



# Resettlement Policies and Implementation Management: A Case of Hydropower Resettlement Management in Laos

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**Abstract**— This paper aims to describe the hydropower development and resettlement management background, and to review the existed regulatory framework on resettlement policies and implementation management of hydropower projects in Laotian context. The results of review note showed that, Laos has planned to become the “Battery of ASEAN” and so rid itself of the status of least developed country by 2020. Thus, the hydropower and mining projects have become the main key sectors for contributing and supporting the socioeconomic development of the country. Nowadays, about 22 hydropower projects with totally installed capacity of 3,205 megawatts have been operated. The hydropower projects have provided the better public infrastructures and electric supply to local, national and regional communities. However, the lager hydropower development projects have created the environmental, social, cultural, and economical impacts and the resettlement of people in reservoir areas. To overcome issues, the project developers in cooperation with related sectors must follow the preferable Decree No. 192 on Compensation and Resettlement of Development Project, its technical guidelines, and related article of laws for resettlement and compensation programs.

**Keywords**— Hydropower, Resettlement, Policy, Implementation, Management

## I. INTRODUCTION

Hydropower, as the largest clean and renewable energy source, has played an essential role in the global energy mix. Against the backdrop of rapid social-economic development and global warming, the development of renewable energy has gained increased attention among the global community. Many countries have accumulated abundant experiences in hydropower equipment manufacturing, planning and design, technology development, operation and management as well as enabling policy framework [1]. However, the social impacts of

hydropower, as with other forms of economic activity, hydro projects can have both positive and negative social aspects. Social costs are mainly associated with transformation of land use in the project area, and displacement of people living in the reservoir area. Relocating people from the reservoir area is, undoubtedly, the most challenging social aspect of hydropower, leading to significant concerns regarding local culture, religious beliefs, and effects associated with inundating burial sites. While there can never be a 100 percent satisfactory solution to involuntary resettlement, enormous progress has been made in the way the problem is handled [2]. Since the science of resettlement and rehabilitation is a new marginal science. With the continuous development of large scale water conservancy and hydropower construction, the water resource workers realize more and more clearly that it is extremely important to plan rationally resettlement, compensation and rehabilitation, implement successfully the plans and manage well the implementation [3].

In the context of the Lao People's Democratic Republic (Lao PDR), commonly referred to as "Laos" abroad, and is a land-linked country in the heart of Southeast Asia. The country encompasses 236,800 square kilometers and borders with China to the north, Cambodia to the south, Vietnam to the east, Myanmar to the northwest, and Thailand to the west. For centuries it has been known by outsiders as the land of a million elephants (Lan Xang or Lao Kingdom of Million Elephants). Around 70% of Laos' terrain is mountainous, reaching a maximum elevation of 2,820 meters in Xieng Khouang province. Laos has a population of approximately 6.5 million people (2012) with a growth rate of 2% per year. The Lao population consists of 49 ethnic groups, in 4 main linguistics and comprises of 3 main ethnic groups namely the Lao Loum (lowland), 68%, the Lao Theung (low mountains), 22%, and Lao Sung (high mountains), 10%. The population density of Laos is 27 persons per square kilometer and roughly 85% of the population lives in rural community who daily depend on agricultural activities. Buddhism is the dominant religion with more than 85% of the population as believers [4].

The Lao People's Revolutionary Party (LPRP) and the Government of Lao PDR (GoL) aim to eradicate mass poverty by 10% in 2015 and to leave the group of the least developed countries by 2020. At present the multi-ethnic Lao people are now trying to overcome these issues and making efforts to develop Laos in line with the new policy of the Party and/ or of the government of Lao PDR, in order to lead the country toward progress and prosperity. Especially, the seventh Five-

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Year National Socio-Economic Development Plan (2011-2015) stressed that *“To encourage Lao people to be better and richer in terms of well-being, long life, healthy living and quality of life. In addition, Lao people will live in a democratic, progressive and a just life condition”* [5].

Nowadays, the hydropower and mining sectors have become the main key sectors for contributing and supporting to the socioeconomic development of the country. Especially, the hydropower projects have provided the better public infrastructures and electric supply to local, national and regional communities. However, the larger hydropower development projects have created the environmental, social, cultural, and economical impacts and the resettlement of people who live in reservoir areas to other new places.

