

Energy I project

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Malawi: Energy I Project (Credit 1990-MAI)

The Implementation Completion Report (ICR) on the Malawi Energy I Project (Credit 1990-MAI, approved in FY89), prepared by the Africa Regional Office, was reviewed by the Operations Evaluation Department (OED). The credit in the amount of SDR 34.8 million was approved on March 14, 1989, and closed on February 28, 1996, fourteen months after the original closing date. The credit was fully disbursed. Cofinancing was provided by the Republic of Austria and the Preferential Trade Area Bank. The ICR includes comments from the Borrower, but not from the cofinanciers.

The objectives of the project were: (i) to meet the forecast 1994-97 increase in Malawi's power demand in a least cost manner; and (ii) to improve the management of Malawi's wood-based energy resources. The project comprised: (a) a power component implemented by the Electricity Supply Commission of Malawi (ESCOM), which included the construction of the 50 MW Tedzani III hydro power scheme; rehabilitation work on Tedzani I and II, and technical assistance to support its continued financial viability, through studies on the power tariff and asset revaluation, and improved efficiency, through a transmission and distribution study; and (b) a woodfuel component implemented by the Forestry Department, which included technical assistance for the production and commercialization of charcoal, the promotion and establishment of public sector and private fuelwood plantations, the production and marketing of efficient charcoal stoves on a commercial basis, and institutional development of the Forestry Department.

Overall, the project achieved its major physical objectives, but failed to achieve its financial and commercial objectives. The Tedzani III hydroelectric scheme was successfully completed, albeit with a 28 percent cost overrun, mainly due to design changes and supplier currency appreciation. Energy output was 33 percent lower than planned, but the ICR provides no explanation. The rehabilitation of Tedzani I and II was only partially completed. The consultant studies on the power tariff, asset revaluation, and transmission and distribution were completed and their recommendations were implemented. However, the rapid devaluation of the currency, combined with inadequate tariff adjustments, have driven ESCOM to the verge of insolvency. The pilot charcoal production scheme was technically satisfactory but a commercial failure, due to continued competition from unlicensed producers. The promotion of tree growing by smallholders and estates was completed, but their commercial viability is uncertain, due to continued (albeit unsustainable) fuelwood production from village woodlands. The production and marketing of efficient charcoal stoves was successfully completed, but the ICR provides no indication that this activity is continuing beyond the project. The technical assistance for strengthening the Forestry Department was completed, but there is little indication of lasting improvements, due to the shortage of qualified staff and budgetary resources. The economic rate of return of the Tedzani III scheme, which accounted for 82 percent of total project costs, was reestimated as 5 percent in the ICR, lower than the appraisal estimate of 11 percent, due to higher costs and lower outputs than planned.

OED rates the project outcome as marginally unsatisfactory, the sustainability as unlikely, institutional development impact as moderate, and the Bank's performance as marginally satisfactory. Three of these ratings are lower than those of the ICR. The ICR rates the outcome as satisfactory, but does not give adequate weight to the financial health of the ESCOM, which has moved from a very healthy financial position to one of near insolvency. On the woodfuel side, the inability to commercialize the new ventures is sufficient to rate the outcome as unsatisfactory. The ICR rates the sustainability as likely, but ESCOM's weak financial condition-with a rate of return on revalued assets of 0.1 percent in 1995-combined with the

Forestry Department's inability to adequately fund the actions needed to ensure the sustainability of the woodfuel components, make it more appropriate to rate it as unlikely. The ICR rates the institutional development impact as partial, in agreement with OED. The ICR rates the Bank's performance as satisfactory, since the power component, which accounted for 85 percent of project costs, was well prepared and implemented, while the rapid devaluation of the currency and growing political interference with tariff adjustments could not have been foreseen. However, the preparation and appraisal of the woodfuel component appears to have been based on unrealistic expectations about the Forestry Department's commitment and ability to support the commercialization of the activities that were launched by the project, which led to their sustainability being uncertain. Thus, a marginally satisfactory rating is more appropriate.

Overall, the uncertain commercial sustainability of the woodfuel components, in spite of their technical success, appears to be mainly due to the inability of the Forestry Department to control continued production of fuelwood and charcoal from village lands, which is destroying the natural forest cover due to unsustainable practices. A general lesson that emerges points to the need to adequately appraise a Government agency's commitment and ability to support the commercialization of activities that were developed under its own management. A more specific lesson relates to the desirability of involving local communities in project design and implementation, particularly where they can play a key role for the success or failure of the project. In the last year of the project, however, some progress has been made with the establishment of village forestry committees to manage the village woodlands and share in the stumpage fee. This approach appears to be more effective in policing the production of wood from village lands, and through improved collection of stumpage fees, improving the viability of smallholder woodlots and estate fuelwood plantations.

The ICR is satisfactory. It provides a candid discussion of the implementation experience of the project, supported by extensive operational and financial indicators, and identifies the appropriate lessons. The project may be audited.