, and the provisions of resettlement policies for other hydropower projects that have been agreed between Government and international donors (ADB and World Bank), the definition of severely affected - as people losing 10% or more of their productive or income generating assets - will be adopted as part of the Project’s resettlement policy.

2) Also, both Lao Law and WB policies entitle non-titled APs to compensation for affected assets at replacement cost and other assistance so that they are not made worse off due to the Project. Decree 192/PM goes beyond WB’s policy and provides APs living in rural or remote areas, or APs in urban areas who do not have proof of land-use rights and who have no other land in other places, compensation for loss of land-use rights at replacement cost, in addition to compensation for their other assets and other assistance.

- Both the law (Decree 192) and OP 4.12 require that if non-titled APs are required to relocate, the project will ensure they are provided replacement land at no cost to the APs, or cash sufficient to purchase replacement land.
As GOL has ratified the international agreement and commitment to promote sustainable development, existing policies/plans have taken into account the bilateral and multilateral cooperation to manage the share water resources and sustainable utilization of natural resources.

(1) Mekong River Commission: Mekong River Commission (MRC) succeeded the Mekong Committee, which, among other things, had been instrumental in the planning of Nam Ngum, the first larger hydropower project in Lao PDR. In 1995 the four riparian countries in the lower Mekong basin Cambodia, Laos, Thailand and Vietnam signed agreement on cooperation for sustainable development in the Mekong River Basin. The primary purpose of the Agreement is to promote economic and social well-being of the people in all the riparian countries through the protection of the environment, improvement of navigation and the cooperation in the maintenance of flows and intra-and inter-basins diversions.

(2) ASEAN membership: Lao PDR became a member of the Association of Southeast Asian Nations (ASEAN) in 1997. The principal legal instrument of ASEAN that has potential nature conservation obligations is the agreement on the Conservation of Nature and Natural Resources. However, it has been ratified by only three countries since it was adopted in 1985, and is therefore not in force. ASEAN also has provisions to assist member countries to establish trans-boundary nature reserves.

- International Conventions and treaties: The following conventions also relevant to development projects in Lao PDR:

- Convention on Biological Diversity (CDB) - Lao PDR became a signatory to the CDB in 1992. The obligations of CDB have been fulfilled in terms of new policy and legislation and by establishing National Biodiversity Conservation Areas (NBCAs).

- Convention on International Trade in Endangered Species (CITES) - The Lao PDR ratified Convention on the protection of World Cultural and Natural Heritage - This convention was ratified by GOL in 1987. The convention addresses the protection of both cultural and natural objects and
• This convention was signed in early 2004. Prior to the ratification, the Ministry of Agriculture and Forestry (MAF) issued a regulation that banned all hunting for trade. Hunting for consumption was still allowed. This implies that GOL is now committed to increasing efforts to halt the extensive trade in wildlife from Lao PDR to its neighboring countries.
4. IDENTIFICATION OF SOCIAL IMPACTS

4.1 PROJECT IMPACTS

The SIA identifies and evaluates the potential impacts that a proposed project may have on the social and human health environment and develops mitigation measures that will be incorporated in order to eliminate, minimize or reduce these impacts. It seems reasonable to identify what groups of people will be affected from the development of the Mekong Sanakham HPP and how these impacts differ between these groups. For example, the most severe impacts are due to inundation and land while marginal impacts may be due to disturbance from construction activities including those living in downstream areas that may also be affected from water level fluctuations, etc.

In this regard, we can divide APs into three groups based on geographical impacted zones as follows (Figure 5), (Table 2):

- Group 1 – Upstream and communities residing near construction/quarry sites.
- Group 2 – Downstream communities.
- Group 3 – Resettlement host communities.

![Figure 4: Identification of Affected Social Groups](image)
### Table 2: Summary of the Potential Project Impacted Villages

<table>
<thead>
<tr>
<th>Province</th>
<th>District</th>
<th>No.</th>
<th>Village Name</th>
<th>Population</th>
<th>Affected FM</th>
<th>Affected Assets</th>
<th>Upstream from dam (Km)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FMs</td>
<td>HHs</td>
<td>People</td>
<td>Female</td>
</tr>
<tr>
<td>Xayaboury</td>
<td>Kenthao</td>
<td>1</td>
<td>Houislah</td>
<td>81</td>
<td>77</td>
<td>323</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Khae</td>
<td>150</td>
<td>140</td>
<td>649</td>
<td>308</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>231</td>
<td>217</td>
<td>972</td>
<td>458</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partially flooded</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Donmen</td>
<td>217</td>
<td>217</td>
<td>1,023</td>
<td>511</td>
</tr>
<tr>
<td>Bank Erosion Risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Nakham</td>
<td>72</td>
<td>72</td>
<td>339</td>
<td>172</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>Donsang</td>
<td>82</td>
<td>75</td>
<td>365</td>
<td>169</td>
</tr>
<tr>
<td>Pak Lay</td>
<td></td>
<td>6</td>
<td>Boungma</td>
<td>268</td>
<td>258</td>
<td>1235</td>
<td>616</td>
</tr>
<tr>
<td>No.</td>
<td>City</td>
<td>Affected 1</td>
<td>Affected 2</td>
<td>Affected 3</td>
<td>Affected 4</td>
<td>Relocated</td>
<td>Total Flooded</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
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<td>------------</td>
<td>------------</td>
<td>------------</td>
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<td>---------------</td>
</tr>
<tr>
<td>7</td>
<td>Kengsao</td>
<td>151</td>
<td>161</td>
<td>814</td>
<td>357</td>
<td>29</td>
<td>55</td>
</tr>
<tr>
<td>8</td>
<td>Nasak</td>
<td>168</td>
<td>170</td>
<td>845</td>
<td>404</td>
<td>3</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal Affected (Xayaboury):</strong></td>
<td><strong>1,189</strong></td>
<td><strong>1,170</strong></td>
<td><strong>5,593</strong></td>
<td><strong>2,687</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No. to be relocated (Xayaboury):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>198</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Vientiane</strong></td>
<td><strong>Sanakham</strong></td>
<td><strong>Totally Flooded</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Donsok</td>
<td>36</td>
<td>28</td>
<td>155</td>
<td>73</td>
<td>36</td>
<td>1 1 27</td>
</tr>
<tr>
<td></td>
<td>No. to be resettled:</td>
<td><strong>36</strong></td>
<td><strong>28</strong></td>
<td><strong>155</strong></td>
<td><strong>73</strong></td>
<td><strong>36</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Partially flooded</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Houaytiao</td>
<td>217</td>
<td>166</td>
<td>805</td>
<td>405</td>
<td>56</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td><strong>Bank Erosion Risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Donphoung</td>
<td>135</td>
<td>127</td>
<td>576</td>
<td>255</td>
<td>40</td>
<td>41</td>
</tr>
<tr>
<td>12</td>
<td>Maipakthoun</td>
<td>240</td>
<td>238</td>
<td>1,984</td>
<td>593</td>
<td>54</td>
<td>50</td>
</tr>
<tr>
<td>13</td>
<td>Khokkhaodor</td>
<td>275</td>
<td>247</td>
<td>1,611</td>
<td>492</td>
<td>6</td>
<td>57</td>
</tr>
<tr>
<td>Sub-totally Affected:</td>
<td>903</td>
<td>806</td>
<td>5,131</td>
<td>1,818</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. to be relocated:</td>
<td></td>
<td></td>
<td></td>
<td>156</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total No. to be resettled/relocated by the Reservoir:</td>
<td>267</td>
<td>354</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total No. of Affected by the Reservoir:</td>
<td>2,092</td>
<td>1,976</td>
<td>10,724</td>
<td>4,505</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 4.2 ANALYSIS OF THE SOCIA L IMPACTS

