

Overall Rating **A** Poverty Reduction



8 Indonesia Small Scale Irrigation Management Project (3)

Contributing to increased agricultural production through the development of small scale irrigation

Loan Amount / Disbursed Amount 16.71 billion yen / 16.08 billion yen
Loan Agreement January 1998
Terms & Conditions 2.7% interest rate (consulting services: 2.3%), 30 year repayment period (10 year grace period), General untied
Final Disbursement Date February 2004
Executing Agency Directorate General of Water Resources, the Ministry of Public Works (http://www.pu.go.id/satminkal/Dijen_SDA/INDEX.ASP (in Indonesian))

* This project was jointly evaluated with the National Development Planning Agency (Bappenas).



Project Objectives

The objective of this project was to increase production of rice and other agricultural products by developing surface water irrigation through the construction of weirs (head works) and dams, and the installation of pumped groundwater irrigation facilities in six provinces in eastern Indonesia, and thereby contribute to the improvement of farmers' income and poverty reduction.

Effectiveness and Impact

Rating **a**

The total irrigation area developed through this project reached approximately 60,000 ha (total for six provinces), greatly exceeding the initial plan of approximately 16,000 ha. There is wide disparity in the amount of rainfall between the rainy and dry seasons in the project area. The cultivated area in the dry season after project implementation increased nearly three times and the cultivatable period was extended. A beneficiary survey (16 locations, 132 respondents) clearly showed that the rice harvest of beneficiary farmers increased 2.3 times after project implementation. Further, 70% indicated that they became able to cultivate high profit crops such as beans, chili peppers, and vegetables. Therefore, this project has largely achieved its objectives, and effectiveness is highly satisfactory.

Relevance

Rating **a**

This project has been highly relevant with Indonesia's national policies both at the time of the appraisal and at the time of the ex-post

evaluation. The development of eastern Indonesia was a priority issue both at the time of appraisal and ex-post evaluation, and various agricultural programs had been established.

Efficiency

Rating **b**

The project period was much longer than planned (168% of planned period) although the project cost was lower than planned; therefore the evaluation for efficiency is moderate. The project delays were primarily caused by the preparation and additional construction needed to expand the project scope.

Sustainability

Rating **a**

No major problem has been observed for capacity of the executing agency nor the operation nor its maintenance system, therefore, sustainability of this project is high. Water users associations perform ad hoc maintenance of irrigation canals as needed. No serious damage to irrigation canals was found upon a site inspection.

Conclusion, Lessons Learned, Recommendation

In light of the above, this project is evaluated to be highly satisfactory. Factors contributing to project success include the establishment of a management system that continuously covers the project cycle from initial formation through operation and maintenance, and the appropriate combination of hard (irrigation development) and soft (strengthening of water users associations) facets. Regarding operation and maintenance, there is significant reliance on ad hoc repairs made by water users associations as needed. In the long term, it is advisable that systematic operation and maintenance be implemented according to the system operation.

Beneficiary Survey Results

Were you able to cultivate more profitable crops after the project?

Answer	%
Yes, very much.	32%
Yes, to some extent.	39%
Almost no change.	20%
No, less.	0%
No answer (do not know).	9%



Vegetable market near project site.

Third-Party Opinion

The project contributed to improving incomes through increased agricultural production, but the implementation of micro-finance is needed for landless farmers. The participation and support of farmers is important from the early stages of project implementation to achieve continuous operation and maintenance.

Name of specialist: Mr. Bambang Ismawan (NGO)

Earned Master degree in agricultural economics from Gadjah Mada University and Master degree in rural sociology from Bogor Agriculture Institute, Former General Secretary of the Indonesian Society of Agricultural Economics (PERHEPI). Former President now Chairman of Board of Trustees of Bina Swadaya (Community Self-reliance Development Foundation). Specializes in poverty, micro credit, and social development.