

Challenging Hongsa Resettlement and Livelihoods The First Mine-Mouth Power Plant Project in Lao PDR

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Introduction:

Hongsa Power Company (HPC) has been implementing a resettlement and livelihoods program since late 2009 through land acquisition, compensation, resettlement site development, physical relocation, grievance redress, and livelihoods restoration. Implementation will be carried out until the target income is achieved in 2022.

Hongsa project comprises a lignite-fired power plant, a lignite mine, a limestone mine, and supporting infrastructures, for the total capacity 1,878 MWs. The Power Plant will use approximately 14.3 million tones of lignite per year. Construction of Power Plant has commenced since late 2010, and its Commercial Operation Date is targeted in mid 2015.

Although land acquisition, compensation and physical relocation are completed, the journey of livelihoods restoration, health surveillance, and social cohesion is a continuous process and may well be future challenges.

Why is the Project Important?

Lao PDR is committed to full integration in the Association of South East Asian Nations (ASEAN) by 2015 and aims to remove itself from the list of least developed countries by 2020. Lao DPR also aims to transform itself to "*the Battery of ASEAN*". As a key step in achievement of this goal, GOL plans to build hydropower and mining coal power plants to sell electricity to Asian neighbors, and Hongsa Project is one of them and is the first coal-fired power plant.

Hongsa Project is located in a-67.37 km² Concession Area (CA) comprising three components: (1) Power Plant component consisting of development of a-1,878 MW coal-fired power plant; (2) Coal Mining component; and (3) Limestone Quarry component.

The power plant is located adjacent to the mining area approximately 8 km to the west of Hongsa district town. The power plant is located within a fenced area of approximately 1 km². A-67 km 500 kV transmission line connects to an interconnection point on the Lao-Thai border to supply electricity to Thai Grid at Mae Moh Northern Thailand; and a-105 km 115 kV transmission line will supply Luang Prabang province in Northern Laos.

Lignite used to generate power will be supplied from the adjacent mine. There are over 577 Million Tonnes (MT) of geological lignite resources and of mineable reserves around 370 MT in Hongsa Basin. The mine pit area covers the area of approximately 12 km² (3 x 4) and maximum depth 350 m. Total coal consumption through a-25 years operation period is 370 MT or 14.8 MT per year with average stripping ratio 3.38:1

The supporting infrastructure includes a Limestone Quarry located at Muang Ngeun, supplying at a rate of 1,650 tonnes per day for Flue Gas Desulphurization (FGD) system at the Power Plant, a-35 km main roads from Muang Ngeun to the Power Plant, access road to dams, water resource system (Nam Louk and Nam Kene Dams), resettlement villages and facilities, fuel supply station, and staff accommodation.

In regard to concern for the environment, the power plant is designed to minimize environmental impacts. These features include FGD 92% efficiency in removing sulfur dioxide; Electrostatic Precipitator (ESP) 99.9% efficiency in removing particular matter; Continuous Emissions Monitoring (CEM) system, which is installed at stack end, to measure NO_x, SO_x, TSP, O₂, temp, etc. Data of environmental change will be real-time monitored in the control room; and waste water will be treated before discharge.

Construction of the power plant commenced in 2010, and Commercial Operation Date (COD) is targeted for June 2015.

Who are the Project-Affected Persons?

Hongsa district is located in Xayaboury Province, Northwestern Laos, approximately 34 km from Thailand border, nestled in a relatively flat valley floor surrounded by rough hills at 500-900 m in elevation. Streams and small rivers flow into the Mekong River. Sixty percent of the area is forested. Hongsa district is a home to a diverse ethnic population of about 27,000 persons.

Three categories of PAPs were identified: (1) PAP1-Resettlers (loss of land, house, and livelihood and relocation needed); (2) PAP2-Loss of land and livelihood but no relocation; and (3) PAP3-Host community who shared land and resources with Resettlers. The Project's plan for resettlement and livelihoods restoration identified in the CA and Entitlement Matrix aims:

- To ensure PAP1 (approximately 2,000 Resettlers) are compensated with cash, new land, new houses, and other infrastructure for resettlement and their income level must be reached within the stated target year;
- To ensure PAP2 (approximately 11,300 persons living in the surrounding communities living in CA area) are compensated for the loss of land, provided alternative livelihoods, and improvement of existing infrastructure; and
- To ensure PAP3 (approximately 330 persons from Host community) are compensated for sharing lands and infrastructure with the Resettlers.

Moreover, there was an influx of imported workforce from Lao PDR, Thailand, Vietnam and China. Labor demand increased from 6,200 in 2011 to a peak of 11,500 in 2013 and will decrease gradually to 1,960 from 2017 onwards.

How has the Resettlement and Livelihood Program been implemented?

Activities relating to Hongsa resettlement and livelihoods program has been implemented as follows:

Land acquisition and compensation involved a number of consultation meetings with relevant GOL and PAPs for discussion of the land and property survey, collecting data using satellite images, GPS and interviews with PAPs. Calculation of land and property loss was undertaken for compensation based on agreement of the Entitlement Matrix. Public consultation for compensation was arranged with PAPs to verify the compensation amount. If agreed, the compensation sheet was signed, and a bank account for compensation transfer was set up. While waiting for the process to be completed, the Project team arranged household account training for PAPs and requested PAPs to remove their property and belongings within a few weeks to allow contractors to start their work. After compensation was transferred, official compensation and the land handover ceremony was organized.