## II. OBJECTIVE AND METHODOLOGY

Thus, this paper aims to describe the hydropower development and resettlement management background, and to review the existed regulatory framework on resettlement policies and implementation management of hydropower projects in Laotian context. This is descriptive research based on the documentary study, which was used for summarizing and describing the resettlement policies and implementation management. The study was used secondary data by collecting from different sources such as both published and unpublished materials, websites, and other sources. Finally, the paper summarizes and also presents the data or sub-themes according to the objectives of this study by using qualitative explanation.

## III. RESULTS AND FINDINGS

### 3.1 Hydropower Development and Resettlement Implementation Background in Laotian context

#### A. Hydropower Development

To reach the Millennium Development Goals (MDGs) and be able to provide the “well-being” to all Lao people, the government of Lao PDR (GoL) believes that, the rich in national resources such as land, forests, and rivers (Me Nam<sup>1</sup>) may be helpful for the development of country. That is why the GoL has identified the development of hydropower project as a key way to promote economic growth and alleviate poverty. Developing hydropower, however, puts pressure on the environmental and local people’s livelihoods. The original concept of hydropower projects were launched to support Lao economic growth, by enhancing foreign exchange earnings through export of electricity. In the late 1980s, the government identified the country's hydropower potential as a major natural resource that could help generate the revenue and energy needed to kick-start Laos's economic development.

<sup>1</sup> Nam (in Lao word) - refers to water and or/ stream. Nam or Menam also represents to the river (the mother of river), for example, Me Nam Khong, Me Nam Ngum, etc., but in shortly, Lao people always call Nam Ngum, Nam Khong, etc.

Laos has huge potential for hydropower development and be able to provide further electric energy to other ASEAN members such as Thailand and Vietnam. Laos has planned to transform itself to become the “Battery of ASEAN” and so rid itself of the status of least developed country by 2020. According to a government estimate it would be selling 7,000 megawatts of hydroelectric power to Thailand by 2015 and 5,000 megawatts to Vietnam by 2020. The purpose of the production and sale of such a high volume of electricity is to earn millions of US dollars and put them into the coffers of the country [6].

Since 2006, Lao PDR has seen an influx of private investors and developers in the hydropower sector. According to the information recorded by the Ministry of Energy and Mining (MEM), by 2013, about 136 hydropower projects with the expectation of installed capacity of 21,906 MW signed their contracts for hydropower development projects through national wide. These include 74 projects under memorandum of understanding (MOU) for feasibility study and starting construction after 2020, 12 projects signed project development agreement (PDA) and starting construction before 2015, 28 projects signed concession agreement (CA) and under construction, and more than 22 hydropower projects signed the concession operational delivery (COD) with totally installed capacity of 3,205 megawatts have been operated in the country. The GoL expects an additional 40 to 50 projects to be operational by 2015 [7].

Table 1: The Number of Hydropower Projects in Laos by 2013

Item / Progress	Number of Project	Installed Capacity (MW)
Operational	22	3,205
Under construction	28	4,973
Starting construction before 2015	12	1,799
Starting construction after 2020, under feasibility study and under negotiation for concession	74	11,929
Total	136	21,906

Those larger dams in Laos are Nam Theun2 (2005-2010), Nam Ngum2 (2005-2012), Nam Theun Hinboun (phase1: 1994-1998 and phase2: 2008-2012), Nam Xekhaman3 (2008-2010), Nam Ngum1 (1968-1971) and so forth.

Table2: Top Rank of Largest Hydropower Projects in Laos by 2013

No	Name/ Station	Capacity (MW)	Number of Resettlement		Project Cost (US\$)	Resettlement Cost (US\$)
			People	Households		
1	Nam Theun2	1,070	6,200	1,300	1.3 billion	NA
2	Nam Ngum2	615	6,234	1,099	963 million	25,4 million
3	Nam Theun Hinboun	500	4,367	800	1,33 billion	40,3 million
4	Nam Xekhaman3	250	NA	NA	NA	NA
5	Nam Ngum1	155	3,242	570	97 million	NA

#### B. Involuntary Resettlement

According to the historical note, the Lao people have settled in Laos for hundred years, even maybe as far back as six hundred years, recording to the oldest written archaeological evidence. The original territory of Lao is

thought to be north of Me Khong River to the Plain of Yangzi River that is located in southern China. Now, Lao people live in every province of today's Lao PDR. They also live in Thailand, Vietnam, Cambodia and other countries (TEAM Co; Ltd, 2006). In fact, the involuntary resettlement is not new to the Lao people - centuries of changing fortunes have seen villages and groups of villages relocate to survive - what is relatively new is the need for people to relocate in order to make way for development of projects considered to be in the national interest, such as hydropower schemes [8].