Below is a detailed analysis of social impacts (Table 3)

#### Table 3: Summary of Project Potential Impacts and Mitigation Measures and Responsibilities

<table>
<thead>
<tr>
<th>Duration (Phases)</th>
<th>Component Concerned</th>
<th>Potential Impacts</th>
<th>Significance</th>
<th>Mitigating Measures</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and Construction phases</td>
<td>Resettlement or Relocation of 13 villages; 2,003 households; 4,505 people</td>
<td>Loss of land and altered livelihoods</td>
<td>Major negative</td>
<td>- Full compensation for lands, resources and livelihood lost or changed with the aim that they should be better off than before the project.</td>
<td>RCS/EMO/SMO and EMC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resource access restriction and altered livelihood and social stress caused by resettlement</td>
<td>Major negative</td>
<td>- Livelihood packages, livestock, fisheries and forestry development.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Improved land tenure.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Exclusive rights for resettle people in relation to natural resource management.</td>
<td></td>
</tr>
<tr>
<td>Duration (Phases)</td>
<td>Component Concerned</td>
<td>Potential Impacts</td>
<td>Significance</td>
<td>Mitigating Measures</td>
<td>Responsibilities</td>
</tr>
<tr>
<td>-------------------</td>
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<td>------------------</td>
</tr>
</tbody>
</table>
|                   | Competition for resources (infrastructure and natural resources, reduced capacity of local authorities and marginalization of ethnic groups) | Moderate negative | - Improved institutional capacity for local people, regional and national institutions for implementing resettlement and livelihood development plans.  
- Community or livelihoods development initiatives for resettlement. | RCS/EMO/SMO and EMC |
<p>| Population migration | Influx of people (during the construction and operation) could create inflation, price increases and shortage of goods and services due to increased demand | Minor negative | - Proactive approach and preparation of an influx management plan in association with Social Management and Monitoring Plan (SMMP) initiatives as part of the overall project impact assessment. | EMO/SMO and EMC |</p>
<table>
<thead>
<tr>
<th>Duration (Phases)</th>
<th>Component Concerned</th>
<th>Potential Impacts</th>
<th>Significance</th>
<th>Mitigating Measures</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Public Health and safety</strong></td>
<td>Health impacts include STDs (esp. spread of HIV/AIDS) drug use, alcoholism, poor sanitation, spread of other communicable diseases and human trafficking.</td>
<td>Moderate negative</td>
<td>- Education programmes for Human trafficking prevention, HIV/AIDS prevention, and drug use awareness and prevention for communities, workers and spontaneous settlers.</td>
<td>SDS (Health team) /EMO/SMO and Project Safety Officer.</td>
</tr>
<tr>
<td></td>
<td>Water quality, noise, vibration, dust and social interruption.</td>
<td>Moderate negative</td>
<td>- Monitoring and mitigation by contractors as they will need to prepare contractor’s environmental management plan.</td>
<td>SDS (Health team) and ES/EMO/SMO.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Road accident</td>
<td>Moderate negative</td>
<td>- Village warning for rock explosion, replacement of water supply, appropriate safety measures. - Proper road system design and sign and awareness.</td>
<td>SDS (Consultation Team)/EMO/SMO.</td>
<td></td>
</tr>
<tr>
<td>Duration (Phases)</td>
<td>Component Concerned</td>
<td>Potential Impacts</td>
<td>Significance</td>
<td>Mitigating Measures</td>
<td>Responsibilities</td>
</tr>
<tr>
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</tr>
</tbody>
</table>
| Education        | Increase in students drop out rates during construction period | Moderate negative                                                 | - Education and community development initiatives for resettlers.  
- Assist in improving existing facilities to required standard and capacity to accommodate student population from workers families.  
- Construction of new secondary and primary schools. | SDS (Education Team)/EMO/SMO.                                                      |
| Economic opportunity | Increased employment opportunity  
Commercial opportunity | Moderate beneficial                                                 | - Contract specification, priority is given to local laborers and technicians.  
- Training for local people. | SDS (Community Development Team)/EMO/SMO.                                                      |
<table>
<thead>
<tr>
<th>Duration (Phases)</th>
<th>Component Concerned</th>
<th>Potential Impacts</th>
<th>Significance</th>
<th>Mitigating Measures</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| Operation phases | Socio/Livelihood    | Changes in ecology and accessibility to rivers for people dependent on aquatic resources for nutrition | Major negative      | - Monitoring of erosion along the river at downstream and provision of compensation as needed.  
- Fishery monitoring and compensation as needed, alternative protein replacement programme.                                                                                                            | SDS (Community Development Team)/EMO/SMO. |
|                  |                     | Loss of NTFPs and natural resource use                                             | Major negative      | - Develop compensation and livelihood development program.                                                                                                                                                            | SDS (Community Development Team)/EMO/SMO. |
| Public health    |                     | Increase of dusts from transportation of the materials in-out of the project       | Moderate negative   | - Watering roads in the area that are close to the community.  
- Set up warning signs and speed limit.  
- Provide adequate year round road water supply to directly and indirectly impacted villages that are                                                                                                       | SDS (Health team)/EMO/SMO and Project Safety Officer. |
<table>
<thead>
<tr>
<th>Duration (Phases)</th>
<th>Component Concerned</th>
<th>Potential Impacts</th>
<th>Significance</th>
<th>Mitigating Measures</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>water-borne disease</td>
<td>close to transport areas or access roads.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Health and safety</td>
<td>Health impacts includeSTDs (esp. spread of HIV/AIDS) drug use, alcoholism, poor sanitation, spread of other communicable diseases and human</td>
<td>Minor negative</td>
<td>- Education programmes for Human trafficking prevention, HIV/AIDS prevention, and drug use awareness and prevention for communities, workers and spontaneous settlers.</td>
<td>SDS (Health team) /EMO/SMO and Project Safety Officer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drinking water quality</td>
<td>Major beneficial</td>
<td></td>
<td>- Construction of village drinking water supply.</td>
<td>SDS (Community Development Team) /EMO/SMO.</td>
</tr>
<tr>
<td></td>
<td>Road accident</td>
<td>Minor negative</td>
<td></td>
<td>- Proper road system design including traffic signs.</td>
<td>SDS (Health team) /EMO/SMO and Project Safety Officer.</td>
</tr>
<tr>
<td>Duration (Phases)</td>
<td>Component Concerned</td>
<td>Potential Impacts</td>
<td>Significance</td>
<td>Mitigating Measures</td>
<td>Responsibilities</td>
</tr>
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<td>------------------</td>
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<td>-------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>Good access to educational facilities</td>
<td>Major beneficial</td>
<td>- Construction of primary and secondary schools</td>
<td>SDS (Education Team)/EMO/SMO.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Occupational training centre to be provided to local people to prepare for project employment.</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>electrification</td>
<td>Good electricity facility</td>
<td>Major beneficial</td>
<td>- Provide free electrical connection to the new resettlement villages as part of the compensation package.</td>
<td>SDS (Community Development Team)/EMO/SMO.</td>
</tr>
</tbody>
</table>
5. MEKONG SANAKHAM HPP COMPENSATION PRINCIPLES

