



<b>1. Project Data :</b>			
OEDID: L3458			
Project ID: P001922			
Project Name: Sugar Energy Development			
Country: Mauritius			
Sector: Other Power & Energy Conversion			
L/C Number: Loan 3458-MAS			
Partners involved : GEF			
Prepared by : Richard L. Berney, OEDST			
Reviewed by : Yves J. Albouy			
Group Manager : Roger H. Slade			
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**2. Project Objectives, Financing, Costs and Components :**  
 Objectives were: (1) to expand bagasse-generated electricity production in five years from 70 GWh to 120 GWh using bagasse now burned for disposal; (2) support a program of mill improvements to further increase bagasse availability for power generation; (3) experiment with methods of bagasse transport and use of cane residue to increase the use of biomass fuels for energy production; and (4) Strengthen the implementation of the Biomass Energy Development Program (BEDP) through technical assistance and institutional support for program management and coordination and for environmental monitoring . The main components were: (a) building a 22 MW bagasse/coal fired power plant US\$ 29.3 million); (b) increasing steam usage and generation efficiency at several sugar mills US\$ 22.2 million); (c) improve efficiency for transport of bagasse and experiment with use of can residue as a fuel for power generation US\$ 2.0 million); and (d) provide TA for strengthening the Mauritius Sugar authority and the Central Electricity Board in program implementation and environmental monitoring US\$ 1.6 million). The IBRD loan of \$15 million was to finance component (b). A GEF grant of US\$ 3.3 million was to finance components (c) and (d). Financing for component (a) was to come from other domestic and foreign sources .

**3. Achievement of Relevant Objectives :**  
 The project failed to meet most of its relevant objectives . The power plant was never built. Private sector demand for funds to finance mill improvements was below expectations, and only 40% of the funds allocated for this purpose were disbursed. The transport study and residue use experiments were dropped after initial results proved negative, Environmental monitoring was improved and 80% of the GEF was disbursed.

**4. Significant Achievements :**  
 The only significant project achievement was that the project coordination unit became a focal point for resolving IPP development issues, and in designing a power purchase agreement . Achievements in the area of increased power generation using bagasse fuel (which were substantial) came mainly from private sector initiatives outside the projects scope.

**5. Significant Shortcomings :**  
 The project was appraised before a detailed design was established for the proposed power plant, and the effectiveness covenant for providing a viable financial plan for the plant was dropped . The appraisal and supervision team teams failed to include a power engineer to advise on design of the power plant . The ultimate design proved to be too expensive to implement economically . When the project was appraised, Bank financing was attractive to the private sector primarily because foreign exchange resources were unavailable through other channels . However, when the Government lifted restrictions on the availability of foreign exchange before the loan became effective, the rationale for Bank financing disappeared . Bank funds were only partially used because the private sector quickly discovered that commercial bank financing was easier .

<b>6. Ratings :</b>	<b>ICR</b>	<b>OED Review</b>	<b>Reason for Disagreement /Comments</b>
Outcome:	Satisfactory	Highly Unsatisfactory	None of the physical objectives were met .

<b>Institutional Dev .:</b>	Partial	Modest	The project's original ID objectives, though not very ambitious, were only partially met, but the side effects on PSD for power generation were clearly positive.
<b>Sustainability :</b>	Likely	Likely	Rating applies only to the ID impact discussed above.
<b>Bank Performance :</b>	Satisfactory	Unsatisfactory	The ICR rating is Marginally Unsatisfactory, OED rates the project as unsatisfactory because the major project component, the power plant, was not built, and less than half the funds were used, primarily because both quality at entry and supervision were unsatisfactory .
<b>Borrower Perf .:</b>	Satisfactory	Satisfactory	
<b>Quality of ICR :</b>		Satisfactory	

**7. Lessons of Broad Applicability :**

1. Power generation and energy efficiency projects should be handled by energy sector staff, not agriculture sector staff.
2. The Bank's institutional requirements make the private sector reluctant to use Bank funds if foreign exchange is available from any other source, especially for relatively small energy savings /efficiency improving investments .

**8. Audit Recommended?**  Yes  No

**Why?** The ICR was based on a desk review, and does not include any information about what investments the Bank's funds were used for and what the efficiency /efficacy was of these investments . The use of the GEF funds and their impact is unclear .

**9. Comments on Quality of ICR :**

Because the Region recognized that the project design was inappropriate and the project had failed to meet its major objectives, it focused the ICR on the broader sector development issues that needed to be resolved to move forward with implementing private sector owned, bagasse-based power development . These issues, which are at the core of the original project design concept of expanding private initiative in the sector are handled in a satisfactory manner, particularly in the "Operational Plan." There is also a full Borrower's assessment . However, it must be noted that the ICR fails to provide information about the benefits of the subprojects that the Bank did finance and is also silent on the efficacy of activities supported by GEF funds . In addition, the project performance ratings given in the ICR are unduely generous .