Beginning in 1975, the GoL began moving ethnic minorities out of mountainous and remote areas, due to security concerns. In the early 1990s, the GoL began to express its concerns about the shifting cultivation practice in the mountainous areas especially in the Northern and Eastern parts of the country. The result was that hundreds of thousands of families from various upland areas were resettled. The concentration of these scattered communities, as well as their cultural and livelihood integration with the ethnic people of the lowlands has long been a goal of the central government. Moving scattered remote upland communities into more accessible areas facilitates easier and cheaper provision of essential development services such as health care, sanitation, education, roads, irrigation and electricity [9].

Recently, there is no officially statistical record on the total number of resettlers, who were resettled by hydropower projects in Laos. An estimated, by 2013, about 101 villages, 5,699 households, and 31, 579 people were resettled from hydropower projects in the whole country. This is not included those resettlers, who were affected by other mineral, agricultural, infrastructural, rural and urban development projects. In fact, Laos has initiative experienced in first resettlement implementation of Nam Ngum1 (NN1) Hydropower Project during 1960s to 1970s. The NN1 relocated more than 23 villages, 570 households, 3,242 people and there was not clear compensation implementation giving to the project affected persons at that period.

### **3.2 Existed Regulatory Framework on Resettlement and Compensation of Hydropower Projects**

There are some related articles of excited laws and regulations that project developers must apply for resettlement and compensation implementation caused by hydropower projects in Laos. These included the Water and Water Resource Law (1996), Electricity Law (1997), Environmental Protection Law (1999), Constitution of Lao PDR (2003), Land Law (2003), Handing Petition Law (2005), Forestry Law (2007), decrees and other guidelines. Moreover, these are the most preferable policies and regulations that project developers must apply as follow:

#### **(1) The Decree on the Compensation and Resettlement of Development Project (No. 192/PM on July 7, 2005)**

According to this decree, the article 6 on "*Compensation Principles*" stated that, project owners shall compensate project affected people for their lost rights to use land and for

their lost assets (structures, crops, trees and other fixed assets) affected in full or in part, at replacement cost. Also, the article 7 on "*Assistance during Relocation and Transition Period*" said that affected persons (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 1) transport allowance or assistance in kind to transfer to the resettlement site or their choice of relocation; 2) Food allowance, in cash or in kind to compensate for income lost, during the transition period; and 3) Suitable development assistance after displacement during the transition period until they are able to restore their incomes and living standards with targeted level of household incomes on a sustainable basis. In addition, the article 8 "*Economic Rehabilitation*" provided three principles of rehabilitation namely 1) 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 land), means of livelihood, employment or business and access to community resources shall be entitled to sustainable income restoration measures in addition to their entitlement for compensation and other allowances enabling them to attain at a minimum pre-project livelihood levels. 2) For displaced persons whose land-based livelihoods 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. 3) 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. 4) 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. Referring to the article 9 on "*Restoration and Repair*" revealed that project owners shall restore or repair community facilities and infrastructure that are damaged due to the project, at no cost to the community. 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 APs if their benefits are affected due to the loss of access to common property resources.

Furthermore, the article 10 on "*Resettlement Site Development*" stated that, all persons relocating to group resettlement sites shall be provided with suitable housing or developed housing lots, shop lots if businesses are affected, agricultural sites of equivalent size, with productive potential and locational advantages better or at least equivalent to the old site. Replacement land, house/business plot shall be as close as possible to the land that was lost and/or acceptable to the APs. Group resettlement sites shall be developed with water supply, sanitation, drainage, with internal and access roads, and access to electricity. When it is necessary they may be provided other form of assistance from project owners such as public health

and education. 2) All replacement land for agriculture, residential and businesses shall be provided with secured land titles and certificates and without any additional cost, sales taxes, fee, and surcharge to the APs at the time of transfer. Construction lands shall be allocated in accordance to regulations and standard procedures in urban planning. 3) Project owners shall take responsibility to develop resettlement sites in order to avoid or mitigate adverse social and environmental impacts to the surrounding areas. 4) Where relocation to a group resettlement site is considered necessary, project owners shall mitigate the adverse impacts on host community and shall provide appropriate compensation (to damaged assets) and assistance to host community similar to the project affected persons [10].

