



1. Project Data :
OEDID: L3302
Project ID: P003981
Project Name: Provincial Irrigated Agriculture Development Project
Country: Indonesia
Sector: Irrigation & Drainage
L/C Number: L3301-IND
Partners involved : None
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2. Project Objectives, Financing, Costs and Components :

Approved: March 1991; Effective: June 1991; Closed: March 1998 (15 months late)

Project Costs (US\$ million)	Appraisal	Actual	Canceled
Total	215.4	139.0	76.4
IDA credit	125.0	94.3	30.7
Government	90.4	44.7	45.7

Objectives:

1. to complete and fully develop ongoing small and medium-scale irrigation schemes on the Outer Islands of Indonesia to achieve potential benefits from irrigated agricultural development; and
2. to assist development of institutional capacity to enable improved coordination of irrigation with agriculture and other related services.

Components :

1. complete new or rehabilitate existing irrigation works for 129 irrigation schemes covering 273.000 ha;
2. clearing 27,000 ha of forested land and development of about 40,000 ha of irrigation;
3. agricultural development activities including seed multiplication programs, mitigating effects of problem soils, and training of farmer groups;
4. land titling and certification of 227,900 ha of land to be irrigated by the project;
5. environmental protection of 79 schemes covering 41,200 ha of degraded watersheds, including erosion control;
6. settlement of 1,400 transmigrants from Java; and
7. coordination and management of irrigated agricultural development in 13 provinces.

3. Achievement of Relevant Objectives :
<ul style="list-style-type: none"> • Overall, new or improved irrigation led to significant incremental agricultural production under irrigation; there was, however, considerable regional variation due to soils and agro -climatic factors. • Better coordination of agriculture and irrigation activities was achieved, particularly at the regional level .

4. Significant Achievements :
<ul style="list-style-type: none"> • Completed 109 irrigation schemes covering 167,900 ha comprising 73,400 ha of new area and 94,500 ha of rehabilitated area. • Cleared about 90 percent (24,100 ha) of land and developed 50 percent (20,400 ha) of SAR targets; guidelines for this work developed by the project have been adopted nationally . • Seed certification programs was extended to 5,000 ha (400 percent of SAR targets) and new extension activities were introduced to support agricultural development in problem areas . • The impact of agricultural and farmer development activities is substantial : area under improved crop varieties has increased by 60 percent; paddy yields have marginally increased; and net returns for irrigated paddy are up by 80 percent, and average income of beneficiary farmers has increased by about 30 percent. Overall economic rate of return is 14.2 percent compared with 17.5 percent at appraisal. • Land titles and certificates were issued for 114,026 ha (90 percent of revised targets) and this facilitated access to much needed rural credit.

- After an initial slow start, successful inter-agency coordination (led by BAPPEDA) was introduced to the provinces.

5. Significant Shortcomings :

- Environmental protection objectives were not achieved . Appraisal overlooked the problems caused by (a) the fragmented and dispersed nature of sites, (b) limited local capability for environmental assessment activities, and (c) complete lack of interest by the Ministry of Forests, the main stakeholder .
- Resettlement of transmigrants was a fiasco . Soon after appraisal all available land was settled by local people through spontaneous migration; additional land made available by government was disputed by locals, and eventually about 70 percent of transmigrants returned to Java . There are still many unresolved problems .
- Training provided to Water User Associations has not yet resulted in improved operation and maintenance (O&M) and this jeopardizes scheme sustainability .
- Budget allocations for O&M vary widely but are generally about half of needs; introduction of irrigation service fees is still at a fledgling stage .
- Inadequate and delayed counterpart funding and institutional restructuring delayed project implementation .

6. Ratings :	ICR	OED Review	Reason for Disagreement /Comments
Outcome :	Satisfactory	Satisfactory	
Institutional Dev .:	Substantial	Substantial	
Sustainability :	Uncertain	Uncertain	
Bank Performance :	Satisfactory	Satisfactory	
Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR :		Satisfactory	

7. Lessons of Broad Applicability :

- Centrally planned and managed projects (building on the Java experience) are inappropriate given the diversity of provincial agro-climatic, geographic and cultural environments .
- The success of environmental management components depends upon all stakeholders buying into the project objectives before implementation.
- Resettlement projects must consider and internalize the traditions and rights of the indigenous people of the resettlement area.

8. Audit Recommended? ☐ Yes ☒ No

9. Comments on Quality of ICR :

Some minor contradictions but otherwise satisfactory . Only 67% of its target irrigated command area proved to be feasible and thus the ICR states that appraisal was over-optimistic. Conversely, the borrower's comments highlight government's desire for a significantly larger project than constructed . The ICR could have concluded that the project was able to conclusively demonstrate that many of the schemes were not viable, thus saving wasteful investment .