



(7) Good practices

<Lao PDR>

Good practice 1: Nam Ngiep 1 Hydropower Project

1. Stage of EIA Process	Implementation of the Environmental and Social Management and Monitoring Plan and monitoring
2. System/ implementation	Implementation
3. Country	Lao PDR
4. Project overview (if it is about specific project) and outline of good practice	<p>The Nam Ngiep 1 Hydropower Project (NN1HP) is a large-scale hydropower Project in Lao PDR and is currently under construction. The project is implemented by the Nam Ngiep 1 Power Company (NNP1) established in a partnership between KPIC Netherlands (45%), a subsidiary of Japan's Kansai Electric Power, EGAT International (30%) of Thailand, and the Lao Holding State Enterprise (25%). The Project loans were provided by the Asian Development Bank (ADB) and a syndicate of Thai (Bangkok Bank, Kasikornbank, Siam Commercial Bank and Thai Exim Bank) and Japanese banks (Bank of Tokyo Mitsubishi UFJ (BTMU), Mizuho Bank and Sumitomo Mitsui Banking Corporation (SMBC)). The subordinated Lao Holding State Enterprise equity financing was provided by a consortium of Japan Bank for International Cooperation (JBIC) and certain Thai banks. The project has been categorized as Group 1 (i.e. hydropower projects with 15 MV or more installed capacity) and required comprehensive Environmental and Social Impact Assessment (ESIA).</p> <p>The key project components include the main dam, which is a roller-compacted concrete gravity dam approximately 530 m in length, water from the reservoir will drop around 132 m to the Main Powerhouse. The main powerhouse features two Francis unit turbines that can together generate 272 MW of power, supplying 1,546 GWh per year.</p> <p>The re-regulation dam is located 6.2 Km downstream from the main dam. The re-regulating facilities utilize water discharged from the main powerhouse that flow into the re-regulating reservoir, creating a smooth discharge of water can be released on a daily basis. The re-regulation powerhouse has an 18 MW capacity, able to generate 105 GWh of power annually through a single bulb type turbine. Other ancillary facilities include access road, main reservoir (67 Km²), a 230 kV transmission lines (125 Km), and resettlement site.</p> <p>4,000 affected people, mainly ethnic minorities, in five villages are required to be resettled. Including four villages in the lower reservoir area will be completely inundated, losing their housing, infrastructure and most of their agricultural land.</p> <p>The main ESIA and associated studies for the project was finalized in 2014 to align with Lao PDR statutory requirements as well as applicable international standards i.e. ADB Safeguard Standards. The NN1HP is managed by Nam Ngiep 1 Power Company (NNP1). The project's environmental and social management and monitoring plan (ESMMP) is being implemented. NNP1 is also committed to meaningful consultation</p>

	<p>and information disclosure which is outlined in the Project's <i>Public Consultation and Information Disclosure Plan (PCDP)</i> (ERM, 2014).</p> <p>Although there are still challenges in enforcement and operation, the project's mitigation and compensation measures have been designed to meet international standards. Also, the project has independent monitoring system to review environmental and social performance of the project annually. Considering these points, the project can be a good practice of infrastructure development projects in the country.</p>
<p>5. Background and issues identified (why and how does this good practice was started and evolved?)</p>	<p>The Nam Ngiep 1 Power acknowledges the environmental impacts a hydropower project can have and is committed to minimising these impacts. Some of the most likely environmental impacts associated with the Project include the loss of upstream terrestrial biodiversity due to the creation of main reservoir (66.9 km² of surface area); alteration of water flow and quality, and ecosystem services. The company has set up the Social and Environmental Management Office (SEMO) to ensure project activities follow the national legislation in terms of environmental performance and that all environmental risks are properly identified, assessed, managed and mitigated. NNP1 is committed to achieving the environmental management standards required for ISO 14001 and is also bound by ADB Safeguard Policy Statement (2009). NNP1 undertakes to maintain a transparent process of information disclosure and consultation on environmental matters and also to continually improve its performance in this vital field of project development.</p> <p>To manage and minimise the impacts of the NN1HP on local people, NNP1 works with local and national authorities to meet guidelines (i.e. Decree on Compensation and Resettlement Management in Development Projects (2005 and recently revised in 2016)), set out by Lao laws, in its Concession Agreement with the Lao Government, and as stipulated by the Asian Development Bank's Safeguard Principles.</p>
<p>6. Key features of good practice and its consequences/ outcomes</p>	<p>The project has been designed to avoid or minimise negative impacts where possible, and where effects are still expected, mitigation and compensation programmes have been put into place. NNP1 has developed comprehensive ESIA documents including ESMMP and sub-plans that meet applicable international best practices and guidelines. The Project developers have allocated appropriate and adequate resources to implement the ESMMP and other sub-plans whilst the contractors and all suppliers are required to fulfil their contractual environmental, social obligations including preparation of site-specific ESMMP and implementation.</p> <p>NNP1 has created a dedicated Social and Environmental Management Office (SEMO) to ensure that the project minimizes its local footprint and also contributes to improved conservation measures and environmental awareness on a national scale.</p> <p>The SEMO of NNHP1 plays a critical role in monitoring the implementation of ESMMPs on the ground with local authorities and affected communities. In addition, the management, mitigation, and monitoring measures identified and prescribed in the thematic ESMMPs and site-specific ESMMPs have been incorporated into construction contracts to ensure compliance obligations.</p> <p>Internal compliance monitoring activities has been conducted weekly by the SEMO with an emphasis on active sites and activities. Effective communication procedures are in place for any non-compliance issue</p>