**(2) *The Technical Guideline on Resettlement and Compensation of Development Projects* (WREA, March 23, 2010)**

The specific objectives of these guidelines are to provide detailed guidance to the project owners, private and public sector, as well as all concerned in addressing social issues in development projects specifically in planning and implementation of resettlement plans, ethnic minority development plans, where necessary. The guidelines also provide guidance for conducting social assessment in projects with indirect impacts on population within or beyond the project boundaries. In addition, these technical guidelines are prepared and issued in accordance with the provisions of the Decree and Implementing Regulations covering objectives and principles of resettlement, entitlements to compensation, allowances and economic rehabilitation, monitoring and evaluation, and implementation arrangements. These are major steps in project process cycle - All development projects go through a well defined project process cycle beginning from inception to implementation and passing through various phases that include: project identification, pre-feasibility study, feasibility study or preliminary designs, detailed technical design, and implementation. General description of these activities is summarized below.

1) **Project Identification** - The first step in planning of a project involves project identification. At this stage only preliminary information on the location and scope of projects is generally available. Very rarely the project owners are in a position to describe specific location or physical boundaries of projects at this stage. At this stage, project owners are required to collect some basic information regarding potential social issues and impacts and make a preliminary assessment of potential environmental and social benefits and impacts of the projects. Following main activities are generally carried out during the project – identification such as a) Identifying likely social impacts and issues relevant to the project; b) Review and screening of existing data; c) Determining level and amount of information required for subsequent phase in the project; and d) Establishing the purpose of data collection for resettlement planning, monitoring and evaluation and preparing terms of references (TORs).

2) **Pre-feasibility** - is a step forward from project identification and its main purpose is to refine the project objectives, conducting specific technical studies and economic analyses and preparation of preliminary designs. The pre-feasibility gives an account of the scope of the project and resources needed for its implementation. More specific information on the scope of the project and its likely impact areas are generally available during the pre-feasibility stage of projects, although information on precise project boundaries may not be available at this stage. Based on the available information, the pre-feasibility will also determine whether the potential resettlement impacts of the proposed project are likely to be significant. Identification of key stakeholders including project affected persons and groups and beneficiaries is made and a more specific information on the scale and degree of potential social impacts and socio-economic characteristics of project affected persons and groups is collected through field investigations, surveys and interviews with selected population within and adjoining the project areas. Since the information collection and analysis on social impacts is carried out in parallel to preparation of preliminary design of projects, the exercise also includes assessment of various design options for avoiding or minimizing adverse impact and selection of suitable design option.

3) **Feasibility and Detailed Design** - In a project, pre-feasibility and feasibility studies are carried out as a continuous activity refining technical aspects in a project. The project owners or assigned agency conduct detail studies incorporating all the components and aspects of the project. During the feasibility study stage project boundaries are finalized, although these may be further modified after the feasibility studies are completed, if necessary, during the detail technical design stage. Technical aspects in the projects are finalized and preparations for detailed technical designs are made. In parallel to the feasibility studies and preparation of technical designs, social assessment study, where necessary, is completed. To address resettlement and other social issues during the feasibility stage of project preparation, detailed census and socioeconomic surveys are completed and inventory of affected assets prepared as an essential element of resettlement preparation. Where necessary, additional information on ethnic minorities groups is are collected. Consultation with stakeholders is carried out throughout the resettlement preparation stage. Based on detailed surveys and field investigations, necessary documents such as the Resettlement Plans, Ethnic minority Development Plans, Social Assessment Reports are prepared and finalized. Normally government approval for projects is obtained upon completion of the feasibility studies following which detailed engineering designs & bidding documents are prepared.

4) **Implementation** - The final stage of the project cycle is the implementation of the project. However, implementation of resettlement activities is given higher priority during the implementation phase of the project. Land acquisition, compensation payment and relocation activities of displaced affected persons are completed prior to start up of civil works

in a project, except in some linear projects where civil works on some sections of the project may begin even when resettlement implementation in other sections is still ongoing. Successful implementation depends upon timely disbursement of resources, efficient institutions and human resources, adequate consultation with and participation of APs in the project process and timely delivery of entitlements plus adequate monitoring of activities.

