



Report on EIA twinning project between Lao PDR and Japan, Sri Lanka and Japan

TA 7566-REG: Strengthening and Use of Country
Safeguard Systems:

Sub-project: EIA Clearinghouse and Capacity
Strengthening through Twinning

Training Workshop on EIA Report Review in Lao PDR September 2014

Implementing Agency:

Asian Environmental Compliance and Enforcement Network (AECEN)
Secretariat

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1. Introduction

The Asian Environmental Compliance and Enforcement Network (AECEN) is a regional practitioner network dedicated to sharing improved policies and practices in compliance and enforcement in Asia. The network was launched at ADB's headquarters in Manila in 2005, with assistance from the United States Agency for International Development (USAID) and ADB, in partnership with 13 Asian countries (16 countries and 19 member agencies as of December 2013). In 2009, member agencies agreed that the Institute for Global Environmental Strategies (IGES) would become the permanent secretariat of AECEN. ADB and IGES recently signed a Memorandum of Understanding (MOU) on a range of cooperative activities, including AECEN.

In July 2010, the ADB Board of Directors approved Technical Assistance (TA) 7566-REG for \$5,000,000. In September 2011 the ADB approved an increased TA amount to \$8,000,000. TA 7566-REG has three components: (i) subproject implementation, (ii) knowledge management and dissemination, and (iii) coordination among development agencies. Through Component 1, Subproject Implementation, ADB is providing systematic, timely support for a series of subprojects tailored to the needs of specific Developing Member Countries (DMCs) for strengthening and effective implementation of their respective country safeguard systems.

A subproject of the TA is being implemented by AECEN through its Secretariat managed by the IGES regional center in Bangkok, Thailand. The subproject has two main components: (i) an EIA clearinghouse that aims to facilitate knowledge capture and dissemination of information on international best practices in EIA implementation, and (ii) south-south twinning between Lao PDR and Japan, and Sri Lanka and Japan. Through these components, the subproject aims to improve information sharing and knowledge management in EIA among all DMCs through the EIA clearinghouse and to enhance capacity of beneficiary countries by improved understanding of EIA best practices of the mentor country through south-south twinning.

The first component, the EIA clearinghouse, was developed and successfully launched on AECEN's website in March 2013 (<http://www.aecen.org/eia-compendium>). The clearinghouse provides EIA laws and regulations, useful EIA references, guidelines and manuals, case studies of EIAs that could serve as models for future EIAs in the same sector, news articles and court cases involving implementation issues surrounding EIAs, and hot-links to national websites of EIA-related agencies.

The second component, two EIA twinning projects, is being conducted between Lao PDR and Japan, and Sri Lanka and Japan. In both cases, the Japan Association of Environment Assessment (JEAS) acts as the mentoring organization to the project, delegated by the Ministry of Environment, Japan (MOEJ). The Sri Lanka twinning project is implemented with the partnership with the Central Environmental Authority (CEA) and the Lao PDR twinning project with the Department of Environmental and Social Impact Assessment (DESIA), the Ministry of Natural Resources and Environmental (MoNRE).

This report presents a summary of the Training Workshop on EIA Report Review – A case of thermal power sector with Japanese Experience in Colombo, Sri Lanka in August 2014 as part of the EIA twinning project between Sri Lanka and Japan.

2. Overview of the EIA twinning project

2.1 AECEN's twinning projects

Twinning is a key feature of AECEN's capacity development mechanism between members and its effectiveness has been proven in numerous projects. Twinning activities can include peer review of policies and operations, technical assistance in developing and implementing improved policies and practices, specialized on-the-job training and information exchange. Key elements of twinning are summarized below:

Counterpart Exchange: Twinning partnerships facilitate direct exchange between practitioners in sharing information on improved policies and practices;

Reciprocal Benefits: Both twinning partners receive benefits from the partnerships in strengthening their policies, practices and capabilities;

Demand Driven: Twinning partnerships respond to an agency's priority needs, which are matched with another agency's proven approaches and capabilities;

Results Focused: Twinning partners develop MOUs and work plans that identify specific commitments, activities, resources, timelines and outcomes. Twinning partnerships result in the adoption of improved policies and practices as well as increased capacity, leading to measurable improvements and tangible outcomes;

Replication: Twinning partnerships aim to replicate proven policies and practices across Asia; and

Cost Sharing: All partner agencies support twinning activities on a cost-share basis, providing in-kind and direct funding support. Development partners facilitate and co-fund twinning activities as needed.

