

TECHNICAL ASSISTANCE COMPLETION REPORT

Division: SAEN

TA No. and Name TA 2648-IND: Institutional Strengthening of Indian Renewable Energy Development Agency, Limited			Amount Approved: \$600,000	
			Revised Amount: \$300,000	
Executing Agency Indian Renewable Energy Development Agency, Limited (IREDA)		Source of Funding: JSF		TA Amount Undisbursed \$56,510
				TA Amount Utilized \$243,490
Date			Completion Date	
Approval 26 Sep 1996	Signing 6 Jan 1998	Fielding of Consultants 8 Jan 1999	Original 31 Dec 1999	Actual July 2001 (final report)
			Closing Date	
			Revised 31 Dec 2002	Actual 26 January 2004
Description				
ADB approved Loan 1465-IND for \$100 million in September 1996 for the Renewable Energy Development Project, to be executed by the Indian Renewable Energy Development Agency (IREDA). The objectives of this project were to promote commercialization of renewable energy technologies by strengthening IREDA's capacity to finance entrepreneurial investments in alternative energy sources, to encourage private investments in small scale power generation utilizing renewable energy technologies, and to expand marketing and financing mechanisms for renewable energy subprojects. An advisory TA was piggy-backed to the loan for an institutional and capacity building program for IREDA. The TA was signed in January 1998, seven months after the loan became effective. The consultants commenced work in January 1999, and their final report was completed in July 2001. The TA was subsequently kept open with the intention of using remaining funds for some additional assistance to IREDA, but plans for this were finally dropped in late 2003 and the TA was closed in January 2004.				
Objectives and Scope				
The objective of the TA was to strengthen IREDA's commercial orientation and basic banking disciplines, including capabilities in credit analysis and risk management, financial management, loan portfolio management, foreign exchange risk management; environmental, social and economic impact assessment; economic analysis of projects, and training and personnel capabilities. At the time of the loan approval in 1996, IREDA was in the process of upgrading and revising its procedures and criteria for subproject appraisal, and it was important to provide IREDA with expert assistance for this. IREDA was also expanding the scope of its operations to new sectors, including biomass power and cogeneration, where it had little experience and needed expert advice.				
The original plan for the TA was to engage two separate consulting firms: (i) one to provide six experts in institutional development, economics, environmental impact assessment, and assessments in technologies in four subsectors; and (ii) another consulting company was to provide expert advice on credit risk management and asset liability –cum-treasury management. The budget for each of these two parts was 10 man-months.				
Evaluation of Inputs				
The TA envisioned a total of 20 person-months of international consultant inputs, with no domestic consultants. However, no proposals were received from any of the five companies that ADB invited in March 1998 to submit proposals on credit risk management and asset liability management. Only one company responded, and it cited the difficulty of having its financial experts spend most of their time in India, as required under the terms of reference. The ADB subsequently decided, after consultation with IREDA in August 2000, to cancel this part of the TA, which resulted in the TA budget being reduced to \$300,000.				
The contract for the work on the environmental, technical, and institutional aspects was for 9.2 person-months of total time by seven international consultants from NRECA, who spent between 1 and 1.5 months each in Delhi. On the counterpart side, 16 IREDA professional staff participated in various parts of the study or in workshop under the TA. ADB head-office staff supervising the study conducted on inception mission in Delhi in February 1999, a review mission to discuss the draft report in September 1999, and a tripartite meeting to review the draft final report in December 2000. The work effort on the institutional analysis task was reduced after IREDA decided to conduct a separate more detailed study on this subject under a World Bank-financed TA on Organizational Study of IREDA, which was completed in 2000 by KPMG management consultants.				

The terms of reference for the TA work that was completed were generally satisfactory, and the resources budgeted for this work were also satisfactory. A significant number of IREDA staff also contributed to the study.

Evaluation of Outputs

The consultants produced four project appraisal manuals for IREDA staff to use for the detailed technical and financial evaluation of loan applications for subprojects in: (i) bagasse-based cogeneration; (ii) solar thermal heating projects; (iii) wind energy projects; (iv) and biomethanation projects for industrial effluents. The consultants also produced separate reports on: (v) project economic analysis: a practical operational implementation of ADB guidelines; (vi) environmental assessment manual for renewable energy projects; and (vii) institutional report on IREDA. These reports achieved the objective of helping IREDA to develop improved detailed guidelines and criteria for subproject appraisal. However, IREDA management considered that the guidelines recommended for environmental assessment procedures were more suitable for large projects, and were too cumbersome and impractical for the many small projects that IREDA financed.

Recommended procedures under the TA that IREDA management found particularly useful and implemented successfully included: initial screening of applications for loans before commitment to detailed appraisal; evaluation of the loan applicant's core business activities and financial soundness; monitoring of project performance (construction and then operations) after loan approval; simplification of procedures for procurement by sub-borrowers; more attention given to soundness of power purchase agreements for subprojects that would sell their electricity generation; system for evaluation of estimated project costs and monitoring of project performance according to benchmarks recommended by consultants, and procedures for periodic review and updating of these benchmarks.

The consultants also recommended improvements in financial administration and coordination, but IREDA found it difficult to implement all of these since some were not consistent with government regulations for public sector enterprises that it also had to follow. However, most of the recommended reforms are being implemented gradually over a period of time.

The TA also included training workshops in various subjects, which were satisfactorily conducted with skill transfer to 16 IREDA staff who participated in these.

Overall Assessment and Rating

The TA is considered to be successful, and it helped IREDA to develop improved detailed guidelines and criteria for subproject appraisal, including the technical, economic and environmental aspects. The performance of the international consultants (NRECA) is also considered to be generally satisfactory.

Major Lessons Learned

IREDA management felt the TA could have been improved by spending more time on staff training on techniques for appraisal of the technical and economic feasibility of subprojects.

The lack of interest by any international consultant in conducting the study on credit risk management and asset liability management suggests that the terms of reference for this study and/or the manpower budget allocated were probably impractical; and they should have been drafted and reviewed more carefully before invitations were issued. Another option could have been to engage qualified domestic consultants for this work.

Recommendations and Follow-Up Actions

IREDA management suggested that future TAs for institutional strengthening should consider: options for more innovative financing techniques for renewable energy projects; technology assessment for the newer generation of more complex renewable energy projects; and procedures for evaluation and management of foreign exchange risks.

An ADB mission that started processing of another project loan to IREDA in 2003 also prepared detailed TOR for management consultants to help IREDA plan and implement improved credit risk management systems, improved organizational systems, management practices and human resource development procedures.