ICR Review

Operations Evaluation Department

Report Number : ICRR11622

1. Project Data:		Date Posted : 08/22/2003		
PROJ ID : P003972			Appraisal	Actual
Project Name : Ag. Research Ii		Project Costs (US$M)	101.80	52.30
Country : Indonesia		Loan/Credit (US$M)	63.0	35.84
Sector(s): Board: RDV - Agricultural extension and research (75%), Sub-national government administration (25%)		Cofinancing (US$M)		
L/C Number : L3886				
		Board Approval (FY)		95
Partners involved :		Closing Date	04/30/2001	12/31/2002

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2. Project Objectives and Components

a. Objectives

The main objective of the project stated in the SAR was : "to strengthen regional agricultural research and development based on local human and natural resources by collaboratively developing and transferring location-specific technology which is market-oriented and client driven to support agribusiness and agro-industry development. This (was to be) achieved through the establishment of a network of regional Assessment Institutes for Agricultural Technology (AIATs), improvement of regional research management, expansion of research in priority areas, and strengthened linkages to local, national, and international institutions thereby facilitating the delivery of research results to end-users."

b. Components

There were four main components : 1. *Regionalization of Agricultural Research and Development* (US$ 53.8 million original, US$25.5 million actual), including strengthening of on-farm research and technology transfer in eight agro-ecological regions, support for eight AIATs to test and assist in the dissemination of technologies . 2. *Institutionalization of Research and Development Management at the Regional Level* (US$ 17.8 million original, US$5.6 million actual), including administrative and management reforms, improvement of the Agency for Agricultural Research and Development (AARD) capacity to respond to the needs of farmers, common management procedures for the AIATs, improving priority setting, strengthening information systems, and improving management capacity . 3. *Support to Priority Commodity and Discipline-Oriented Research* (US$ 22.2 million original, US$19.3 million actual), including acceleration of the development of new technologies and improvement of the relevance of research by commodity institutes with support for high priority research areas, and training of AARD staff . 4. *Strengthening Research and Development Collaboration* (US$ 8.0 million original, US$1.9 million actual), including improved collaboration with international research centers and selected foreign universities, strengthening collaboration between AARD and extension service and a range of institutions involving agriculture, and an exchange program for researchers and managers.

c. Comments on Project Cost, Financing and Dates

Project costs were revised downwards twice, in 1998 and 1999, and the project was extended by 20 months from the original closing date. A total of US$14.50 million was canceled, much of this due to the devaluation of the Rupiah with the Asian economic crisis which at one point reached about a 600% devaluation. US$0.79 million was canceled because of mis-procurement.

3. Achievement of Relevant Objectives:

Most of the major relevant objectives were achieved with some shortcomings . The limited data on measured adoption rates and yield increases presented in the ICR and the lack of baselines makes the assessment of outcomes and impact, as opposed to inputs and outputs, quite difficult . Most objectives were stated largely in input and output terms. It is still early to pick up impacts of attributable project research at farm level . With respect to *collaboratively developing and transferring market oriented and client-driven location-specific technology*, the objective was probably largely achieved. Although a quantitative baseline was not identified in absolute terms, the

number of location specific technologies increased more than fourfold and a number of means to this end appear to have been substantially strengthened including the intended development of farmer participation systems . With respect to the *market oriented, agribusiness, agro industry support element of the objective* , again, while there was no identified target, there was probably satisfactory achievement, a number of established and emerging enterprises benefited and an Intellectual Property and Technology Commercialization Office was established . With respect to the *regionalization and improvement of research management objective,* there appears to have been satisfactory achievement, R&D was substantially decentralized to the planned eight AIATs, and the management systems and priority setting systems planned were introduced . While again there were no upfront targets, local government funding increased, the number and variety of dissemination activities increased and contacts with farmer organizations, farmer leaders, and extension staff are reported to have increased . However, the MIS, M&E and Personnel Incentive System were less than satisfactory (see Section 5 below). With respect to the objective of *improving linkages with international institutions,* there is evidence of some improvement with increased collaboration in several international networks . With respect to *training*, not a stated objective but a means to many of the ends, this appears to have been achieved with numbers trained well beyond the target .