In addition, these guidelines are also provided “Resettlement in the Project Process” that resettlement planning and implementation activities are an integral part of a development project and they run parallel to project planning and implementation activities in the project process cycle. A typical example of stages of project process and resettlement activities/outputs is shown in (Figure1) and summarized in the following sections:

Resettlement Preparation and Implementation Activities in Project Cycle

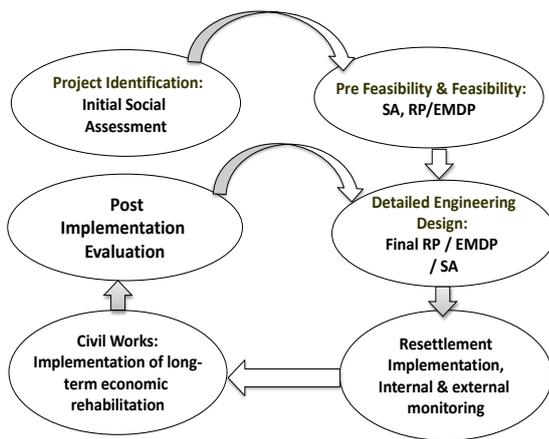


Figure 1: Project Process Cycle and Resettlement Activities

- *Initial Social Assessment (ISA)* - involving identification of potential social issues and impacts and key stakeholders is undertaken during the project identification stage. The exercise also includes screening of available information for assessment of the types, scale and degree of impacts (including land acquisition impacts) and to determine the need for various documents that may be necessary for project process. Based on the results of the screening exercise, decision is taken on the level of surveys and the types of information required for various documents and necessary TORs for subsequent studies are prepared.

- *Social Assessment* - Based on the recommendations of the screening exercise and where the projects may result in indirect social impacts on population within the project or adjoining areas a detailed social assessment study may be necessary. The SA study is conducted during the pre-feasibility phase of the project preparation. Detailed investigations carried out for SA studies include identification of the types and scale of social impacts, stakeholder analysis and institutional analysis. The studies help in formulation of appropriate mitigation measures and instruments necessary to

address social issues in the project. SA generally covers macro level social issues and provides a framework for more detailed investigation and for planning and implementation of mitigation measures to address specific issues.

- *Land Acquisition and Compensation Report/ Resettlement Plans* - Land Acquisition and Compensation Reports (LACRs) or Resettlement Plans (RPs), as the case may be, are prepared during the feasibility study stage of project preparation. These documents are prepared based on field surveys covering census of affected people and detailed inventory of affected assets within the project boundaries. Where sufficient information on physical boundaries is not finalized at FS stage, preparation of these documents is still necessary as part of project preparation and for decision on resource allocation. Normally very few changes in design criteria are made between the FS and detailed design. However, in case of any major change in design parameters effecting project boundaries, corresponding changes in resettlement planning may be necessary and the information provided in these documents is further updated after the detailed designs are ready or during the implementation stage.

- *Ethnic Minority Development Plans (EMDPs)* - In case the ISA identifies major impacts on some ethnic minority groups, and further confirmed during the SA studies, warranting the preparation of standalone EMDP, necessary surveys and investigations would be prepared during the feasibility study phase of project preparation. EMDP preparation activities are carried out in parallel to the resettlement planning activities and EMDPs are prepared as an integral part of project preparation.

- *Project Process and Resettlement Outputs* - Specific resettlement activities and outputs required at various stages of project process cycle are shown in table3 below.

Table 3: Project Process and Resettlement Outputs

No	Stages in a Typical Project	Resettlement Activities/Outputs
1	Project Identification	- Conduct Initial Social Assessment - Prepare TOR for RP/ EMDP/ SA as necessary
2	Pre-feasibility	- Conduct field surveys (inventories, socio-economic status)
3	Feasibility	- Prepare RP/EMDP/SA as necessary
4	Project Approval	- RP and other documents are approved by relevant agencies
5	Detail Technical Design	- Adjustment of RP and other documents following detailed design with specific project boundaries, if necessary
6	Implementation	- Implementation arrangements for RP/SA/EMDP - Monitoring and supervision

In particularly, the *Resettlement Plans (RP)* would need to be prepared in accordance with the provisions of Decree 192 on Compensation and Resettlement, and the Implementing Regulations following three basic principles: (a) Enhance the quality of life for project affected people, (b) To the extent possible, prevent or minimize adverse social impacts and (c) Mitigate possible adverse social impacts. While adhering to the above principles, the RPs will incorporate all resettlement and rehabilitation measures necessary to ensure compensation

for assets acquired at replacement cost, and restoration or enhancement of livelihood for all PAPs. In principle, the Land Acquisition and Compensation Report is similar to the RP in its objectives. The only difference is that it is simpler in its scope and contents. RP is required in 'S1' category of projects where the impacts are significant while the Land Acquisition and Compensation Report, which is a simpler form of RP, is required for 'S2' category of projects where the adverse social impacts are marginal.