The Project compensation eligibility policies and compensation principles are generally set out in the SIA report. However, the following matrix of the proposed entitlements for compensation and assistance are provided below (Table 4):

Table 4: Project compensation

<table>
<thead>
<tr>
<th>Impacts / Issues</th>
<th>Entitlements for Compensation and Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent loss of agricultural land</td>
<td>• Replacement land of at least the same size and equal productive value at a location acceptable to the AP.</td>
</tr>
<tr>
<td></td>
<td>• Replacement land will be cleared, fenced and prepared by the resettlers (food for work program) or mechanically cleared if the AP cannot provide sufficient labour.</td>
</tr>
<tr>
<td></td>
<td>• In cases where replacement land is not available in sufficient area, the AP may accept cash payment for difference between land registered and land provided in the resettlement site.</td>
</tr>
<tr>
<td>Permanent loss of irrigated land</td>
<td>• Replacement irrigation system in resettlement site or compensation by cash to the labour fee of current irrigation system development.</td>
</tr>
<tr>
<td>Permanent loss of residential land</td>
<td>• Replacement land for housing and front yard and for backyard cropping per family.</td>
</tr>
<tr>
<td>Permanent loss of commercial land</td>
<td>• Replacement land of at least equal value; location will be suitable to the AP in order to continue viable commercial activities.</td>
</tr>
<tr>
<td></td>
<td>• Cash payment for the value of land if commercial activities cannot be continued or AP does not wish to do so.</td>
</tr>
<tr>
<td>Loss of houses</td>
<td>• Provision for new material and construction of new house with better standard.</td>
</tr>
<tr>
<td></td>
<td>• Basic housing area of 10 m² per person.</td>
</tr>
<tr>
<td></td>
<td>• Basic housing area of 60 m² for 5 members or less.</td>
</tr>
<tr>
<td></td>
<td>• Barn, livestock pens and other buildings will be replaced.</td>
</tr>
<tr>
<td></td>
<td>• Private fences will be replaced by shared fences.</td>
</tr>
<tr>
<td>Impacts / Issues</td>
<td>Entitlements for Compensation and Assistance</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• Flushing latrines will be installed on new house plots.</td>
</tr>
<tr>
<td></td>
<td>• Household electrical wiring and basic fixtures for three lamps and one plug will be provided.</td>
</tr>
<tr>
<td>Loss of commercial structures</td>
<td>• Replacement structure in a location acceptable to the AP.</td>
</tr>
<tr>
<td></td>
<td>• Cash option if commercial activities cannot be continued or AP does not want to continue.</td>
</tr>
<tr>
<td>Loss of physical cultural resources</td>
<td>• Provision for rituals and acceptable arrangements for transporting moveable items re-establishment at new site.</td>
</tr>
<tr>
<td></td>
<td>• Replacement of holy house and other belief structures of at least the same value and be acceptable to the community.</td>
</tr>
<tr>
<td></td>
<td>• Provision for appropriate rituals and for cemeteries, holy sites and other immoveable cultural landmarks prior to moving.</td>
</tr>
<tr>
<td>Loss of agricultural production system</td>
<td>• 02 ha of land in an off-village location, allocated and developed on a community basis (with host village if any).</td>
</tr>
<tr>
<td></td>
<td>• Irrigation system for 01 ha of agriculture land.</td>
</tr>
<tr>
<td></td>
<td>• A range of feasible production and income generating options in order to meet household income targets.</td>
</tr>
<tr>
<td></td>
<td>• Supply of basic tools and equipment for agriculture work.</td>
</tr>
<tr>
<td></td>
<td>• Planting materials for three years, including saplings.</td>
</tr>
<tr>
<td></td>
<td>• Fertiliser and agro-chem cals, as required.</td>
</tr>
<tr>
<td>Loss of fruit trees and timber /</td>
<td>• Cash compensation based on 5 years of production or estimated return on investment (based on studies and agreed by DWG, SRMU and Project Developer).</td>
</tr>
<tr>
<td>industrial trees</td>
<td>• Replacement seedling at new village location as part of the livelihood restoration package.</td>
</tr>
<tr>
<td>Loss of common property resources</td>
<td>• Access to forests, grazing land and fisheries in the new area</td>
</tr>
<tr>
<td></td>
<td>• Livelihood restoration packages</td>
</tr>
<tr>
<td></td>
<td>• Enhancement and development of common property resources of new villages.</td>
</tr>
</tbody>
</table>
## Impacts / Issues

<table>
<thead>
<tr>
<th>Loss community infrastructure</th>
<th>Entitlements for Compensation and Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• All-weather road to each resettlement site.</td>
</tr>
<tr>
<td></td>
<td>• Replacement of all community infrastructure of at least the same value and function or improvement of host village situation.</td>
</tr>
<tr>
<td></td>
<td>• New market place and meeting/community hall in each resettlement village location or improvement of host year-round village water supply.</td>
</tr>
<tr>
<td></td>
<td>• Electricity connections to houses.</td>
</tr>
</tbody>
</table>

| Loss of educational facilities | • Replacement school or upgrading of existing host village facilities, including library. |
|                               | • Provision for equipment, materials and furniture as required. |
|                               | • Training of existing and new teaching staff. |

| Loss of health facilities     | • Replacement health centre or upgrading of existing host village health facilities. |
|                               | • Provision for equipment, medical supplies, and water and sanitation arrangements. |
|                               | • Support for district and Provincial health facilities to be of good standard and have trained staff. |
|                               | • Improvement of health prevention, diagnosis and treatment of common diseases. |
|                               | • Training of existing and new village health volunteers. |
|                               | • Health checks for all resettlers during resettlement transition period and annually until income targets are reached. |
|                               | • Free referral and ambulance services for three years after moving. |

| Loss of cemetery               | • New cemetery at the resettlement site as requested. |
|                               | • Assistance for performing required ceremony in an amount of 600 USD per cemetery. |