2.2 Rationale for the EIA twinning project

Minimizing adverse environmental impacts of economic development accompanied by rapid urbanization and industrial growth as well as conserving natural environments remain significant challenges for Asia. While many governments have developed legal and institutional frameworks for environmental safeguards, implementation and enforcement of environmental laws and regulations remain weak due to technical, financial, and human capacity limitations.

In the region, application of EIA requirements has been consistently identified as a priority concern of environmental compliance and enforcement. Yet, effective implementation of the EIA laws in Asia remains patchy, especially in relation to compliance and enforcement of environmental management and monitoring plans (EMMPs) which identify measures to be taken in order to reduce adverse environmental and social impacts to acceptable levels or offset them in an appropriate manner. Therefore, EIA implementation needs to be enhanced through further capacity strengthening.

2.3 Objective of the EIA twinning project

The objective of the project is to develop the implementing capacity of EIA in Sri Lanka and Lao PDR through the bilateral twinning arrangement with Japan as a mentoring country. The twinning arrangement provides mutual hands-on learning opportunities among the government officials in charge of EIA and experts in the field and delivers tangible outputs that are beneficial to the mentee countries.

2.4 Overall activities envisioned for EIA twinning project

The following sequential activities were envisioned to be undertaken for the twinning project to implement effective partnerships between mentor and mentee countries (Sri Lanka, and Lao PDR):

- (i) Drafting plan and schedule for key activities in close consultation with Japan and Sri Lanka/Lao PDR for ADB review and approval;
- (ii) Signing of Memorandum of Understanding (MOU) between partners;
- (iii) Organizing workshops to launch the twinning program;
- (iv) Reviewing EIA and SEA application in Sri Lanka/Lao PDR to ascertain training requirements;
- (v) Coordinating study tour and site visits to Japan;
- (vi) Revising Sri Lanka's/Lao PDR's existing EIA guidelines and/or developing new ones;
- (vii) Drafting training and user manuals for amended and/or additional EIA guidelines; and
- (viii) Organizing a training program to introduce amended and/or new EIA guidelines and manuals.

3. Lao PDR-Japan and Sri Lanka-Japan EIA twinning project

3.1 Organizational arrangements

Japan (mentor)

JEAS acts as a mentoring organization of the project and implements the project on behalf of MOEJ. JEAS is a public association, comprising approximately 140 environmental assessment business companies (as of June 2014), established in 1978 and operated under the supervision of ministries of environment; agriculture, forestry and fisheries; economy, trade and industry; and land, infrastructure, transport and tourism (<http://www.jeas.org/english.cts>).

As JEAS has limited staff in its secretariat, it appointed Japanese experts from Environmental Resources Management (ERM) in Japan for the project implementation. ERM is a leading global provider of environmental, health, safety, risk, social consulting services and sustainability related services. ERM has over 140 offices in 39 countries and territories employing more than 5,000 people (<http://www.erm.com/en/>).

Mr. Manabu Sakaguchi, Partner, ERM Japan, leads the project. He is an environmental and social safeguards specialist with extensive experience in the field from various projects implemented overseas. Ms. Naoko Maruyama, Mr. Yohei Suzuki, and Ms. Tomoko Kaku, Consultant, ERM Japan, assist in implementing the project as team members. They are environmental and social safeguards specialists and have extensive experience in the field. Other ERM staff provide *pro bono* assistance.

Lao PDR (mentee)

The Department of Environmental and Social Impact Assessment (DESIA) under MoNRE is responsible for overseeing the implementation of the EIA process in Lao PDR. MoNRE is responsible for issuing environmental quality standards in cooperation with the line ministries, and for issuing general EIA guidelines specifying procedures and standards to evaluate and mitigate environmental impacts caused by development projects.