In cases where the impacts of the sub-project are marginal such that less than 200 persons (about 40-50 families) are severely affected and/or displaced, or where the impacts are minor, although more than 200 persons may be affected (Category 'S2' projects), a simple Land Acquisition and Compensation Report should be prepared. It should provide the same type of information as the full RP, however, the level of detail will differ. In Category 'S1' projects where the project displaces more than 200 people (40-50 families), or where APs are severely affected in terms of loss of 20% or more of their productive assets or loss of incomes and businesses, a time-bound Resettlement Plan (RP) for the project should be prepared in accordance with the provisions of the Decree on Compensation and Resettlement and the Implementing Regulations. Resettlement plans should be built around a development strategy, and compensation, resettlement, and rehabilitation packages should be designed to improve or at least restore the social and economic base of those severely affected. Preference should be given to resettling people dislocated from agricultural settings into similar settings. In undertaking RP preparation exercise, the project owner or consultants are expected to follow a series of steps leading to the preparation of acceptable RPs:

- Review the legal framework in the Lao PDR;
- Review the detailed project design and the results and recommendations of ISA;
- Facilitate discussions with the local government officials in affected provinces/districts in order to agree on the RP approach; the local authorities will have to take an active role in RP planning and implementation processes;
- Undertake a census of all APs (with 100% coverage), inventory of affected assets, and a sample socio-economic survey of project area and proposed resettlement site, where necessary to resettle displaced persons, to establish a baseline of APs and the host population; for smaller sub-projects and depending on the availability of resources, the census, inventory of affected assets, and socio-economic survey may be combined into one field operation;
- Hold consultations with stakeholders (including APs) to obtain their inputs for RP design and to enhance ownership, facilitate approval process, and ensure ease of implementation;
- Analyze data to identify different categories of APs depending upon the degree and scale of impacts of the project components;
- Hold consultations with the key stakeholders to design compensation package (including compensation for all

types of affected assets, rehabilitation measures and other assistance) for each category of APs;

- Formulate procedures for assessment of compensation for each type of affected assets;
- Formulate time bound schedule for the implementation of resettlement plan (RP);
- Formulate procedures for grievance redress;
- Determine monitoring procedures during and post-project period and identify a competent external monitoring agency for external monitoring and prepare a TOR for the same;
- Prepare detailed cost estimates for implementation of RPs including the costs for administrative overheads [11].

#### IV. CONCLUSION

Laos has wealthy rivers and water resources that may be suitable for hydropower development to promote economic growth and alleviate poverty. Nowadays, about 22 hydropower projects with totally installed capacity of 3,205 megawatts have been operated in the country. However, those larger hydropower development projects have caused to environmental, social, cultural, economical, livelihood and resettlement impacts in large scales. There are variously related articles of excited laws that project developers must apply for resettlement and compensation implementation caused by hydropower projects in Laos. Especially, the specifically preferable regulations are the Decree No. 192/PM on Compensation and Resettlement of Development Project and its technical guideline on Compensation and Resettlement of Development Project. For those projects are funded by the World Bank and Asian Development Bank, the borrowers or/and project developers have to follow environmental, social, and involuntary resettlement policies of two major banks.

To overcome the environmental, social, and resettlement challenges, the Government of Lao PDR has made the partnership with several international financial institutions and different organizations such as World Bank (WB), International Finance Corporation (IFC), Asian Development Bank (ADB), United Nations Development Programme (UNDP), and other related agencies to enhance capacity on natural resources and environmental protection, and social safeguard. Those many partnership projects aim to ensure that hydropower will be developed and operated in sustainable ways that protect the environment and local people's livelihoods. It will also support socio-economic development of the country. The supports are realised the economic growth potential through the development of sustainable and commercially viable hydropower. It seeks to collaborate with local government agencies, international and local civil society organisations, finance institutions, and the private sector to enhance environmental and social standards in the hydropower sector [12].

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