<p>| Moving Assistance             | • One time disturbance allowance for moving 250 USD per household (This covers the cost of labour for the dismantle and transportation of moveable assets to new site and assistance in performing spirit |</p>
<table>
<thead>
<tr>
<th>Impacts / Issues</th>
<th>Entitlements for Compensation and Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training and Support</td>
<td>• Training and support for livelihood restoration for five years after moving and establishment of household plots or until income targets are reached in a sustainable manner.</td>
</tr>
<tr>
<td></td>
<td>• Skills training for all households bases on consultations and agreed to by the community and individual households.</td>
</tr>
<tr>
<td></td>
<td>• Social development training for all households, e.g. household budget training, saving and credit groups etc.</td>
</tr>
<tr>
<td></td>
<td>• Support and advice from project Resettlement Unit, RMU and District line agencies.</td>
</tr>
<tr>
<td></td>
<td>• Priority for labour opportunities on project sites.</td>
</tr>
<tr>
<td>Food support</td>
<td>• Assistance for 20 kg of milled rice per person per month in the period of 3 years of resettlement or until the new resettled families can afford to get rice sufficiency.</td>
</tr>
<tr>
<td></td>
<td>• Additional support of supplementary protein to meet basic nutritional shortfalls during first year of resettlement.</td>
</tr>
<tr>
<td>Vulnerable Households</td>
<td>• A Numbers of Households with insufficient labour force will receive special assistance for their individual needs during moving.</td>
</tr>
<tr>
<td></td>
<td>• Vulnerable households will receive assistance in an amount of 100 USD for the establishment of suitable production systems in relation to their needs and capacity.</td>
</tr>
<tr>
<td>Self-relocation</td>
<td>• Those who do not wish to partake in the resettlement program will receive a one-time payment for the loss of structures, land, trees and produce.</td>
</tr>
<tr>
<td>Grievance</td>
<td>• All household to have access to Grievance Committee for complaints.</td>
</tr>
</tbody>
</table>
6. INSTITUTIONAL ARRANGEMENT FOR SMMP

Figure 5: Institutional Arrangement for SMMP

6.1 NATIONAL ENVIRONMENTAL AND SOCIAL COMMITTEE

It is not always possible for the developer to recognize indirect social and environmental impacts arising from the projects implementation and its social-environmental mitigation plan. Accordingly, community consultation and consultations with government agencies constitute an important component of the plan. The planning of this project will be undertaken in consultation and with the advice of the district, provincial, national governments. It is proposed to establish of the National Environment and Social Management Committee (NESMC).

The major scope of work of the NESMC is to provide guidance and to direct implementation of the SMMP and the RAP.

The operational costs of the Mekong Sanakham HPP NESMC will be supported by the project proponent. To avoid conflicts of interest, no member of the NEMSC will be
contracted to implement any part of the Environmental Management and Monitoring Plan (EMMP), RAP or Watershed Management Plan (or any others).

The NESMC may consist of the following at the ministerial level:

- Minister/Vice to Prime minister’s office/President or Vice President of MONRE.
- Minister/Vice of Energy and Mines.
- Agriculture and Forestry Permanent Secretary Office.
- And any other relevant Ministerial personnel.

NESMC may conduct a meeting every 3 months to evaluate the overall progress of the project, and if required may organize a special meeting at any time to solve any issues or emergencies that require a quick decision.

**6.2 PROVINCIAL ENVIRONMENTAL AND SOCIAL COMMITTEE**

Following precedents set by earlier projects the developer proposes that a Provincial Environment and Social Management Committee (PESMC) will be set up composed of officials from relevant Departments and Sectors of each provincial government chaired possibly by either the Provincial Governor or Vice governor. Representatives from the District government may include:

- Provincial Governor
- Provincial Cabinet Officer
- District Governor
- Environmental Manager
- Provincial Energy and Mines Officer
- Provincial Forestry Officer
- Provincial Land Officer
- Lao Woman's Union representative
- And other concerned authorities

The Mekong Sanakham HPP, PESMC will meet regularly, perhaps once a month. The committee will have its inaugural meeting at least 1 month before the start of the Project and will operate for the construction stage and a few years after to monitor post impoundment impacts and take action as necessary.
6.3 PROJECT ENVIRONMENTAL AND SOCIAL UNIT

MONRE will establish an Environmental Management Unit (EMU) in accordance with the Environmental Protection Law with the authority to closely monitor the Company’s and Project’s compliance with environmental measures, standards, and permits. One of the EMU’s major tasks will be to act as secretary to the NESMC with the major task of preparing all relevant Mekong Sanakham HPP implementation policies and directions for approval by the NESMC. The EMU has the full right to inspect the implementation of the EMMP, SMMP and RAP of the Project.

During preparation of the Concession Agreement (CA) of the project, many obligations of the GOL and the Mekong Sanakham HPP including the environment and social management conditions are to be discussed. The EMU will be set up to see that Mekong Sanakham HPP has fulfilled those requirements and obligations during the implementation phase of the project. The complete EMU operational budget will be fully supported by project proponent.

The EMU may be headed by Director/Vice Director General of the ESIA Department, and they will regularly report to MONRE and NESMC as a representative of the GOL on environment and social management issues during the development of Mekong Sanakham HPP.

The EMU will have the following responsibilities:

- Assisting MONRE with reviewing and approving subject to conditions.
- Coordinating with Government Authorities in relation to the implementation of the Environmental Objectives of the GOL and the Company.
- Monitoring and inspecting the implementation and compliance of the Environmental Obligations of both the GOL and the Company.
- Conducting field monitoring and inspections of the Company’s compliance with its environmental obligations.
- Advising MONRE and the Government Authorities on the adequacy of proposed environmental mitigation measures and recommending amendments following findings from project monitoring.
- Setting up a process to record all monitoring data compliance, management decisions and corrective actions taken.
• Setting up the Environmental Management Information System.
• Liaising with external organizations in relation to environmental issues relating to the Project, which include the following:
  o Coordinating the resolution of issues which arise among the various Government Authorities and the company relating to the environmental measures.
  o Developing and updating work schedules for the monitoring and inspections of the EMU.
  o Managing its financial and manpower resources.
  o Procuring technical assistance or other services or goods.
• Advising the GOL through MONRE using periodic reporting on the performance of the Environmental Measures, including the performance of the financial aspects of the Environmental Measures.
• Coordinating any necessary interfaces between the Company or the EMO with any of the government authorities with respect to environmental issues.
• Working with the Independent monitoring agencies in order to periodically assess the performance of Environmental Measures.
• Following the provision of any required input from the EMO, responding to any public comments, complaints and inquiries in relation to the environmental measures.
• Assisting MONRE with giving instructions to the company regarding compliance with its environmental obligations.
• Assisting MONRE with issuing non-compliance notifications to the company and sanctioning the company in case of non-compliance.

