



1. Project Data:		Date Posted : 05/09/2003	
PROJ ID: P034617		Appraisal	Actual
Project Name: Selingue Rehab.	Project Costs (US\$M)	42.10	34.21
Country: Mali	Loan/Credit (US\$M)	27.30	24.40
Sector(s): Board: EMT - Power (99%), Central government administration (1%)	Cofinancing (US\$M)	6.50	5.30
L/C Number: C2850			
	Board Approval (FY)		96
Partners involved : EIB	Closing Date	06/30/2001	06/30/2002
Prepared by :	Reviewed by :	Group Manager :	Group:
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2. Project Objectives and Components

a. Objectives

The main objective of the project was to repair and rehabilitate the S élingué Hydropower Plant. Other objectives of the project were to: (a) maintain the electricity demand-supply balance by increasing the thermal capacity of the system and implementing an energy efficiency program; (b) improve the capacity of Electricité de Mali (EDM) to properly operate, maintain and supervise its power generation facilities; and (c) prepare a long term institutional framework and regulatory system for the power system and privatize EDM . The privatization of EDM was added following a revision of the project objectives . This objective resulted because in 1999 -EDM not being able to comply with covenanted financial ratios- the Bank threatened to suspend disbursements . In response, the Government adopted a new water and electricity law and in policy letter, it revealed its decision, inter alia, to privatize EDM .

b. Components

The project had four components :

Component A: Rehabilitation of the S élingué Hydropower Facility, which included (i) remedial and rehabilitation works in the dam, the power house, the spillways, the galleries and drainage systems, the roads, and the dam safety monitoring and instrumentation devices; (ii) Repair of the Power Plant, which included the overhaul of the four turbine-generators sets, its ancillary equipment, and some general powerhouse equipment; and (iii) the transmission system which included a comprehensive restructuring of the electrical protection system for the 150 kV, 30 kV and 15 kV systems, and the procurement of spare parts and maintenance of the S élingué-Bamako 150 KV transmission line and substations and a feasibility study of a dispatching center for the interconnected Malian system .

Component B: Maintain the demand/supply balance, which included (i) Thermal capacity intended to provide an additional capacity of 9 MW needed to maintain the demand/supply balance and provide back-up capability during periods of reduced supply from S élingué before the Manantali Regional Energy Project is completed; (ii) small diesel units of about 1.0 MW capacity each to be added to the interconnected system and later to be relocated to supply small isolated centers; (iii) the purchase and installation of equipment for reducing distribution network technical losses; (iv) the identification of existing captive power capacities and negotiation of contracts by EDM; and (v) the design and promotion of end-use efficiency programs.

Component C: Strengthening EDM's management capacity, which included (i) a specific training program to improve the capacity of EDM staff to operate and properly maintain generation facilities, specifically at S élingué; studies for preparing future power sector development programs; and (iii) acquisition of equipment, computer software and other items.

Component D: Long-term institutional framework, which included the set up of a new institutional framework for a rapid and sustainable development of the power sector in Mali . Following systematic consultation of stakeholders made by a steering committee, the committee was to make proposals enabling the Government to take decisions on sector reforms by mid-1998.

c. Comments on Project Cost, Financing and Dates

The project was completed in 2002 with a delay of one year at a cost of US\$ 34.21 million, or 18.7 percent below the

US\$ 42.10 million appraisal estimate. The physical infrastructure was completed on time but the late commissioning of the Manantali Regional Energy Project (a joint venture of Mali, Mauritania, and Sénégal) forced a delay in the completion of some complementary works affected by the interconnection of EDM with the Manantali hydroelectric complex. The cost under-run was the result of significant competition for the supply of works and equipment procured under competitive bidding procedures. The IDA credit disbursed US\$24.41 million equivalent for the financing of rehabilitation of civil works and procurement and installation of electromechanical equipment (US\$19.5 million), the hiring of consultant services and execution of training programs (US\$2.4 million) and part of the cost of the thermal generating capacity component (US\$0.73 million). The credit was closed on June 30, 2002 following a one year extension of the closing date at which time a balance equivalent to US\$ 0.41 million was canceled. The EIB co-financed US\$5.3 million of the US\$6.0 million cost incurred in the procurement and installation of 6 MW in thermal generating capacity and in carrying out the demand-side management study. The balance US\$0.73 million was financed by the IDA credit. The contribution of the Government to project financing was US\$ 4.5 million equivalent, mainly for the rehabilitation of the Sélingué hydropower facility.