Mr. Lamphoukeo Kettavong, Deputy Head of Planning and Administration Division, DESIA leads the project on behalf of the Government of Lao PDR.

Sri Lanka (mentee)

The Central Environmental Authority (CEA) acts as the implementing organization of the project in Sri Lanka. The CEA was established in August 1981 under the provision of the National Environmental Act No: 47 of 1980. The Ministry of Environment and Natural Resources (ME&NR) which was established in December 2001 has the overall responsibility in the affairs of the CEA with the objective of integrating environmental considerations in the development process of the country. The CEA was given wider regulatory powers under the National Environment (Amendment) Acts No: 56 of 1988 and No: 53 of 2000 (<http://www.cea.lk/>).

Ms. Kanthi de Silva, Director, the CEA leads the project on behalf of the Government of Sri Lanka.

AECEN (project secretariat)

Dr. Peter King, Head of AECEN Secretariat, Ms. Sarunya Sujaritpong, AECEN Programme Manager, Mr. Chandkachorn John Chandarat, Website and Database Manager, IGES Regional Centre, and Dr. Daisuke Sano, Director, IGES Regional Centre, assist in implementing the project and liaise with ADB. Dr. Daisuke Sano will act as a focal point for IGES.

3.2 Training Workshop on EIA Report Review in Lao PDR

Summary of the workshop

A training workshop on EIA report review under the Twinning Partnership between Laos and Japan was held between 17th -18th September 2014 at the Auditorium of the New Rose Hotel in Vientiane. Sixteen officers from Head Office of DESIA, MoNRE, participated in the training workshop. For Day1, group discussion workshop was conducted at the New Rose Hotel in Vientiane. This was basically focused on EIA report review with special reference to hydro power sector, taking the Theun Hinboune expansion project, Lao PDR, as a case study. In addition, a site visit to the Theun Hinboune expansion project site was conducted on Day2 to examine an actual situation of the project that they discussed on Day1 of the workshop. Mr. Manabu Sakaguchi and Mr. Yohei Suzuki, Consultants of ERM, Japan, attended the workshop to share their experience with the DESIA officers under the twinning partnership. Workshop documents are available on AECEN website at <http://www.aecen.org/events/training-workshop-eia-report-review-eia-case-hydro-power-sector-japanese-experience>.

Day1: Group discussion workshop

The workshop was commenced at 9.00 a.m. in the morning on 17th September. Mr. Thavone Vongphosy, Deputy Director of the DESIA, welcomed all the participants. He briefly outlined the history of the twinning partnership and informed the participants that this workshop was a collaborative approach of the AECEN Secretariat, DESIA and ERM, Japan. Day1 of the workshop was facilitated by Mr. Kettavong, DESIA.

Mr. Thongsamlit Onmanisone briefly explained the basic information of the Theun Hinboune expansion project. The project that was used as the case study is an expansion of existing 220MW Theun-Hinboun Hydropower project (THPP). The expansion project added water capacity to the THPP project which previously relied on a run-of-the-river dam on the Nam Then. The storage comes from a new reservoir, created by a dam built on the Nam Gnouang. The total power generation capacity from the THPP is 550MW. A summary EIA report (in Lao language) of the project was circulated among the participants.

Mr. Suzuki briefly explained a checklist developed by Japan Bank for International Cooperation. He explained that JBIC had developed a number of environmental checklists (referred to as JBIC checklist) to review their projects. The checklists have been developed for 27 different sectors such as hydropower, oil, gas, power, and road.

He explained the JBIC check list for hydro power sector (henceforth referred to as 'hydro power checklist') as the case study. The hydro power checklist includes several components such as permission and approval requirements and protective measures for water quality, waste, soil

contamination, noise vibration, and natural & social environment. The component on natural environment includes protected areas, ecosystems and biota, hydrology, topography and management of abandoned sites. The component on social environment focuses on resettlement, livelihood, indigenous people, occupational safety and etc. Then Mr. Suzuki explained International Finance Corporation Performance Standard (IFC PS). He mentioned that IFC PS is a set of 8 safeguard policies for each component including management system, pollution prevention and land acquisition. The purpose of the development of the IFC PS is to safeguard environment and society from project activities. Mr. Suzuki further explained specific points of reviewing hydro power plants in detail.