Since the GOL monitoring task is considered very important, the MONRE will establish an Environmental/Social Monitoring and Inspection Unit (ESMI) within its organization. The ESMI shall be under the direction of MONRE to monitor and inspect the compliance with the environmental and social measures of the GOL and the company. The ESMI’s responsibilities in terms of monitoring and inspection of environmental and social measures shall be addressed in the CA. The ESMI will have the following responsibilities:

• Assisting GOL with reviewing the EMMP and any revisions or detailed plans thereof.
• Conducting monitoring and field inspections of the social measures of the Company and the GOL with respect to compliance with the environmental and social obligations of the Company and the GOL.

• Assisting GOL with the following:
  o Issuing instructions to the company regarding compliance with its social obligations including the law of the Lao PDR.
  o Issuing non-compliance notifications/enforcement notices to the company.
  o Solving problems for the Company in cases of non-compliance.

• Advising relevant government authorities on the adequacy of proposed social measures and recommending amendments following findings from project monitoring.

• Periodic reporting on the performance of the environmental and social measures, including the performance of the financial aspects of the environmental and social measures.

• Developing and updating work schedules for the monitoring and inspections of the ESMI.

• Managing its financial and manpower resources.

• Procuring technical assistance or other services or goods including the following:
  o Assist GOL with reviewing all documents related to the social measures.
  o Monitoring and auditing funds for social obligations that are earmarked by the company for GOL activities.
  o Report to GOL about monitoring findings.

6.4 PROJECT ENVIRONMENTAL AND SOCIAL OFFICE

The Project Developer will set up an organizational structure for the project in order to take care of all social and environment matters of the project.

6.4.1 ENVIRONMENT AND SOCIAL MANAGEMENT AND MONITORING UNIT

The Developer will establish an Environment Management and Monitoring Office (EMO) and a Social Management and Monitoring Office (SMO) which will be responsible for the overall planning including the implementation of environmental and social management, resettlement for the project and coordination with local authorities and affected households.
While implementation of the project will be managed by Project Prop nent, the EMO/SMO (Figure 7) will be established to manage the RAP using consultant inputs as required, and they will monitor and report to the developer on the effectiveness of implementation of the RAP. Also, they will coordinate activities during and after construction aimed at improving the environmental performance of the project during its operating phase.

At least one official will be assigned for the EMO/SMO that will be responsible for the coordination with the construction and operation managers of the environmental and social aspects. The EMO/SMO will implement the resettlement under the supervision of the Provincial Environment and Social Management Committee and contract a company, NGO or government to monitor the resettlement and the extent to which it is conducted according to the Resettlement Policy Frameworks, the RAP and government policy and regulations. The EMO/SMO will prepare all documentation and reports concerning the environmental and social aspects of the project including resettlement progress reports to be submitted to DOE and MONRE during the project implementation period.

The EMO/SMO is will act as the first point of contact for the EMU and indirectly for the Project National Environment and Social Management Committee (NESMC). It will receive all complaints and grievances arise in the course of the implementation of the RAP resolve them as far as it can with the offended parties. If unsatisfactorily resolved an appeal by the offended party could then lodge an appeal to the PESMC through the EMO/SMO.

**Environmental Manager:** The developer will appoint an Environmental Manager (EM) to head the EMO/SMO on a full time basis. The EM will report directly to the project proponent Project Manager. His/her role will be to ensure that the mitigation and monitoring measures are implemented and that the standards in the schedules of the RAP and those that are also applicable to the operation of the project are applied. Breaches of the standards detected during compliance monitoring and mitigation measures undertaken to resolve the problem and the success or otherwise of these measures will be reported to the project manager.

The EM will act on behalf of the project proponent in dealing with Government Agencies or other parties concerned. He/she will represent project proponent in the Provincial Environment and Social Management Committee (PESMC) and will be responsible for
maintaining good relations and communication with the local communities. His other activities will include but not necessarily be limited to:

- Coordination, supervision, monitoring and reporting on activities undertaken in the RAP
- Liaising between the Project Manager with the Consultants, the Government Agencies, and the contractors and concerned or contracted NGOs.
- Supervising and monitoring of field activities of sub-contractors in relation to implementing the RAP.
- Supervising specific routine technical tasks of the EMO/SMO such as water quality monitoring
- Reporting to the project Manager.

To implement these tasks, the EM will be assisted by full-time assistants as required and part-time international/or national consultants. This technical assistance will include the services of an environmental planner mainly during early implementation of the RAP, and by other specialists as required by the EM.

The Environment and Social Management and Monitoring Unit is composed of the Resettlement Section (RS), a Social Development Section (SDS) an Environment Section (ES) and a Project Monitoring group made of members who are retained within each of these three groups for monitoring each group but share facilities and the EMO/SMO database.

---

**Figure 6: Components of the EMO/SMO**
a. Resettlement Section

The Resettlement section (Figure 8) will be responsible for all infrastructure and livelihood planning as well as implementation and monitoring of the relocation process for households in the new resettlement area. It will carry primary responsibility for livelihood restoration and improvement for the new and adjacent villages. In addition, it will be responsible for compensation and relocation issues related to Project Construction Lands.

The Unit will be headed by a Manager with proven resettlement implementation experience, who will report directly to the EMO/SMO Manager, and work closely with the Liaison Officer and GOL support staff (see below).

The tasks of the three teams in the Resettlement Section will be as follows:

**Infrastructure Team**

- Ensure access to new sites/adjacent villages through the construction of new bridges and roads, or the rehabilitation or upgrading of existing transportation facilities.
- Ensure that effective water supply is provided to all new sites/adjacent villages, through the installation of wells and piping systems.
- Ensure irrigation is well constructed and water is available and operational at new sites/adjacent villages.
- Ensure that housing and other relevant structures are constructed at new sites; and that community and service buildings for resettled people and adjacent villages are constructed or rehabilitated.
- Ensure that all new sites have reliable electricity supplies and be linked to the Lao grid where feasible, and in accordance with GOL planning.

**Livelihood Team**

- Develop suitable agricultural cropping systems, and carry out extension and technical support work to ensure food security and income targets for resettled people and villagers in adjacent villages.
- Ensure sustainable livestock and aquaculture development for all households (resettled people and adjacent population) in the adjacent villages.

- Establish project nursery(s) for the development of tree crops and domesticated NTFPs and support their proliferation with extension work.

- Facilitate management of the village forest resources through zoning, regulations and raising awareness.

- Investigate markets and marketing-chains for agricultural produce and forge links with middlemen and cash crop companies.

- Develop handicraft and small-scale business opportunities and identify market channels.

- Together with the Monitoring Unit, monitor livelihood development until income targets are reached and sustained.

Figure 9: Organisation of the Resettlement and Compensation Section.
**Project Lands and Compensation Team**

- Liaise with Infrastructure Section to ensure all infrastructures are in place for villagers who have to relocate from Project Construction Lands areas.

