

## Indonesia **18 Rural Electrification Project (2)**

The project's objectives were to improve and increase power supplies to areas outside the Java-Bali power grid by developing rural distribution and generation equipment, and thereby contribute to strengthen responses to poverty reduction in these areas and those to support regional development.

Loan Amount/Disbursed Amount: 6,115 million yen/4,897 million yen Loan Agreement: December 1996 Terms and Conditions: Interest rate, 2.7%; Repayment period, 30 years (grace period, 10 years); General untied Final Disbursement Date: December 1999 External Evaluator: Atsushi Fujino (KRI International Corp.) Field Survey: August 2003

## **Evaluation Result**

Development of rural distribution line and installation of small diesel generators for villages off the Java-Bali power grid was implemented almost as planned. The project period took longer than planned as the result of needs-based adjustments to outputs and deteriorating security due to political instability in Aceh and other areas, but project costs were almost as planned. The project resulted in 711 villages being electrified, which was more than the 670 planned, and equates to approximately 7% of the non-electrified villages on outer islands that were electrified during 1996-2000. Power supplies were improved in 206 electrified villages and the number of electrified households was also increased. Approximately 2.06 million people, or some 2% of the population of the target area benefited from the project (Nagoya, Japan, has a population of 2.2 million). Results from the beneficiary survey relating to impacts on the region's economy and society and improvements in the living standards of residents revealed that the project has been effective in "improving access to TV and radio", "improving the learning environment", "reducing the number of hours spent on housework", "revitalizing local industries", and "creating jobs". There are no problems in the technical capacity, or operation



and maintenance system of the state electricity corporation (PLN) - the project's executing agency, but for financial condition, its earnings performance is not satisfactory. PLN is undertaking various measures, which include reviewing its tariff system and its contracts with independent power producers (IPP) and attempting to improve its managerial efficiency and to improve distribution efficiency by enhancing the supply situation (reducing technical losses). Given the nature of this project, which predominantly targeted non-electrified villages, it is difficult to recover all costs from electricity tariffs, thus ideally the costs should be spread appropriately amongst the beneficiaries, local governments and PLN.

## Third-Party Evaluator's Opinion

Provision of infrastructure will continue to play a vital role for poverty reduction. Decentralization allows a more holistic planning, operation and management with infrastructure projects, such as electrification, rural roads and clean warter.

Third-Party Evaluator: Ms. Erna Witoelar

Obtained a master's degree in human ecology from University of Indonesia. Formerly served as Minister of Human Settlements and Regional Development. Presently holds the post of UN Ambassador for the Millennium Development Goals, and the post of Chairperson of Indonesia Biodiversity Foundation (KEHATI). Specializes in environmentology.



A beneficiary survey was conducted in four of the villages targeted by the project; results evidenced increases in the use of household appliances such as light fixtures, TVs and radios.



Regarding other impacts of electrification, villages cited improvements in nighttime safety and fewer fires because kerosene lamps are no longer being used.



Residents cooperating with the survey