	<p>identified during site monitoring and inspection.</p> <p>Independent Advisory Panel and Lenders' Technical Advisors have been engaged to conduct external audit and review of NNPI's environmental and social performance on annual basis. The Project-specific Environmental Management Unit representing the Ministry of Natural Resources and Environment has been established and engaged in monthly, quarterly, and annual monitoring and inspection of the Project.</p>
<p>7. Lessons learnt/way forward</p>	<p>The environmental impact assessment provides information to decision makers and the public on the environmental consequences of the proposed project implementation. However, investor's demand is a key driver to good practice of ESIA in Laos. Internationally financed projects are usually required to follow international safeguards in the development of the project. In short, the level of good practice of ESIA demands from financiers is also correlated with the level of government pressure put on developers to comply with the national legislative framework.</p>
<p>8. Photos</p>	 <p>The Main Dam Construction in Bolikhamxay Province as of early 2017 (Source: NNPI, 2017)</p>  <p>Discharge monitoring activities by NNPI environmental staff (Source: NNPI, 2017)</p>

(Author: Bounta Nuanvixay)

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Good practice 2: Agroforestry Project

1. Stage of EIA Process	Implementation of the Environmental and Social Management and Monitoring Plan (ESMMP) and monitoring
2. System/ implementation	Implementation
3. Country	Lao PDR
4. Project overview (if it is about specific project) and outline of good practice	<p>Stora Enso Lao Co Limited (SEL) was established in 2010 and is a subsidiary of the Stora Enso Group - a leading provider of renewable solutions in packaging, biomaterials, wooden constructions, and paper on global markets. SEL has planted approximately 2,400 ha of eucalyptus and acacia plantations and plans to expand the estate to 35,000 in Southern Lao PDR. SEL is utilising an innovative agroforestry model which seeks to maximise community benefits as well as the economic viability of the plantations. A standard nine (9) meters between rows to allow for 70% of the areas to be used for intercropping or cattle grazing.</p> <p>A series of social and environmental assessments have been conducted for the agroforestry project of SEL during 2008 – 2011 including EIA (2008), Social Impact Assessment (2011); and Soil and Water Management and Carbon Sequestration Assessment (2011). SEL has recently developed its Environmental and Social Management and Monitoring Plan (ESMMP) for its plantation operations and associated facilities. The ESMMP and other social and environmental risk management programs are being implemented. The Company also developed specific work instructions, standard operating procedures, manuals, and checklists to help implement the environmental and social impact mitigation measures.</p> <p>The project implements a bottom-up process for the identification of available land which includes:</p> <ul style="list-style-type: none"> • Free, prior and informed consent (FPIC) consultation; • Use of degraded lands; • Detailed land-use mapping at the village level in coordination with district government; and • Obtainment of concession agreements from government. <p>The project can be a good practice in terms of securing implementation of environmental and social mitigation measures through strict monitoring.</p>
5. Background and issues identified (why and how does this good practice was started and evolved?)	SEL is committed to developing and operating agroforestry project in accordance with international best practice including IFC sustainability framework (2013); Forest Stewardship Council Principles and Criteria for Forest Stewardship V5 (Version 5 2012); ISO 14001:2015 Environmental Management Systems; and OHSAS 18001:2007 Occupational Health and Safety Management Systems.
6. Key features of good practice and its	The good practice of EIA not only account on the quality of the EIA report but SEL actively and progressively implements the environmental and

consequences/outcomes	<p>social risk and impact management and mitigation measures. Relevant EIA documents for the Project have been recently updated to meet applicable policy, legal and regulatory obligations defined in Lao PDR including the international policies and standards (IFC Safeguard Policy and Performance Standards; ISO 14001: Environmental Management Systems; OHSAS 18001 Occupational Health and Safety Management Systems; and Forest Stewardship Council Forest Management Principles and Criteria). SEL implements a program of continuous improvement to monitor, maintain and improve the management and achievement of the company's environmental and social performance targets and objectives. These include:</p> <ul style="list-style-type: none"> • Internal monitoring and reporting; • External audit and certifications including; Forestry Stewardship Council (FSC); ISO14001: Environmental Management Systems; ISO45001: Occupational health and safety management systems; and • Continual stakeholder engagement and community consultation. <p>SEL has developed its own project specific policies, which align to the group's policies and commitments. These policies include economic sustainability; legal adherence; human rights; social responsibility; occupational health and safety; environmental responsibility; good governance; and conflict resolution.</p> <p>The company has established the Sustainability Team to provide support all employees to ensure compliance with FSC, ISO14001 and ISO45001 standards. However, all employees are required to comply with all company policies and procedures.</p>
7. Lessons learnt/way forward	<p>SEL has implemented a number of measures and initiatives to assist in minimising environmental impacts and increasing social benefits of their Lao PDR operations. Some of the environmental measures include the avoidance of areas set aside for conservation or protection (i.e. water buffers) and areas/species with high conservation values. The Company also supports the development of food security, income generation, education, health and other priority areas as part of the Project's social development program. Their environmental and social management has improved incrementally since the beginning of the project. The management, mitigation and monitoring obligations prescribed in ESMMP and other management plans are being implemented successfully with sufficient resources and staff capacity.</p> <p>It is important to note that the ESMMP is a dynamic document that is reviewed and updated regularly to reflect changes to project activities, company commitments, environmental and social conditions, and legislative requirements.</p> <p>The adoption of international best practices in its agroforestry operations can help achieving environmental and social sustainability objectives.</p>

8. Photos



Rice intercropping in SEL's Plantation in Savannakhet Province, Lao PDR
Source: SEL, 2016



6-year old eucalypt plantation
Source: SEL, 2016

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