- Liaise with Livelihood Section to ensure AP benefit from livelihood activities, where required.

- Valuate the assets lost due to construction activities in Project Construction Lands.

- Undertake cash compensation to entitled APs together with Compensation Disbursement Agent.

**b. Social Development Section**

The Social Development Section (SDS) (Figure 9) will have the primary responsibility for all consultations in the project area as well as community and human services aspects of the resettlement and livelihood improvement process. It will initiate and monitor consultations, health programs, education programs and a range of community development initiatives.

The Section will be headed by an experienced Manager with proven social mitigation and development project experience, who will report directly to the EMO/SMO Manager, work closely with the Liaison Officer and GOL support staff. The SD Unit will seek intermittent input from an Ethnic Specialist and a Gender Specialist, both during detailed planning, and the commencement of implementation, in order to ensure that ethnic and gender aspects are mainstreamed. The SDS will also ensure that the needs of vulnerable groups are addressed.

---

**Figure 8: Structure of the Social Development Section**
The main tasks of the four teams in the Social Development Section will consist of the following:

**Consultation Team**

- Participatory planning support for resettled people and villagers in adjacent villages, ensuring that local concerns and beliefs are incorporated.

- Participatory planning for downstream, the watershed and project construction land areas.

- Establish consultation feedback loops between affected households and project implementing organizations.

- Ensure that gender and ethnic issues are incorporated into planning procedures and implementation.

- Ensure that all affected households are familiar with content and mechanisms of the Grievance Procedure.

**Community Development Team**

- Prepare a comprehensive community development strategy for resettled people and other project affected groups.

- Facilitate the implementation of savings and credit schemes.

- Assist villagers in developing off-farm livelihood alternatives and cottage industries.

- Pay special attention to vulnerable groups in the resettlement and livelihood development processes.

- Link up with NGOs for community development initiatives.

**Health Team**

- Facilitate preparation of a comprehensive long-term health strategy and annual implementation plan for resettled people and other project-affected groups.
• Oversee construction of new and upgrading of existing health facilities and the transfer to and orientation/training of MOH staff for these facilities.

• Establish baseline data on the health status of the population in project-affected villages; facilitate annual surveys to measure changes in health status against the baseline; report to the project proponent, MOH and any other relevant GOL line ministry on changes in health status.

• Liaise with MOH at national, provincial and district level to link project supported activities with GOL health initiatives.

• Provide direct mentoring and support to Provincial Health Office (PHO) and District Health Office (DHO) staffs to conduct regular monitoring and supervision of health facilities and service delivery standards.

• Liaise with health and safety officers appointed by dam-site construction companies on issues related to effects on the population of adjacent villages of risks to health such as water pollution, dusts, and vehicular accidents.

• Liaise with multilateral, bilateral and NGO agencies active in health sector programs, to maximize cooperation and minimize duplication; participate in MOH activities to facilitate sector-wide coordination.

**Education Team**

• Facilitate development of a comprehensive education and training strategy and plan, for resettled people and other project-affected groups.

• Oversee the reestablishment and upgrading of school facilities

• Assist District and Provincial education authorities in recruiting teachers and link up with GOL education initiatives.

• Monitor education programs and school attendance.

**c. Environment Section**

The major tasks of the Environment Section (Figure 10) are to monitor all the baseline data and information concerning the environment like fish and fishery, hydrology, water
quality, river bank erosion etc. And the implementation of the mitigation measures that were mentioned in EMMP; the Environment Section may be divided into two following teams:

**Environmental Monitoring Team**

- Establish baseline data on the environment status of the project area environment in the watershed, upstream, damsite and downstream area.

- Carry out daily, weekly or monthly (as planned) schedule for monitoring of the environmental changes.

- Report to Environment Working Group for the timely management of the environment status in the Project area.

**Construction Monitoring Team**

- Make a detailed plan to follow up with the contractors in all construction sites (including access road).

- Ensure the contractors provide the environmental management for all project work.

- Monitoring of the safety issues of the workers in the work site.

- Draft Environmental Instructions for environment management of the Environment Working Group and EMU for consideration of further instruction for contractors.

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**Figure 9: Structure of the Social Development Section**
To respond effectively to matters raised by the NESMC or EMU and to effectively manage the environmental performance of the Project, the EMO/SMO will set up an Environmental Management Information System to process and record all monitoring data compliance, management decisions, and corrective actions taken. Anticipated documentation to be filed includes:

- Active and obsolete printed versions of the RAP sub-plans.
- All plans including resettlement site plans.
- Census of resettlement site and agricultural holdings of each household.
- All communications which have social and environmental implications.
- All monitoring reports from EMO/SMO and the Contractor staff.
- Quarterly Reports.
- Grievances and complaints register.
- Training materials.
- Training attendance registers.
- Non-compliance special reports.
- Lao environmental legislation.
- Permits, legal documents, and authorizing letters.
- Monthly e-meeting minutes.
- Occupational Health and Safety reports.
- Medical reports.
- Disciplinary procedures.
7. CONSULTATION AND GRIEVANCE REDRESS

7.1 CONSULTATION AND INVOLVEMENT OF VILLAGERS

During project planning and design a full series of consultation has been or will be conducted by the Project Developer and Environment and Social Impact Assessment Consultant (NCG). The consultation and involvement will be continuous through the life of the project.

7.2 GRIEVANCE REDRESS

Mekong Sanakham HPP will undertake grievance resolution in accordance with the provisions in Article 13 of the Decree on Compensation and Resettlement of People Affected by Development Projects, and the Technical Guidelines on Compensation and Resettlement. All grievances related to any aspect of the project or sub-projects will be handled via consultations aimed at resolving matters through consensus at the project level. In this way the possibility of conflicts escalating and being passed on to higher (district level or ultimately the national legal system) levels will be avoided to whatever extent possible. All grievances, whether verbal or received in writing, will be documented by the project or its agent, including actions taken, minutes of meetings, outstanding issues and results.

Upon approval of the project, Mekong Sanakham HPP will make a formal request to the GOL to establish a Grievance Redress Committee (GRC) in each project district to address any complaints or grievances regarding land acquisition, compensation and resettlement submitted by APs. Each district GRC will be comprised of:

- Representative from local government (Chair).
- Provincial Water Resource of Environmental Agency (MONRE).
- Provincial Ministry of Energy and Mines.
- Provincial Land Office.
- Village heads.
• Two village elders or representatives of local mass organisation(s), at least one of whom should be a woman.

• Two representatives from PAFs (at least one being female or representative of minority ethnic group).

Participation of project-affected people is ensured through their involvement in the GRC as shown above. The PMU and Mekong Sanakham HPP field offices will establish and maintain ongoing interaction with the affected families and communities to identify problems and undertake timely remedial actions. There will be involvement of local institutions or organisations, non-government organisations (NGOs), women’s unions and community-based organisations (CBOs) in terms of membership of the GRC (as decided by the Chair).

