



Indonesia

8 Ujung Pandang Water Supply Development Project (Stage 1)

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This project's objective was to meet water demand in Ujung Pandang (now Makassar), the capital city of South Sulawesi Province, through the construction of new water treatment facilities, thereby promoting economic growth and contributing to improvements in the health and hygiene of local residents.

Loan Amount/Disbursed Amount: 7,034 million yen/6,850 million yen

Loan Agreement: November 1993

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

Final Disbursement Date: June 2002

Executing Agency: Directorate General of Human Settlements under the Department of Public Works/Ujung Pandang Water Utility (PDAM)



External Evaluator: Takuya Okada (KRI International Corp.)

Field Survey: October 2004

Evaluation Result

In this project, construction of a water treatment plant, extension of service pipes, installation of faucets (with meters), etc. was conducted almost as planned. The project period was longer than planned due to delays in hiring consultants and procuring equipment. However, the project cost was lower than planned.

The operating rate of the water treatment plant exceeded 100% in 2002 and 2003, and the number of households with water supply reached 127,468 in 2003, exceeding the planned 125,000. Thus, this project is contributing to stable water supply in Makassar with a population of 1.13 million (population of Saitama City: 1.07 million).

In the beneficiary survey, about 80% of respondents mentioned "improvement in sanitary conditions" (reduction in the incidence of diarrheal disease) and about 70% mentioned "saving time formerly required to draw well water" as benefits of the project. In addition, basic water supply services are now available to adjacent districts, which formerly had problems with receiving a sufficient supply of treated water and thus had difficulty receiving residential population, suggesting that water supplies are helping to stimulate industrial and

commercial activity in the target area.

There is no problem with the operation and maintenance system of PDAM. However, in relation to its technical capacity, adequate measures have not been taken against the high non-revenue water rates caused by water leakage due to aging of service pipes in northern areas of the city. As for financial status, although efforts are needed to improve profitability (measures to lower non-revenue water rates), the total revenue PDAM has been increasing since completion of the project.

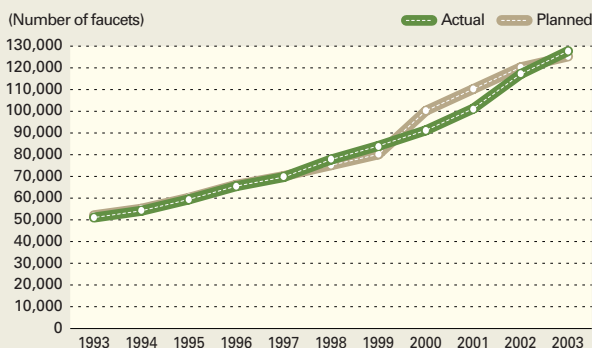
Third-Party Evaluator's Opinion

This project was highly relevant in that it addressed the rapidly increasing water demand in Makassar. However, in order to sustain the effects of the project, sediment control measures at the Bili-Bili Dam and a water rate schedule which can make profit while giving consideration to people in poverty will be necessary.

Third-Party Evaluator: Mr. Firdaus Ali (private company)

Obtained a doctoral degree in environmental engineering from the University of Wisconsin-Madison. Presently holds the post of senior engineer at an environmental consulting company on general environmental engineering. Specializes in water supply system, sewage engineering, etc.

Changes in the number of faucets in Makassar



The number of faucets installed in 2003 was approximately 2.5 times higher than at appraisal.

Beneficiaries in the project area



After the project was completed and supplies of treated water increased, the health and sanitary conditions of municipal residents have improved.