

Small-scale private involvement in water-supply provision in Tanzania

Victoria J. Boydell

After the failure of successive attempts to provide a 'free' water system, privatization has restored water supplies to a community.

erege village's new private rural water supply system has successfully restored the water supply after the failure of other externally imposed schemes (see box). An individual manages and operates the water supply on a private shareholder basis, with the consent of the community and the village government. Berege is an interesting example of a small-scale privatization scheme in which the water supply is operated and managed by a private shareholder, yet major decisions are taken by the community.

Personal initiative

Following the failure of the village to address its water supply problems in 1996, Kennedy Masinga approached the village government with an alternative proposal

'Free water for all' proves an elusive ideal

Berege village is located in the Mpwapwa district of eastern Tanzania. Its population of 3020 is mostly engaged in agriculture and livestock production. When the village was established, in the 1950s, the community depended on unprotected springs and traditional wells. In 1953, in line with its policy of 'free water for all', the Tanzanian Government drilled a borehole fitted with a windmill. Water committees were established to organize construction, collect water charges and to establish a water fund to finance maintenance. Maintenance of the water supply through a 'Pump and Engine Maintenance Scheme' (PEMS), was to be the joint responsibility of the project's water committee and technicians from the Water Department.

Before long, the borehole stopped functioning — the technicians had failed to maintain it properly, and corruption had flourished in the community's water committee. In 1959, a new government initiative replaced the windmill with a new pump and diesel engine, but this soon failed as well, and the community returned to the unsafe water sources it had used in the past.

In 1975, the government commissioned another borehole fitted with a pump and engine, but poor operation and maintenance (O&M) and the theft of engine parts again led to failure. As before, the government agency had not provided the community with the support, equipment or training it needed to operate and maintain the facility. The failure of this third initiative, and the fact that the previous water sources had all dried up, resulted in community members having to buy water at TSh300/litre (around 40p).

In 1991, the government abandoned its principle of 'free water for all' in favour of a revamped Tanzanian Water Policy based on community responsibility for O&M of village water supplies. In 1996, Berege village requested the assistance of the Mpwapwa Water Department in rehabilitating its water-supply project. The Department estimated the cost of rehabilitation at TSh2.3 million; and despite the best efforts of the village and the Anglican church to raise Tsh400 000, no solution was found.

to rehabilitate, manage and operate the water project on a private shareholder basis.

Masinga is a recognized and respected member of the community, a former member of the water committee with knowledge of water policy, and experience of operating grain-milling machines, which are similar to pumps and engines. Masinga offered to operate and maintain the water system in close collaboration with the water committee, village government and the community. His contacts within the Water Department offered the possibility of an effective back-up system, and he also possessed the skills necessary to undertake specific operation and management tasks. After a favourable analysis of Masinga's proposal by the village government and the water committee, at a village meeting Masinga's neighbours decided that he could begin operating the water project.

Institutional arrangements

An informal contract for partnership overseen by the village government defines the financial input, expenditure and recovery costs incurred by Masinga (the 'shareholder'). The time period for the contract is undetermined because operation and maintenance are managed through a lending scheme with an unlimited time-frame. A formal contract will soon be finalized.

Guidelines for the distribution of responsibility have been drawn up to ensure that both community members and the shareholder meet their obligations (as defined by 1991's Rural Water Policy and Operational Guidelines, developed through consultation between the community, the shareholder and the Water Department). Masinga is responsible for all repairs to the pump, engine and borehole, and for establishing a financial management system for O&M

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financial sustainability

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HESAWA's store of waterpump

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costs, while the water committee deals with all issues relating to the water supply. Major decisions concerning the project are reached through consultation between the shareholder, the water committee, the village government and the community.

Masinga, with his substantial income from various businesses (including two maize mills, a pharmacy, and farms) was able to cover the capital costs (around \$1000) of rehabilitating the borehole, pump and engine, and to pay the initial operational costs to provide a reliable water service to the community within a few months. He also established a viable water-fund system to facilitate the payment of debts incurred by the water committee and the village government.

Each home contributes TSh1000 (about £1) per annum for O&M costs (infirm and elderly villagers are exempt). The revenue from consumer charges does not yet fully cover these costs, but there is resistance to increasing the tariffs as they are already significantly higher than those in surrounding areas (TSh50 per litre in Berege village, compared to TSh20 to 30 in other villages).