The process will be as follows: In the first instance, APs will submit their grievances to Mekong Sanakham HPP via the project implementation team. If the AP is not satisfied with Mekong Sanakham HPP’s efforts to resolve the problem or grievance, within 15 days the matter can be referred by the AP to the district GRC. If the AP does not receive any response from the district level GRC within 15 days of filing the complaint, or the matter is not resolved to the AP’s satisfaction, the complaint may then be submitted to the Mekong Sanakham HPP head office and MONRE. If the matter still remains unresolved within 20 days of filing the complaint with Mekong Sanakham HPP head office and MONRE, the AP may then forward the case to the Court of Law. The Project will cover all administrative and legal costs incurred relating to the grievance redress procedures.

7.3 DISCLOSURE INFORMATION

In parallel with the detailed design, census, DMS and SES activities, Mekong Sanakham HPP in conjunction with the Provincial MONRE staff will continue to consult and disseminate project and resettlement-related information to APs via local authorities. Community meetings will be held and opinions and suggestions elicited from the APs will be reflected in the Updated RP. Mekong Sanakham HPP will inform all APs about the Project’s potential impacts, locations to be flooded, location of access roads, restrictions on land use in the project following construction, compensation principles and appeal procedures. All consultations with APs, including questions asked and answers provided, will be recorded including information on gender and ethnic group of people consulted.
Particular efforts will be made to ensure women are consulted and informed, enlisting the help as required of the Lao Women’s Union.

In line with Government disclosure policy, key information in the updated RP such as measurement of losses, detailed asset valuation, policy principles and entitlements and special provisions, grievance procedures, timing for payments and displacement schedule, and proposed activities; and avenues for grievance redress. Copies of the results of the replacement cost survey and DMS will be made available in the district and village offices.
8. IMPLEMENTATION, MONITORING AND EVALUATION - SMMP

8.1 MONITORING REQUIREMENT

The project monitoring group will be composed of staff members from each of the Resettlement, Social Development and Environment groups. The members of each group will monitor their own group according to the requirements laid out in the RAP, SMMP and EMMP. The Monitoring Unit should include the following specialists:

- A project monitoring Specialist with a strong background in mathematics or statistics and a relevant social or natural science plus experience in planning, implementing, monitoring and evaluating resettlement plans or projects to international standards on large hydropower projects, and preferably with relevant experience in Lao PDR or elsewhere in the region.

- Lao National Resettlement Specialists or Social Development Specialists with strong background in relevant social sciences and demonstrated experience in organizing and managing socioeconomic data collection and analysis, PRA, group facilitation, and with relevant experience in the Project area.

- Surveyors with demonstrated experience in household surveys, data input and analysis and participatory rapid appraisal techniques, and group facilitation will be used. Surveyors and monitoring team leaders should have an equal gender mix and local language skills.

- An Ethnic and/or Gender Specialist who will probably be a member of the social development team will assist the monitoring unit to ensure that Ethnic and Gender issues are included in the various monitoring programs.

8.2 MONITORING INDICATORS

Good practice in resettlement requires continuously incorporating the learning that takes place in programs using a variety of implementation strategies and institutional models, allowing the SMMP to evolve as needed. Monitoring provides the mechanism by which to do this. Monitoring and evaluation of the SMMP will occur as part of the overall RAP. Participatory self-monitoring by affected people will be essential to accurate monitoring of
the SMMP. For example monitoring of the effectiveness of the health team in providing access to health services will be undertaken by individual resettled people through their own personal assessment of the community’s access to health services. The monitoring team will simply undertake an abbreviated social assessment every 6 months.

Questions the monitoring team will be asked to answer through such assessments will include as a minimum the following:

- Have any people used the grievance redress procedures? What were the outcomes?
- Have any intra-community conflicts been reported? How were they resolved?
- Were special measures for ethnic peoples were implemented?
- What changes have taken place in key social and cultural parameters relating to living standards?
- What changes have occurred for vulnerable groups?
- Are people able to access schools, health services, cultural sites and activities?
- What is the extent and quality of participation in community groups?
- Has access to cultural sites and events been restored?
- Have perceptions of "community" been restored?
- Do people believe local spiritual needs are being met?
- Have people achieved replacement of key social and cultural elements?
- Have people reported incidents of corruption?
- Are women taking increasing roles in public decision making?

In addition, to answering these questions through appropriately designed survey questions, specific data will also be collected based on a set of indicators of both the state of social development and the state of the livelihood system. Quantitative data on the level of social development attained will include, but will not be limited to: school attendance, Early Childhood Care for Development (ECCD) centre attendance, teacher attendance (ensuring all schools have sufficient teaching staff assigned and active), number of classrooms with
adequate learning materials, participation rate in adult literacy classes, village literacy rate, ratio of women to men on village committees, etc. All of the above data will be disaggregated by sex.

Quantitative Indicators of the system of livelihood for each family include:

- Paddy yield in tonnes per ha.
- Vegetable crop yields.
- Fish production (spawning and nursing survival rates, yield by weight and by cash value).
- Animal production: the animal weight and the survival rate after disease control.
- Design, making and marketing for women's products.
- Whatever overall socio-economic well-being indicators that Project selects as measures of the attainment of livelihood targets, income/poverty levels at both household and village level.

Monitoring of community management and benefit distribution will also be undertaken but the indicators of this will be decided upon by the communities themselves.

It is not possible to accurately define cost when the level of impact is not known for sure. The Project will need to characterise the existing situation accurately, and then closely monitor what actually happens when the dam's effects begin to be felt. A contingency budget has been established for livelihood improvement in the upstream villages; for example if fisheries monitoring shows a significant impact on the fishery by the Project, funds can be provided. The budget is by no means meant to be used equally for each village. The amount to be used will depend on the impact, the size of the village, the importance of fishing and cost of livelihood activities (crop and livestock production) for each specific village.
9. **ESTIMATED BUDGET FOR SMMP**

The total budget (Table 5) for the Social Development Plan is estimated at about $274,120. The SMMP cost is directly included within the agricultural and forestry extension, fisheries programme, health and education outreach, community gain and social development fund. Costs given below include capital cost, the first 8 year recurrent cost during construction work and the recurrent cost out to year 23 during project operation. The total yearly budget estimate is in Table 5.

**Agricultural and forestry extension:** Slash and burn is the only rice production system used in the area which is considered non-sustainable an agriculture and forestry extension program will be introduced. The program will provide more sustainable solutions that will be adapted for the local communities while generating better income and preserving environmental resources. The program would also develop markets for the produce.

**Fisheries programme:** To compensate for the loss of fish, a fishery extension program will be introduced to local people by building a fish pond or by some other related aquatic development such as frog aquaculture or some other enterprise which could be agreed upon with local villagers during consultation.

**Health and education outreach program:** Health, nutrition, and education standards are inadequate in these remote areas and these are directly linked to the continuation of poverty in the area. The program will include both the construction phase and some years of the project operation phase as well.