3. Achievement of Relevant Objectives:

The project objectives were fully achieved. The dam, related civil works and power facilities were rehabilitated, the reservoir was impounded to capacity, and the downstream population was secured. The strengthening of the thermal generating capacity with 6 MW was achieved in 1996. The repair of the dam and civil works was completed in 1998 as planned and the reservoir safely filled to level 349m, now with a stable dam. All electromechanical components were completed on time and the high voltage transmission lines connected to the Manantali grid in July 2001. However, electricity from the Manantali plant did not become available until early 2002. The demand-side management study was completed in 1998 but not implemented. EDM was privatized under a restructured power sector, EDM's financial viability has been restored, and the power system operation has improved significantly as shown by the fact that the customers have been served with electricity without load shedding during the season of peak demand for electricity.

4. Significant Outcomes/Impacts:

In 1998, a management contract with a foreign joint venture helped EDM identify and implement the training program needed to improve the technical and managerial competence of middle- and upper-level staff. This action enabled EDM to operate with modicum efficiency during the difficult two-year transition preceding its privatization in 2000. A new legal and regulatory framework was established in 2000 and an independent regulatory authority for water and electricity created prior to the privatization of EDM. Also, before privatization, the electricity tariffs were increased by 30 percent in 1998 and 10 percent in 1999, which combined with a rescheduling of the US\$24 million equivalent of EDM's debt and the settlement of arrears equivalent to US\$ 3.7 million, led to the stabilization of EDM's finances.

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

Although the recommendations of the demand side management study were not implemented (because of being relatively high capital intensive for the public) this shortcoming is not considered to be significant. The EAP was designed but not implemented before loan closing date. Upon Bank insistence, EDM will recruit a consultant to assess the environmental actions carried out to date and determine the course of actions needed to satisfy the objectives of the EAP.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Highly Satisfactory	Highly Satisfactory	The rehabilitation of the Sélingué hydro power project in Mali has large ERR (70 percent) and NPV (US\$171 million). The project achieved the restructuring and privatization of a relatively small power sector in Africa, in a very successful manner.
Institutional Dev.:	High	High	
Sustainability:	Highly Likely	Highly Likely	The privatization of EDM is expected to be irreversible.
Bank Performance:	Highly Satisfactory	Satisfactory	OED's rating is based on Borrower's criticisms of the Bank's performance as follows: (i) long project identification (18 months); (ii) the Bank's initial opposition to the reinforcement of the system generation capacity with 8 small (1 MW)

			units of thermal capacity that later proved to be necessary due to the delay of the Manantali hydro plant; (iii) the Bank's opposition to split the procurement of the electromechanical equipment in three packages – the one package approach delayed by three years the completion of the rehabilitation due to lack of collaboration by the former supplier of the turbine with the single contractor; (iv) significant delays in giving no-objections to procurement matters; and (v) frequent lack of internal coordination between the disbursement department and the project management team.
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:

(1) This project proves that the Bank can justify financing a project generated out of necessity even when the main implementing agency is an unstable institution, provided that country commitment is strong, and essential measures are put in place and promptly enforced .

(2) This project also shows that a simple two-pronged lending operation involving both physical infrastructure and institutional development components can be handled successfully by giving adequate attention to both components as if they were separate, self standing projects .

(3) IDA credits should include direct funding for carrying out environmental actions . In this project the cost of the Environmental Action Plan (EAP) -equivalent to about US\$2.5 million- was not included in the Credit. Lack of financing is a formidable barrier for the timely implementation of an EAP .

8. Assessment Recommended? Yes No

Why? Because more lessons and good practices could be derived from the highly satisfactory outcome of a project that rehabilitated an old hydroelectric plant and simultaneously reformed the power sector and privatized the power utility that owned the rehabilitated hydro plant .

9. Comments on Quality of ICR:

The ICR complies with the Bank guidelines for ICRs and OED rates it as satisfactory . However OED notices that (i) the ICR did not comment on the feedback on Bank performance provided by the Borrower on its project completion report; (ii) the statements on ERR (70 percent) and NPV (US\$171 million) contained in the second paragraph of section 4.3 are not properly supported by Tables of Annex 3 which present non-discounted values as if they were NPV; and (iii) the Satisfactory performance ratings given to both project DO and IP in the ICR line of Annex 4 do not match the Highly Satisfactory rating given to Project Outcome in Section 2, Principal Performance Ratings . Also, the ICR would have been enriched by mentioning the price paid for EDM under the ICB privatization process .