



Indonesia

6 Kotapanjang Hydroelectric Power and Associated Transmission Line Project (1) (2)

The objective of the Kotapanjang Hydroelectric Power and Associated Transmission Line Project (1) (2) was to handle rapidly increasing demand for power more effectively via the construction of a gravity dam and hydroelectric power plant, transmission lines and a substation on the border between the provinces of Riau and West Sumatra in central Sumatra and thereby contribute to economic and social development in the two provinces.

Loan Amount/Disbursed Amount: 30,025 million yen/22,972 million yen

Loan Agreement: December 1990/September 1991

Terms and Conditions: Interest rate, 2.5% (1)/2.6% (2); Repayment period, 30 years (grace period, 10 years); General untied

Final Disbursement Date: December 1999/October 1999

External Evaluator: Mikiyasu Nakayama (Tokyo University of Agriculture and Technology, Graduate School), et al.

Field Survey: March 2002



Evaluation Result

A gravity dam and hydroelectric power plant (38MW x 3 units), transmission lines and substations were constructed essentially in accordance with the project plans. The project period fell behind schedule due to delays in the procurement of equipment but project costs came in almost as planned. With the construction of the hydroelectric power plant, output reached 483GWh in 2001, or approximately 90% of the target level (542GWh^{*1}), and the plant supplied 20% of its electric power to the provinces of West Sumatra and Riau.^{*2} Meanwhile, from an environmental perspective, there were concerns about deforestation in the protected area in the river basin and about the impact on wildlife, including elephants. From a social perspective, a resettlement program was undertaken for local residents. Subsequent changes in the structure of the economy at the new settlement (increases in the amount of income sourced from fishing, increases in the importance of the non-agricultural sector, etc.) resulted in a varied level of satisfaction among residents due to livelihood differences. The PLN, which was the project executing agency, saw its finances deteriorate as a result of the massive plunge in the exchange rate during the Asian Monetary Crisis,

but it has subsequently been working on measures to improve managerial efficiency and so forth.

^{*1} Output was 706GWh in 2003, a 1.3-fold increase on the target figure, accounting for approximately 27% of the supply volume to the two provinces (based on the latest PLN statistical data).

^{*2} The two provinces have a population of approximately 9 million and an area equivalent to Hokkaido and Tohoku in Japan combined.

Third-Party Evaluator's Opinion

The project has been highly relevant as it aimed at supplying hydro electric power, and alternative renewable energy source to mitigate the accelerated electricity demand in Sumatra Island. In addition, institutional reforms such as electricity price setting and establishment of a development strategy targeting the community in the river basin are needed.

Third-Party Evaluator: Ms. Armida Salsiah Alisjahbana

Obtained a doctorate in economics from the University of Washington. Presently holds the post of Lecturer and Head of Center for Economics and Development Studies, Faculty of Economics, Padjadjaran University. Specializes in public finance, economic development, economics of education, and microeconomics.

Contents of the evaluator's evaluation results and JBIC's comments

The content of the evaluator's report is posted on the JBIC website; aspects of the report with which JBIC is at variance have been appended at the end. The main discrepancies are as follows:

● **Regarding the project's environmental impact, concerns were raised about deforestation in the protected area in the river basin and about the impact on wildlife.**

As stated in the evaluation report "it is not clear how dam construction itself has affected this deforestation," there is no clear cause-effect link involving this project. In connection with the project's impact on wildlife, the Indonesian government, the project's implementing authority, has caused the project executing agency to appropriately relocate all elephants inhabiting the project area to a wild life reserve, based on the wild life preservation and monitoring plan drawn up by the Indonesian Government. JBIC has been notified to the effect that 36 elephants were relocated by the Indonesian Government.

In addition, JBIC made a proposal on an environmental action plan in

the study conducted in 2002 to support the Indonesian government in environmental management and monitoring. We understand that later actions for environmental management and monitoring have been taken by Indonesia.

● **Regarding resettlement, the extent to which resettled residents are satisfied with their new settlements varies**

The Indonesian Government has recognized that some of the living conditions of the relocated people need improvement and has taken remedial measures by drawing up an action plan based on the views and comments as the well as participation of the residents. JBIC has provided support by conducting a study when the Indonesian Government drew up the action plan.