



1. Project Data:		Date Posted : 08/21/2002	
PROJ ID: P003978		Appraisal	Actual
Project Name: Id-ind'l Technology Dev	Project Costs (US\$M)	60.9	41.9
Country: Indonesia	Loan/Credit (US\$M)	47.0	38.5
Sector(s): Board: PSD - Central government administration (85%), Information technology (15%)	Cofinancing (US\$M)	13.9	3.4
L/C Number: L3972			
	Board Approval (FY)		96
Partners involved :	Closing Date	12/31/2001	12/31/2001
Prepared by :	Reviewed by :	Group Manager :	Group:
Kris Hallberg	Roberto R. Rocha	Alain A. Barbu	OEDST
2. Project Objectives and Components			
a. Objectives			
<p>The overall objective of the project was to enhance the competitiveness of Indonesian industry, particularly of small and medium industries (SMIs) by: (a) providing public and private technology support services; (b) facilitating the access to public and private technology service providers; (c) strengthening public technology support institutions; and (d) improving the formulation and coordination of industrial technology policies .</p> <p>The specific objectives of the project (described in the SAR under "components") were (i) to strengthen Indonesia's system of industrial technology, standards, testing, and quality (MSTQ) support services; (ii) support the diffusion of good technology practices through the competitive provision of technology upgrading services to small and medium industries (SMIs) by both public and private technology suppliers; (iii) reorient the public research and development labs to towards support more effective technology development in private industry, especially SMIs; and (iv) strengthen the capacity to formulate and coordinate technology and industrial strategies, policies, and programs .</p>			
b. Components			
<p>(i) Technical assistance and training to the National Metrology Center (KIM-LIPI) and the Ministry of Industry's Center for Industrial Standards (PUSTAN). Technical assistance to KIM was provided through a twinning arrangement with a leading international metrology and calibration laboratory selected competitively, to build its management and institutional capacity .</p> <p>(ii) A matching grant scheme to cover part of the costs of technical and consultancy services purchased by SMIs from public or private providers.</p> <p>(iii) Technical assistance through twinning arrangements for the Agency for the Assessment and Application of Technology (BPPT) and the Indonesian Institute of Sciences (LIPI) to improve public R&D management, and financing computers and software for management systems; and technical assistance to three R&D centers for restructuring and improved cost recovery .</p> <p>(iv) Technical assistance to BPPT to formulate, coordinate, and monitor the Government's technology policies .</p>			
c. Comments on Project Cost, Financing and Dates			
<p>The loan was partially cancelled as part of the Government's overall debt portfolio restructuring after the 1997 economic crisis. Loan disbursements were even lower, at 85% of the restructured amount. However, the commitment of the Government to the project was evidenced through the continued allocation of counterpart funding to the project entities. Although implementation was slowed by the economic crisis as well as by a lack of familiarity with the Bank's procurement procedures, the project still closed on schedule .</p>			
3. Achievement of Relevant Objectives:			
<ul style="list-style-type: none"> • The twinning partners brought value to the Indonesian institutions by transferring their superior R&D management practices. • The institutions supported by the project increased their cost recovery, and some set up spin -off companies. • The Government designed a National Industrial Strategy and established a National Competitiveness Council, headed by the Coordinating Minister for Economic Affairs . 			

4. Significant Outcomes/Impacts:

One of the most important achievements of the project was the cooperation and learning across public sector agencies involved in technology policy, and in raising awareness among government officials of the need for better technology support institutions. Project entities also benefited from twinning arrangements with foreign technology support institutions.

As the ICR notes, the reorientation of technology policy and institutions is a long-term process. The achievements of this project were modest in the short run, but may become more apparent in the longer term.

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

- The project did not appear to cause a significant increase in demand for publicly - and privately-provided technology services, despite the subsidy introduced by the matching grant scheme (see comments below). Moreover, the increase in demand that was induced by the matching grant subsidy may not be sustainable in the long run, when the subsidy is removed.
- The objective of achieving financial self-sustainability of R&D centers was frustrated by the Government's budgetary systems, which did not automatically allow these institutions to retain the revenues from increased cost recovery.
- Procurement problems delayed implementation of the project.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Moderately Satisfactory	<ul style="list-style-type: none">• The project did not appear to cause a significant increase in demand for publicly- and privately-provided technology services, despite the subsidy introduced by the matching grant scheme. The loan documents did not present convincing arguments for a market failure on the demand side (for technology services); coverage of the matching grant scheme was low (only 130 of the intended 600 firms); no evidence was provided in the ICR of demonstration effects on demand, or that the 130 firms would not have purchased technology services in the absence of the subsidy, or that their increase in sales was due to technology services (as opposed to other factors).• The objective of achieving financial self-sustainability of R&D centers was frustrated by the Government's budgetary systems, which did not automatically allow these institutions to retain the revenues from increased cost recovery.
Institutional Dev .:	Modest	Modest	
Sustainability :	Likely	Likely	
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:

As the ICR notes: In order that research institutions move away from being wholly government-funded and develop self-financing capacity, the government should provide strong incentives for external revenue generating activities and allow the institutions to retain and accumulate their earnings, and to be able to use these earnings with greater flexibility and freedom. In addition, the project showed that public institutions can benefit from sharing experiences with each other. Finally, in projects with newly-created implementing agencies that do not have experience with Bank financing, more up-front training in the Bank's procurement procedures may be needed.

8. Assessment Recommended? Yes No

Why? The lessons of this project would be relevant for similar T.A./matching grant projects, not only in the area of technology development but also for other business development services for SMEs.

9. Comments on Quality of ICR:

The ICR is well-written and mostly complete, but does not provide enough evidence to judge the achievement of the

overall objectives of the project -- e.g., increased use of public and private technology services, particularly by SMIs; and improved productivity in the industrial sector, also particularly among SMIs .