After that, Mr. Manabu Sakaguchi gave an overview of Xe Katam Hydropower Project, Lao PDR. The purpose of his presentation was to explain the impacts caused by the project and the monitoring system to be implemented by the project.



For the group discussion, the participants were divided in to 3 groups to work on the EIA report of the Theun Hinboune expansion project. They were asked to review the report using the presentation material prepared by ERM Japan. After the group discussion, each group was asked to do a presentation on key findings. Outcomes from group discussion are summarized by each impact component as shown below.

1. Water

Dam construction caused impacts on water quality upstream and downstream during both construction and operation stages resulting in:

- Blockage of the river flow and led to changes in water volume and depth. These impacts may affect fish spawning and may decrease in oxygen levels of the reservoir.
- Changing in water flow might result in degradation of water quality indicating by a number of parameters: temperature, pH, turbidity, COD, BOD, DO, TDS, NOs-N, SS and etc. It could cause impacts on aquatic organisms, ecosystems as well as community health.
- Changing in water flow (increase during rainy season and decrease during dry season) may lead to loss of habitats of aquatic animals for example reduction in fish production. This may result in loss of food and income of local community living along the river.

2. Natural environment

- The EIA case study had sufficient baseline data and some examples were hydrology, biodiversity, geology, aquatic animals (11 new fish species found in the Nam Theun-Nam Kading River)
- Sensitive/risk areas included 3 national protection forests: Nakhai, Phouhinboun and Nam Kading Protection Forests. The sensitive area may be affected by road construction and access.
- An increase in sediment load in the reservoir as well as sediment transported downstream may lead to turbid water and river bank erosion. This might be caused by increased river flow. In addition, the increased sediment load may cause loss of riparian and agricultural land in downstream areas.
- Water pollution from improper management of hazardous materials
- Waste from industrial sites and solid waste from site offices and worker camps
- Erosion associated with road construction and access as well as from borrow and quarry sites
- Loss of forest trees and biodiversity due to cutting or clearance from construction sites and illegal consumption of wildlife
- Air and noise emissions during construction
- Artificial dam may cause impacts on loss of forest area of 500 ha and degraded forest of 1,750 ha

3. Social Environment

- Create artificial dam may lead to resettlement of 11 villages with 4200 PAPs and loss of their agriculture land of 10,000 ha
- Degraded biomass in the reservoir leads to GHG emissions
- Increased accidents to local residents due to increased traffic transportation for project construction

4. Environmental management plan and monitoring

The proponent shall develop and implement environmental management plan (EMP) and monitoring programs for both construction and operation stages to avoid or minimize ecological impacts upstream (reservoir) and downstream areas including but not limited to:

- Biomass clearance plan
- Water quality monitoring and water quality improvement for ambient water in the reservoir as well as downstream water quality and ground water quality
- Biodiversity/forest offset program for the lost forest area including movement of wildlife affected by created reservoir to the safe habitat
- Sedimentation and erosion control programs
- Worker health and safety programs
- Resettlement, compensation and livelihood restoration programs
- Community development programs
- Environmental education and training for labor working for the project as well as PAPs and communities around the project sites
- Tourist management programs which may help increases in number of tourists visiting the dam site during the project operation stage
- Establish an environmental office to implement, monitor and report the EMP and monitoring programs

- EMP and monitoring programs for transmission line
- Provide sufficient personnel, equipment and budget for implementing and monitoring the developed plans and programs as well as allocating a budget to the government for monitoring of 1,200,200 over 10 years

Day2: A site visit to the case study of hydropower project site

A site visit to the Theun Hinboune expansion project was conducted on Day2. Almost all the participants who attended Day1 workshop went for the site visit. At the project office, a presentation was provided from Mr. Soullanh (Site Manager) and Mr. Souliyet (Head of Social and Environment Unit). They explained background of the project and environmental management activities conducted by the team, including construction site monitoring, erosion monitoring, water quality monitoring, reservoir clearance, catchment management, reforestation and fisheries monitoring. After that following project areas were visited.