The resettlement site, including new houses and infrastructure, was constructed through consultation with Resettlers and the Host community. After the new house construction was completed, inspection by Resettlers was arranged. A plan for physical relocation plan was prepared and materials and tools for removal of the belongings were provided in advance. Prior to departure, local rituals for graveyards and temples and a general health check for Resettlers and Host community members were arranged. A week after movement, an orientation meeting with Resettlers, Host community members, GOL and HPC field staff was arranged.

For Grievance Redress, preparation of a procedure was included in consultation planning and local level meetings. The procedure comprised of four steps: review by Community Committee; District Committee; Provincial Committee; and Courts. Social audit or third party-monitoring of the implementation of the resettlement action plan against International Finance Corporation (IFC) Performance Standard 5 and other relevant international standards was arranged.

Livelihoods restoration should be comprehensive in nature, not limited narrowly to income. In the Hongsa Project, livelihoods restoration focused on new farmland allocation for para-rubber and fruit tree plantation with intercropping; development of pastures; and a variety of economic home plot activities including entrepreneurial skills, and a series of trainings for both genders promoted through village volunteers. Indicators of improved quality of life especially income targets of the Resettlers was set according to Entitlement Matrix, which all Resettler households shall be above the poverty line within 3 years and have 150% income increases within 10 years after physical relocation. During a transitional period of 3 years, food and nutrition was supported. Moreover, to ensure job security, at least one working member of each Resettled family was employed over the operation period.

Community development was targeted at the communities surrounding the CA area to improve quality of life to at least the same standard as before loss of land and livelihoods. The Hongsa Integrated Development Master Plan including improved existing infrastructure and alternative livelihoods, was prepared through a participatory process, which included improvement of existing roads, village facilities, hospital, school, an irrigation scheme, etc. For alternative livelihoods, it included women driving tip trucks and tractors, production of fly ash cement blocks, traditional massage, food processing, community business, new cash crops with organic, grocery shops, farm machine repair shops, beauty salons, etc. Those activities have been implemented and supported by the Project and GOL through village volunteers.

Health impact assessment and health action plans were prepared in 2012. The health surveillance program will focus on communities surrounding the CA area. General health check for all PAPs, populations at risk, and workers will be arranged to establish baseline data prior to operation of the power plant in June 2015. Environment-related health surveillance training will be arranged for GOL and village volunteers. Active and passive surveillance will be implemented through village volunteers and public health posts, respectively. Sampling health checks and activities related to health surveillance will be fully implemented in the following year and over the operation period.

The Project's future strategic action plan includes (1) establishment of cooperatives; (2) awareness building of environmental sanitation in the communities; and (3) establishment of health baseline data and health surveillance.

What are the Key Challenges?

Although land acquisition, compensation and physical relocation are completed, the journey of livelihoods restoration, health surveillance, and social cohesion is a continuous process and are likely to bring future challenges.

Livelihoods:

Resettler income per person has been apparently higher than the target income (150%), but it does not mean the Project has achieved the goals. The higher income is because the local economy in Hongsa district was boosted significantly during the construction period.

Economic opportunities in Hongsa district will change from traditional rural agricultural practices to contract farming and industrialized communities involving GOL institutions and capacity. Such changes beyond the level of the Project involve both the policy level and the community level. For example, how will Project planning and implementation (such as alternative livelihoods with long-term incorporation of commercial elements, and cooperatives) integrate with institutional structures and sustainability in Hongsa? And what will be the ownership structure?

Health surveillance:

It is clear that respiratory issues will be addressed, but others health issues are also relevant such as non-communicable diseases, stress, noise disturbance, etc. The effectiveness of indicators depends on how reliable and representative of the local context they are, the type and quality of health data collected and obtained from the public health system to establish a proper baseline, and the issue of whether to conduct annual or less frequent repeated surveys to establish and enable assessment of trends.

An additional factor that needs consideration is that owing to traditional farming practices during the dry season, the area surrounding the CA experiences fires and smoke from the clearing of farmland. If PAPs experience problems after the Project starts operation, the Project might be easily blamed for these. Health surveillance can be a tool for the community to check the operation of the Project. What are the necessary strategic actions? Indicators? Who is to be monitored and how? Who should be involved? How reliable, representative, and what is their capacity in the local context?

Social cohesion:

Economic opportunities will change from the production activities of traditional system to a commercial system under which the community's way of life will be changed. The cost of living will increase continually. Therefore, social challenges associated with economic opportunities could include:

- Social disruption e.g. violence, psychological stress, robbery, alcohol abuse. For example, unemployment might cause economic tensions among families (or couples) and leading to domestic tensions, disruption and negative social consequences;
- Exploitation of local culture or a community's way of life e.g. heavy smoking and drinking, demoralized behavior of teenagers or workforce, etc., as a result of economic activities. The exploited or demoralized behavior could be severe when merged with the problem of limited job availability and high cost of living.

As above, disadvantaged or vulnerable groups will be even more challenged due to lack of capacity and lack of access to resources. Such a change could potentially exploit the local cultures and lifestyles.

Conclusion:

The journey of livelihoods restoration, health surveillance, and social cohesion is a continuous process and may well be future challenge. The size of the challenge depends on commitment for sustainable development to be jointly agreed by PAPs, GOL, and HPC.