Still, water costs have plummeted under the new system, a litre used to cost TSh300. In addition, employees now have financial incentives: water and pump attendants, security guards, and water kiosk attendants receive regular pay increases.

Nevertheless, Berege's private watersupply initiative has encountered its share of problems. The reliable supply has destroyed the business of the community's

water transporters; resulting in some deliberate engine and borehole damage. Maintenance problems also arose when the District Water Engineer insisted that the village purchase its spare pump and engine parts from specified PEMS shops, which are often inadequately stocked. In addition, pump and engine operation have been impaired by the PEMS team's delayed responses to major breakdowns.

Far-reaching impact

The reliable and safe water supply provided by the private water initiative has had a marked effect on community life. Daily household use has increased (to around 25 litres per head per day), and improvements in sanitation and hygiene have resulted from the construction of dry pit latrines and dish racks — dishes are no longer left to dry on the ground — the rehabilitation of the village health clinic, and the construction and protection of a reservoir tank. The water source has also concentrated the village's population density with an increase in housing in the immediate area.

There have been other positive social consequences; in the past, many schoolchildren spent an inordinate amount of time fetching water. One teacher noted that school attendance has increased since the restoration of the village pump and engine; an elderly village woman added that, thanks to the new water scheme, women are now able to get on with other household chores and to participate in income-generating activities.

Even the donkey traders who ran the Gulwe water-carrying scheme concede that their animals are now put to better and more profitable use. When they had to transport water from Gulwe, the donkeys could only plough five acres; now they can plough 20 and still get sufficient food and rest. This, in turn, has increased food production, further bolstering support for the new system.

The success of the shareholder-backed rehabilitation, and O&M of the water project has encouraged the village to raise funds for the rehabilitation of other boreholes. Berege village recently contributed TSh500 000 to the Water Department for the development of a second borehole on the opposite side of the village, so ensuring the extension and continuation of service improvements. Masinga will also be the shareholder on

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webwatch

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http://www.ids.ac.uk/eldis/

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EHP assists development organizations to address environment-related health problems, focusing on prevention of: acute respiratory infections, diarrhoeal diseases, and malaria. Also provides technical assistance in water supply, sanitation, wastewater, solid waste and air pollution. Lists recent publications, many with text downloads available. Includes library interface: request a literature search from EHP's bibliographic database of 9000 records. http://www.crosslink.net/~ehp/

IRC International Water and Sanitation Centre

IRC is an independent, non-profit organization specializing in a range of interdisciplinary subjects. Describes centre's core activities (training, research, consultancy, advisory services, documentation), and provides access to IRC-related information on selected themes, including school sanitation, communication, and gender. Also collates **SOURCE**, a valuable news service of sectorrelated items.

http://www.irc.nl/

OneWorld Think Tank on water and sanitation

Despite the wide arrary of global and regional water initiatives and associated information exchange facilities, it is difficult for practitioners to find and share information on the lessons and experiences encountered in the field. This is where OneWorld Think Tank on water and sanitation comes in. A joint initiative, it brings together the expertise of GARNET, IRC, OneWorld, WaterAid and the World Bank, directing it to building practical knowledge-sharing mechanisms that bring practice closer to policy. Two main components: an electronic dialogue mechanism for practitioners (electronic conferences), especially in the South, and a website with links to key resources.

The first electronic conference on demand responsive approaches (DRA) is underway and others are planned on sanitation, small towns and knowledge management.

http://www.oneworld.org/thinktank/water/ index.html

Compiled by Darren Saywell, WEDC

this borehole, and will assist in its rehabilitation. News of the success of the private initiative has spread to neighbouring villages such as Mnzase where, with Masinga's assistance, the programme has been replicated.

Berege is currently being considered for a World Bank Learning and Innovation Loan, designed to develop and pilot innovative mechanisms for the preparation of a large-scale RWSS programme.

A replicable success?

Although the unusual character, skills and assets of its shareholder make the Berege privatization scheme unique, local decision-making and other replicable factors have played a significant role in the scheme's success. The private initiative has given the community a sense of ownership (they make decisions about the future of the scheme and pay towards its operating costs), and has generated trust and confidence in the key role of the shareholder.

Berege village is a positive example of the private service approach which is becoming increasingly influential in the planning of future community-based projects at district, regional and national levels. This successful, private water-supply initiative was not imposed by external agencies, but was planned, implemented and continues to be managed from within the community.



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about the author

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