- Reservoir
- Relocation site



During the site visit, participants actively raise questions to site managers. Items discussed include;

- Since the project area largely covers developed areas and rocky areas, there were only a few biomass resources such as forests. Therefore, amount of logging required before water filling was minimal. Only economically valuable woods were logged.
- During operation stage, reservoir clearance was conducted by removing biomass sources such as floating woods.
- The Biodiversity Offset Program is conducted by the project proponent together with MoNRE. The program includes the conduct of a baseline survey of biodiversity and planted trees.
- Reservoir management includes the restriction on fishing (Avoid spawning season or implementation of fishing permits)

- Annual monitoring is conducted for affected people. An item to be monitored includes a status of livelihood and income.

Conclusions

There were about 16 participants including senior and new staff. Although the level of experiences among the participants varied, all the participants were quite satisfied with the content of the workshop and they thought that the training was very useful. They gained new experience and knowledge from the trainers as well as from exchanging experience with the senior staff. For the group discussion, it was concluded that they had learned several key points as summarized below.

- Overview of JBIC, IFC and JICA standards
- Environmental and social management from other hydropower projects
- The relationship of project development cycle and the development of EIA, EMP and monitoring programs
- Identification of impacts from hydropower development from reading maps of the case study project
- Understanding key points for the EIA review

Recommendations

The joint work plan provided a good opportunity for the participants from DESIA to learn what should be improved to strengthen EIA review and monitoring practices. Through the joint work plan, it was identified that detailed activities for the following main items shall be planned for future programs.

- Improve capacity of EIA review
- Improve capacity of enforcement of environment mitigation and monitoring plan
- Provide practical knowledge and experience (e.g. How to identify the new experience on mitigation measure) for central DESIA and provincial staff
- Introduce experience from other countries

DESIA is currently supported by the Finland Government as well as PEI-LINDP to help establish a management system to control various documents generated in the process of EIA under a new environmental Law. However the practical application of the EIA system is still needed to be strengthened for example through training programs as identified above.

4. Annex I Concept note for the training workshop

Background

For developing countries in Asia, application of Environmental Impact Assessment (EIA) requirements has been consistently identified as a priority concern of environmental compliance and enforcement. Yet, effective implementation of the EIA laws in these countries remains patchy, especially in relation to compliance and enforcement of environmental management and monitoring plans (EMMPs) which identify measures to be taken in order to reduce adverse environmental and social impacts to acceptable levels or offset them in appropriate manners. Therefore, EIA implementation needs to be enhanced through further capacity strengthening.

Under Technical Assistance (TA) 7566-REG on environmental safeguard of Asian Development Bank (ADB), Asian Environmental Compliance and Network (AECEN) aims to increase capacity for EIA implementation through its subproject – “Environmental Impact Assessment (EIA) Clearinghouse and Capacity Strengthening through Twinning.” The subproject strives to achieve its aims by facilitating knowledge capture and dissemination of information on international best practices in EIA implementation through exchange of knowledge and know-hows as well as mutual learning.

For twinning partnerships, Lao PDR was selected to participate in the subproject as one of the mentee countries, and Japan has been acting as a mentor country. Useful perspective, experience and strategies are expected to be shared to advance implementation of EIA laws and regulations in Lao PDR through hands-on activities under the subproject.

Under the subproject between Lao PDR and Japan, there are three key activities planned in order to achieve the subproject’s aim. The first activity, a consultation workshop in January 2014 in Vientiane, Lao PDR, brought together partners from both mentor and mentee countries, identified priority assistance needs, discussed and agreed on objectives and design of the partnership, and secured commitments from both countries for its implementation.¹ Following on the first activity, a workshop was held in June 2014 in Yokohama, Japan to strengthen capacity of the government officials in charge of EIA implementation from the mentee countries (Lao PDR and Sri Lanka) responding to their needs identified at the consultation workshops. Partners and experts from Japan provided the participants both from Lao PDR and Sri Lanka with good practices of EIA implementation in Japan through workshop and study tour. The workshop also provided a platform for all the participants from both mentor and mentee countries to understand the differences in EIA implementation in different countries, share experiences and to discuss improving EIA implementation for mentee countries.²

The third activity, a training workshop – to be conducted in a mentee country – aims to share lessons from the workshop in Japan to a wider audience mentee country and address further narrowed-down needs from the mentee country. During the second workshop held in Japan, a set of training needs for the third activity was identified by the participants from Lao PDR. Through a discussion between the participants from Lao PDR and the experts from Japan, a hands-on training exercise for EIAs for hydropower projects was agreed on as a priority area for the planned training workshop. ERM Japan Ltd, as a mentoring organization, has agreed to dispatch its staff members to be speakers and modulators for the capacity development training in Lao PDR.

