

Report Number: ICRR10061

1. Project Data:

OEDID: L3269
Project ID: P006483

Project Name: Science Research and Training Project

Country: Brazil

Sector: Other Education
L/C Number: L3269-BR

Partners involved : Japan Grant

Prepared by: Helen Abadzi, OEDST

Reviewed by: Alain Barbu
Group Manager: Roger Slade
Date Posted: 06/02/1998

2. Project Objectives, Financing, Costs and Components:

Loan was for US\$150 million, of which US\$10 million was canceled on completion. Objectives were: (a) To strengthen human resource development in specific science areas through support for science research and graduate training and (b) to improve management and grant award decisionmaking processes. The project financed research grants in selected areas of applied technology, under the guidance of a high -level advisory group.

3. Achievement of Relevant Objectives:

The implementing agencies carried out many activities and developed considerably as institutions. The grant review process became more sophisticated in the course of the project. But the objectives were process-oriented, and during most of the project there were no effective mechanisms monitoring outcomes. A survey of grant recipients showed satisfaction with the program, but it is difficult to ascertain whether human resources were in fact strengthened.

4. Significant Achievements:

A total of 1809 research grants were awarded in chemistry, biotechnology, new materials, geoscience, metrology, science education, and other fields. Selected students received graduate study grants. Areas were chosen carefully by groups of experts. Outputs consisted of mainly of journal articles, some patents, and several technologically products, particularly in biotechnology. The institutions involved in managing grants developed significantly as a result.

5. Significant Shortcomings:

The project lacked monitoring indicators, and it was not possible to ascertain the extent to which the research resulted in human resource development. Linkages with industry were often weak, diminishing the utility of human resource training for technical applications. Initial delays and lack of counterpart funds compromised outcomes to some extent.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	
Institutional Dev .:	Substantial	Substantial	
Sustainability :	Likely	Uncertain	Due to lack of monitoring, the long-term effects of research/training expenditures are unknown
Bank Performance :	Satisfactory	Satisfactory	
Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR:		Satisfactory	

7. Lessons of Broad Applicability:

Grants, and the use of clear rules in their award, can help train scientists to make important scientific discoveries . However, it is impossible to ascertain the fulfillment of objectives (particularly the complex human-development objectives of this project) without monitoring indicators.

8. Audit Recommended? O Yes	No

9. Comments on Quality of ICR : The quality of the ICR was satisfactory