



Indonesia

11 The Bapedal Regional Monitoring Capacity Development Project

The project's objective was to improve the capability for collection and analysis of environmental data (water/air pollution, etc.), which forms the basis for the development of monitoring programs, by developing the capabilities of regional laboratories (research institutes), and thereby contribute to improvements in Indonesia's environment through improving the efficiency of environmental administration.

Loan Amount/Disbursed Amount: 2,935 million yen/2,743 million yen

Loan Agreement: November 1994

Terms and Conditions: Interest rate, 2.6%; Repayment period, 30 years (grace period, 10 years); General untied (consultant component: partially untied)

Final Disbursement Date: December 2001

External Evaluator: Takako Haraguchi (Global Link Management Ltd.)

Field Survey: July 2003



Evaluation Result

The water and air quality, noise monitoring equipment and mobile laboratories were installed almost as planned. The project period exceeded the plan due to the political and economic upheaval arising from the Asian currency crisis, but project costs were almost as planned. A survey of equipment utilization status (during the past six months) found that approximately 60% is being used. The techniques and knowledge acquired through project training programs (sampling, analysis methods, etc.) are being applied and are disseminated among lab staff, which is helping to promote equipment usage. Among the laboratories that provided data, 54% are analyzing more water and air samples, indicating improvements in monitoring capabilities. Further, ten of the thirty-nine laboratories covered by the project have been certified by the National Accreditation Body of Indonesia since 2001. Many laboratory users have stated that: "laboratory performance has improved as the result of the project". In terms of project impacts, in addition to legal action against polluters and improvements in the environment led by the laboratory survey, the development of a regional environmental management system has enabled the

administration and/or judiciary to respond to environmental pollution issues. There are no problems in the technical capacity, operation and maintenance system, or financial condition of any of the laboratories. That stated, decentralization is being phased in, which means that a unified system has yet to be established and some laboratories are experiencing difficulties securing a budget; however, the central government is providing subsidies and the situation is stabilizing. Indonesia's Ministry of Environment is expected to promote the establishment of an environmental management system under decentralization.

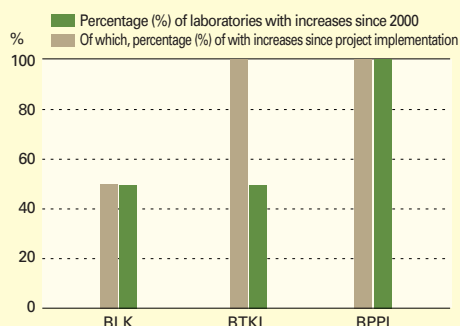
Third-Party Evaluator's Opinion

The project provided great contribution in development and establishment of regional environmental monitoring system. To improve the regional monitoring capacity efficiently, cooperation with higher educational institutions in each region will be a key.

Third-Party Evaluator: Mr. Firdaus Ali

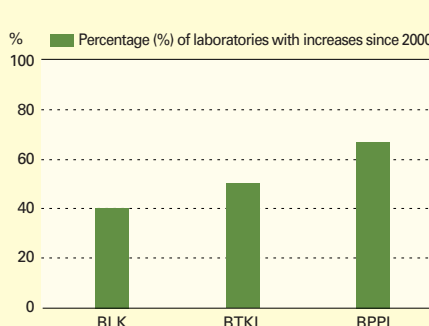
Obtained a doctorate in Environmental Engineering from University of Wisconsin-Madison. Presently holds the post of Professor, Civil & Environmental Engineering Department, University of Indonesia. Specializes in water supply system, industrial water and wastewater design and management, integrated solid waste treatment and management system, and environmental impact assessment.

Changes in Numbers of Water Quality Monitoring Samples



Source: Responses from laboratories

Changes in Numbers of Air Pollution Monitoring Samples



Source: Responses from laboratories

BLK = Ministry of Health Laboratory
BTKL = Ministry of Health, Environmental Health Laboratory
BPPI = Ministry of Industry, Industrial Research and Development Laboratory

The project's objective was to improve the monitoring capabilities of the laboratories and this was evidenced in a survey of transitions in the numbers of water quality and air quality monitoring samples, which revealed increases at the majority of laboratories, that submitted data, since the project was implemented.