4. Significant Outcomes/Impacts:

All except one AIATs are now reported to be fully functional and they are reported to be working in a participatory matter. The average number of location specific technologies per AIAT reached 19 in the year 2002. Regional Advisory Committees and Regional Technical Working Groups were established but effectiveness has been variable . Long-term Strategic Plans and midterm Research Master Plans were developed for each AIAT . Inputs from Participatory Rural Appraisals, Socioeconomic and Gender Analysis, and Strength -Weakness-Opportunities-Threats methodologies are reported to be now routinely used in planning, although the baseline for many of these improvements, and the attribution to this particular project, is not clearly characterized in the ICR . A significant step in biotechnology was taken with the establishment of a biosafety facility used partly to test the safety of genetically modified crops - partly self financed. 428 people, far exceeding the target, received long -term training, including about 360 at post-graduate level.

5. Significant Shortcomings (including non-compliance with safeguard policies):

Main shortcomings were in the areas of MIS, M&E, and the Personnel Incentive System . M&E began too late. MIS data bases are managed separately at Institute level and use different software . There was weak follow-up of incentive recommendations. These are weaknesses that, unless quickly corrected, may come to haunt the project in terms of longer-term sustainability. There are some concerns about technical back -stopping and interaction between AIATs and some Central Research Institutes. As noted above, while achievements in terms of inputs and outputs appear satisfactory, the ICR presents limited data on adoption rates and productivity or income impacts . However, for many technologies it would be too early to pick up such impacts . There remains an imbalance in skill compositions at the AIAT level which the project was only partially able to correct .

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	
Institutional Dev .:	Substantial	Substantial	
Sustainability :	Likely	Likely	But with weak MIS and M&E, and concerns about incentives, this rating is not without questions.
Bank Performance :	Satisfactory	Satisfactory	
Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR :		Satisfactory	

NOTE: ICR rating values flagged with ' * ' don't comply with OP/BP 13.55, but are listed for completeness.

7. Lessons of Broad Applicability:

The main lessons, largely originating from the ICR but made more generic here, are :

1. In decentralizing agricultural research particular attention, and very early attention, needs to be given to human resource development planning and skills balances since skills demands will change rapidly whereas skills profiles, even with training, can only change slowly .
2. Management Information Systems are a persistent problem in agricultural research projects . They often take a long time to develop and are then not used . Systems that are at least in part based on elements of existing systems are easier to apply than systems or sub -systems started from scratch. Pragmatism and realism are called for in the design and application of such systems and, as in this case, staff incentives to use the systems are important .
3. The early establishment of a sound baseline is essential for assessing incremental impacts . The existence of an earlier project does not negate the need for baseline data, although it may make it easier to provide that data .
4. Early training on procurement, and on Bank procurement procedures, is particularly important where English proficiency is a problem.

8. Assessment Recommended? ● Yes ○ No

Why? Three reasons: 1. This project appears to have avoided a number of the problems encountered by other Bank- funded research projects and the lessons may be particularly instructive . 2. There remain some questions, partly because of research impact lag, about the impact on productivity and incomes at the farm level . 3. There are some questions about sustainability which will be more readily answered after a year or two of further operation.

9. Comments on Quality of ICR:

Satisfactory, although somewhat more evidence on early emerging adoption rates and incremental benefits from new technologies at the farm level would have been helpful . Also, for a seemingly successful project in a challenging subsector likely to offer more regional or global generic lessons, the lessons section is too project -specific, or at least insufficiently differentiated between generic and specific lessons . Commendably, the ICR is one of the few examples where, with no economic analysis in the Staff Appraisal Report (SAR), the ICR still attempted an economic analysis rather than simply falling back on the lack of economic analysis in the SAR as an excuse . Coverage of Transitional Arrangements to Regular Operation is better than most - usually a section given very superficial coverage .