

OED Précis



Operations Evaluation Department

May 1997

Two Water Projects in Malawi

Two Bank-funded water supply projects in the city of Lilongwe, Malawi, have shown that a small utility, operating under difficult circumstances, can be managed effectively. An OED audit* found that the projects increased water availability for the poor, established an expanding sanitation program, and improved management at the local water utility. The first project included carefully designed preparation for the second project, and focused primarily on building institutional capacity.

Both projects were completed successfully, the second ahead of schedule. Their accomplishments included an increase in the efficiency of operations and the creation of a network of local consumer committees to operate water kiosks for the poor. Many of the committees are run by women.

An abrupt devaluation of the local currency has made it very difficult for the utility to service its foreign debt and cover supply costs, threatening the projects' long-term benefits. While tariffs can and should be increased further, foreign exchange risk relief should be considered as part of a program to restore and sustain the utility's financial viability.

For over a decade the World Bank has been helping Malawi expand its water resources, funding five operations in the water sector. Two of these were the Lilongwe Water Supply Engineering Project (1982-87) and the Second Lilongwe Water Supply Project (1986-93). The first, for a credit of \$4 million, was

designed to pave the way for the second by developing a long-range sector program for the capital, Lilongwe. The project's goal was to strengthen the Lilongwe Water Board, the city's commercially run utility responsible for water supply and sanitation services. The second project, for a credit of \$20 million, implemented the new investment phase and sanitation program, and continued the institutional support begun under the engineering project.

The projects were a success, especially from the point of view of institution building, and they provided the model for a national approach to managing water in cities and larger towns. One key to their success was the well-targeted and thorough technical assistance of the first project. The extensive groundwork done by the Bank in the first project to prepare the larger investments of the second project helped identify training needs and established a twinning arrangement for a comprehensive training program.

The engineering project produced a master plan, a feasibility study, engineering designs, and contract documents for the second project. It financed experts and computers. The second project included construction of a new earth-fill dam, a water treatment plant, and water mains. It expanded the distribution system and strengthened the capacity of the water board.

Outcomes

Water availability. The new dam and the treatment facility built by the second project have allowed water supply to keep up with population increases, although recent droughts and an unexpectedly high population increase have forced the utility to ration water.

Access to water improved significantly in new housing areas, but coverage was poor in low-income areas until the second project developed an effective network of water kiosks in traditional housing areas and villages in Lilongwe's outskirts. The water board and the city council strongly promoted the creation of consumer committees to run the kiosks. Today, most kiosks are privately operated and managed by these committees, and the vast majority of them are run by women. The Lilongwe Water Board appears to manage the kiosk operator contracts in a trans-

**Performance audit report: "Malawi: Lilongwe Water Supply Engineering Project and Second Lilongwe Water Supply Project," by Tauno Skytta. Report No. 16430. April 1997. Available to Bank executive directors and staff from the Internal Documents Unit and from regional information service centers. Précis written by Stefano Petrucci.*

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parent and effective manner, and the village consumer committees have encouraged discipline and efficiency in kiosk management.

Institutional development. The projects helped develop an effective management support and training program through a twinning arrangement with a British water authority. After the program was completed in 1994, the water board successfully took over the functions of expatriate advisers. All senior level management positions are now filled by local officers, and staff productivity has increased above target levels.

The efficiency of operations has increased considerably, and the current level of unaccounted-for water—16 percent—is among the lowest in any African city. Labor costs were reduced (from 43.3 percent of operating expenses in 1990 to 37 percent in 1995), while response time to new service applications and customer complaints has improved.

Sanitation. About 6,000 latrines were built under the projects, and the sanitation program continues under local supervision. The delivery of sanitation services is now community based, with the city council providing coordination and supervision. The projects developed technological options as well as health education materials and manuals for construction and training. The same training and education materials developed by the first project are now being used for continued sanitation improve-

ments. City health officials report that the incidence of water-borne diseases has dropped since the program began.

Financial risk

After a promising start in the late 1980s and despite a 29 percent average yearly increase in water sales since 1989, the finances of the Lilongwe Water Board have abruptly deteriorated in recent years, and profitability disappeared in 1994. The main reason has been the impact of the local currency's devaluation on the utility's foreign debt.

In fiscal 1995, foreign exchange losses amounted to three times the water revenues. Between 1994 and 1995, foreign exchange losses erased almost five years' worth of sales; as a result, the return on fixed assets was negative. Foreign exchange losses were charged entirely to the income statement, a practice that further damaged the board's creditworthiness and distorted the picture of its operating finances.

The water board has increased its rates to cover rising costs. Even many middle- and higher-income households, consuming about 100 liters per capita per day (lpcd), now pay 5 percent of their income for water. Lower-income households consuming 20 lpcd pay about 10 percent of their income. Water costs still compare favorably with the average in developing countries, however, and there is still room for tariff increases because

water prices have not kept up with the rise in the consumer price index. But affordability should not be jeopardized, or consumers may stop using and paying for the service.

Under financing agreements later made under a Bank-funded follow-on national water development project, water boards were protected from portions of their foreign exchange risk, and the government assumed responsibility for servicing part of the Lilongwe Water Board's foreign debt. As a result, the board's financial position improved in 1996.

Lessons

- Providing adequate and well-targeted technical assistance before an agreement is reached on a major investment program is the correct approach in countries where institutional capacity is weak.
- Extending the network of water kiosks and handing over their operation to private individuals or community groups can be an effective way of improving access to water for the poor.
- When a utility has limited scope for efficiency gains, the adverse consequences of a currency shock should be passed on primarily to consumers in the form of tariff increases at least equal to the consumer price index. But when affordability becomes an issue, foreign exchange relief to restore the utility's viability should be considered.

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