Asia Indonesia

Bili-Bili Irrigation Project

Utilizing the water resources of the multi-purpose Bili-Bili Dam for improving agricultural productivity in the region

【External evaluator】
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Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To increase rice production by constructing and rehabilitating weirs, primary and secondary canals and drainage, as well as procuring operation and maintenance equipment, in South Sulawesi Province, thereby contributing to higher incomes for local farmers.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 5,472 million yen / 5,403 million yen
- Loan agreement: December 1996
- Terms and conditions: 2.7% interest rate (consulting services: 2.3%); 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: December 2005
- Executing agency: Directorate General of Water Resources, Ministry of Public Works
- Website URL: http://www.pu.go.id/satminkal/dijen_sda/ (in Indonesian)

Changes in the irrigated and cultivated areas and the unit yield of rice

Indicator		Unit	Planned value (set in 1996)	Actual (2005)
Irrigated area		ha	24,600	23,786
Cultivated area (wet season)		ha	20,700	23,040
Unit yield of rice	Wet season	t/ha	4.6	4.8
	Dry season	t/ha	4.6	N/A

Sources: The Project Completion Report (PCR); the Consultant's Service Completion Report; and Agricultural Census of the Central Bureau of Statistics

Effects of Project Implementation (Effectiveness, Impact)

The total irrigation area stood at 23,786 ha in 2005 as against the project target of 24,600 ha. The area under rice cultivation totaled 23,040 ha in the same period, compared with the planned value of 20,700 ha. The average unit yield of rice in 2005 in the two districts covered by the project was 4.8 tons/ha, surpassing the target yield of 4.6 tons/ha, according to the Agricultural Census of the Central Bureau of Statistics. In a beneficiary survey conducted in Kampili, Bili-Bili, and Bissua, 94% of the 203 farmers who responded said that their living standards improved after the completion of the project. Some 80% of the respondents noted improvements in their children's education and family's health status.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with Indonesia's national policies and development needs at the times of both appraisal and ex-post evaluation. At these two points in time, the Indonesian government continued to focus on the development of irrigation facilities for agricultural development and the regional development of Eastern Indonesia in formulating different agricultural programs.

Efficiency

This project cost less but took longer than planned (146% of the planned period); therefore the evaluation of efficiency is moderate. The implementation delay was caused by a number of factors, including the economic turmoil triggered by the Asian currency crisis of 1997, and the resultant reorganization of the administrative agencies and the regulatory framework, which led to delays in project implementation procedures.

Sustainability

Some problems have been observed in terms of the institutional framework for the operation and maintenance (O&M) of the irrigation facilities, which has not been practically functioning; therefore, sustainability of this project is fair. The field survey for this evaluation suggests that the weirs and main canals are largely well maintained, although there is room for improvement in the functioning of the water users' associations.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. A major lesson learned is that the responsibility for end canal development has not been clearly defined. An irrigation project should be designed to cover end canals as well to maximize its effectiveness and impact. Recommendations include strengthening the monitoring system for measuring project effects and impact; defining the division of responsibilities for the development and O&M of the irrigation facilities; and encouraging the proper fulfillment of these responsibilities through collective discussion devices.