¹ Please refer to <http://www.aecen.org/events/consultation-workshop-twinning-partnership-environmental-impact-assessment-eia-between-lao-pd> for further details.

² <http://www.aecen.org/events/capacity-development-workshop-twinning-partnerships-eia-lao-pdr-japan-and-sri-lanka-japan>

Objectives and expected outputs of the capacity development training

As stated above, the scope of this capacity development training is limited to EIAs for hydropower projects in Lao PDR. Target participants will include different offices under DESIA.

Objectives of the capacity development training scheduled to be held on 17-18 September 2014 are as follows:

- To strengthen capacity on assessment of social and environmental impacts due to construction and operation of hydropower projects;
- To provide hands-on knowledge on prevention, control and mitigation measures of social and environmental impacts caused by construction and operation of hydropower projects; and
- To enhance understanding about monitoring the potential impacts resulting from operation of hydropower projects.

Expected outcome:

Government officers from DESIA are expected to have:

- Increased understanding and knowledge on conducting EIA for hydropower projects; and
- Better understanding of monitoring the potential impacts resulting from operation of hydropower projects.

5. Annex II Training workshop agenda

Date: 17-18 September 2014

Time	Session details
Day 1 (17 September) Training workshop (8:30-15:45)	
8:30 - 9:00	Registration
9:00 - 9:10	Welcome remarks (representative from DESIA)
9:10 - 9:20	Objective of the training (Mr. Lamphoukeo Kettavong)
9:20 - 9:40	Introduction of the case study of Theun Hinboun Project (Mr. Lamphoukeo Kettavong)
9:40 - 10:30	Presentation of EIA review practice (ERM Japan) <ul style="list-style-type: none"> • JBIC checklist • IFC guideline • Points of review
10:30 - 10:45	Coffee break
10:45 - 12:00	Small group workshop <ul style="list-style-type: none"> • Discussion/working on an EIA report of hydropower project to identify review findings • Presentation preparation
12:00 -13:30	Lunch
13:30 - 14:30	Presentation from each group (Moderator: ERM Japan and DESIA) <ul style="list-style-type: none"> • Review findings of case study project/appropriateness of EIA report
14:30 -14:50	Coffee break
14:50 - 15:30	Panel discussion (Moderator: ERM Japan and DESIA) <ul style="list-style-type: none"> • Summarize the review findings and important aspects to be considered in the review
15:30-15:45	Concluding remarks (Representative from DESIA)
Day 2 (18 September) Field visit to Theun Hinboun Expansion Power Project (7.00-18:00)	

6. Annex III Participant list

	Name	Organization	Position
1	Manabu Sakaguchi	ERM Japan Ltd.	Partner
2	Yohei Suzuki	ERM Japan Ltd.	Consultant
3	Khamsy	Interpreter	Interpreter
4	Phonexay	DESIA	Staff
5	Bunerkeo	DESIA	Deputy of Division
6	Maniphoe Phissamay	DESIA	Staff
7	Jay	DESIA	Staff
8	Chatdauone	DESIA	Staff
9	Thavone Vongphosy	DESIA	Deputy Director of Division
10	Lamphoukeo	Planning Division	Deputy Head
11	Bonpha	DESIA	Officer
12	Oulaphany Inthavong	DESIA	Staff
13	Thongshad	DESIA	Technical officer
14	Boyatoy	DESIA	Staff
15	Vileyphanh	DESIA	Staff
16	Thipthida	DESIA	Deputy Director of Division
17	Khampa-Seuth	DESIA	Technical staff
18	Phoulthavone	DESIA	Technical staff
19	Akkhavong	DESIA	Technical staff