**Table 5: The total budget for SMMP**

<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>Annual Recurrent Cost Construction Phase (8 Year)</th>
<th>Annual Recurrent Cost Operation Phase (23 Years)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Social Management Plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Agricultural &amp; forestry extension</td>
<td>8,000</td>
<td>20,000</td>
<td>28,000</td>
</tr>
<tr>
<td>2</td>
<td>Fisheries program</td>
<td>18,000</td>
<td>40,000</td>
<td>58,000</td>
</tr>
<tr>
<td>3</td>
<td>Health program</td>
<td>18,000</td>
<td>40,000</td>
<td>58,000</td>
</tr>
<tr>
<td>4</td>
<td>Education program</td>
<td>18,000</td>
<td>40,000</td>
<td>58,000</td>
</tr>
<tr>
<td>5</td>
<td>Social Development Fund</td>
<td>15,000</td>
<td>40,000</td>
<td>55,000</td>
</tr>
<tr>
<td>6</td>
<td>Archaeology and Culture Heritage</td>
<td>17,120</td>
<td></td>
<td>17,120</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Total:</strong></td>
<td>94,120</td>
<td>180,000</td>
<td>274,120</td>
</tr>
</tbody>
</table>
Education program aimed to help local people to improve their knowledge and could also participate in the project activities. This could also provide through a scholarship to the village student and district especially for health and administration officers.

A proposed of Social Development Fund is to help village with more sustainable of the social program to support the local people. PESMC give a direction for local affected communities should use this fund for development in the area.

Archaeology and Culture Heritage: This program will support (1). Lao specialists for the government office and to indentify the Archaeology and Culture Heritage site if there is such place and make a recommendation for the project to preserve them; (2). The budget is also allocated for the case of the ceremony cost for the cemetery, spirit and tempo site. Budget for Archaeology and Culture Heritage is design in Table 6 below:
10. IMPLEMENTATION SCHEDULES

Project construction is expected to take about 8 years (Table 7) after which commercial operation would commence. Within these 8 years, the most serious milestone that must be planned and completed, correctly and on time, is the Resettlement of the population that will be affected by the project.

After the resettlement is complete the project will fully concentrate on the livelihood restoration program and make sure the affected people will have a better life than prior to project. Most of the time sent for this program will be in the operation phase.
<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>Construction</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Year 1</td>
<td>Year 2-7</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------------</td>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>I.</td>
<td>Social Management Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Agricultural &amp; forestry extension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Fisheries program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Health program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Education program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Social Development Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Ethnic People Development Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Archaeology and Culture Heritage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Social Monitoring Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Internal Monitoring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Independent Monitoring</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11. REPORTING

The reporting program (Table 8) must satisfy 3 objectives:

- To provide a regular distribution of information through the several parties involved in the project.
- To set up a formal framework for performance achievement evaluation.
- To assist in a fast decision making procedure in order to implement within the shortest time any decision taken by concerned parties.

The system is based on 8 types of reports:

a) **Day to day report:** filled by the Environmental and Social Manager (ESM) in order to take formal notes of daily events, decisions, actions. These reports are only registered for further consultation when necessary.

b) **Weekly report:** prepared by the ESM and submitted to the Project Manager (PM).

c) **Monthly report:** prepared by the ESM for submission to PM, the reports will summarize:

- Activities carried out during the month, task completed, personnel involvement, schedule of activities.
- Problems encountered, decisions taken.
- Major issues under debate, proposed solutions.
- Proposed activities for the coming months.
- Budget situation: expenses, invoices, fund reallocation…etc.
- List of major meeting held during the month.

d) **Meeting reports:** minute of monthly (or ad-hoc) coordination meetings held with Mekong Sanakham HPP (EMC and others). To be prepared by Secretary of the Mekong Sanakham HPPEMC, signed by the Chairman and counter
signed by the EM. For submission to EMO/SMO, Project Manager and Bauxite Mine Project EMC members.

e) **Review reports:** to be submitted to EMO/SMO and lender (if any), every four months the first 2 years and every 6 months after. These report will summarize major issues addressed, major achievements, major pending problems, budget situation, recommended strategy and work plan until the next review. They will be prepared by the review team.

f) **Annual review report:** to be submitted by EMO/SMO to Project Proponent, DoE (MEM), MONRE and lender (if any), summarizing the progress of environmental mitigation and monitoring activities during the last 12 months of activity and presenting strategy and work program for coming 12 months.

g) **Technical report:** prepared by sub-contracted Agencies or consultants. Submitted to EMO/SMO according to schedule.

h) **Independent Monitoring report:** Independent consultant will be hired and paid by project to monitor and advise on the implementation of the environment and social mitigation measures.
Table 7: Summary of Reporting Program

<table>
<thead>
<tr>
<th>Report Types</th>
<th>By:</th>
<th>To:</th>
<th>Purpose:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Report</td>
<td>EM</td>
<td>Project files</td>
<td>Registration of daily events. For consultation only</td>
</tr>
<tr>
<td>Weekly Report</td>
<td>EM</td>
<td>PM</td>
<td>Follow-up of social and environmental activities</td>
</tr>
<tr>
<td>Meeting Reports (monthly and ad-hoc)</td>
<td>EMC</td>
<td>EM</td>
<td>Signed by concerned parties &amp; summarized in monthly report</td>
</tr>
<tr>
<td>Technical Reports</td>
<td>GOL Agencies, consultants</td>
<td>EM, Cons. Engineer</td>
<td>According to technical</td>
</tr>
<tr>
<td>Monthly Report (Project)</td>
<td>EM</td>
<td>PM, EMO/SMO, DoE/MEM, MONRE</td>
<td>Monitoring of RAP implementation Follow-up of contract obligations</td>
</tr>
<tr>
<td>Monthly Report (Contractor)</td>
<td>EM</td>
<td>PM, EMO/SMO, DoE/MEM, MONRE</td>
<td></td>
</tr>
<tr>
<td>Interim Review Reports (4 to 6 monthly)</td>
<td>Review mission member</td>
<td>EMO/SMO, DoE/MEM, MONRE</td>
<td>Progress in RAP implementation, issues &amp; achievement</td>
</tr>
<tr>
<td>Annual Review Report</td>
<td>Review mission member</td>
<td>EMO/SMO, DoE/MEM, MONRE</td>
<td>Annual status of RAP achievement</td>
</tr>
<tr>
<td>Internal Review Report</td>
<td>Internal review mission</td>
<td>Project Management</td>
<td>Progress in EMMP and SMMP implementation, issues &amp; achievement</td>
</tr>
<tr>
<td>Independent Review Report</td>
<td>Independent review mission</td>
<td>DoE/MEM, MONRE</td>
<td>Progress in EMMP and SMMP implementation, issues &amp; achievement</td>
</tr>
</tbody>
</table>
12. REFERENCES


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