Community management of small town water supplies

This item was submitted to Loughborough University's Institutional Repository by the/an author.


Additional Information:

- This is a conference paper.

Metadata Record: https://dspace.lboro.ac.uk/2134/30643

Version: Published

Publisher: © WEDC, Loughborough University

Rights: This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at: https://creativecommons.org/licenses/by-nc-nd/4.0/

Please cite the published version.
Community management of small town water supplies

John Parry, Canada

Since 1990 Wardrop Engineering Inc in partnership with local consulting firms and the Ghana Water and Sewerage Corporation (GWSC) has been implementing the GWSC Assistance Project which is jointly funded by the Government of Ghana and the Canadian International Development Agency. The main objective of the Project is to enhance the financial and technical sustainability of water supply schemes in 34 small towns in the three regions of northern Ghana by enabling management by community based Water and Sanitation Development Boards (WSDBs) supported by their District Assemblies. The following are significant considerations in the implementation of this strategy:

- formation and composition of WSDBs;
- participatory planning process;
- legislative framework;
- institutional linkages;
- management versus operation and maintenance;
- cost recovery and financial sustainability;
- transparency of financial activities;
- water and sanitation linkages; and
- sustainable training.

Formation and composition of community based organisations

The organisation established to assume responsibility for decisions regarding the water supply and sanitation facilities must be representative of the various segments of the community. Each significant group should be represented, but more importantly, women should be adequately represented because traditionally they are responsible for collecting water and for maintaining the health of the family. Thus women have the most at stake in achieving a satisfactory level of water supply and sanitation service.

In the case of the GWSC Assistance Project, community liaison workers in conjunction with community leaders identified the various groups that should be represented on the Water and Sanitation Development Boards. This included each ethnic group, each of the major water user groups, the local government, and the traditional leadership. About 40 percent of the members of the Water and Sanitation Development Boards are women. The membership of the Board was approved in a public forum and by the District Assembly to ensure its legitimacy.

Planning process and selection of levels of service

An essential element in the implementation of a community management strategy is the full participation of the WSDB in planning the improvements to the water supply facilities. On the GWSC Assistance Project, the Board members receive training to raise their awareness of the considerations involved in the rehabilitation of the existing facilities, selection of the appropriate technology for rehabilitated and new components, and the level of service that the beneficiaries can support in the long term. After receiving training from Project staff, community members take a direct role in gathering information needed for the design of the improvements, in particular, demographic surveys and enumeration of existing water sources. The Board with the assistance of Project staff, prepare a Facilities Management Plan which sets out the planned improvements, the estimated capital and operating costs, the cost recovery modalities and the arrangements for operation and maintenance. This report is reviewed in a public forum to ensure that residents are aware of the scope and rationale for the planned improvements. Particular emphasis is placed on making the Board and the community aware of the operation and maintenance cost implications of the various levels of service and the technology choices.

Legislative framework and board constitutions

A community based organisation (CBO) set up to manage infrastructure facilities should be recognised by the various levels of government as legitimately representing the consensus of the community. On the GWSC Assistance Project this has been accomplished by having the WSDBs constituted within the framework of the legislation governing the District Assemblies. Ghana has adopted a policy of decentralisation in which District Assemblies will assume responsibility for local infrastructure. The intent is for the capital investment in local infrastructure to be disbursed through the District Assemblies. The District Assemblies have been directly involved in the Boards in the following ways:

- Passage of a by-law recognising the WSDB as an extension of the District Assembly and authorised to manage the water supply scheme.
• Approval of the membership of the Boards and inclusion of at least one member of the District Assembly on each Board.
• Assistance to the Boards in meeting their financial obligations for acceptance into the programme.
• Approval of the tariffs set by the Boards on the basis that, where the Assembly decides that the tariff should be lower than that required to fully meet the costs, the Assembly will provide a subsidy to cover the shortfall.

The District Assembly acts as a support agency in ensuring that Boards perform adequately. In the case of non-performance by a Board, the District Assembly has an obligation to intervene in the management of the scheme.

Institutional linkages
The success of a community management strategy depends to a large extent on whether adequate institutional support is provided. This is particularly critical in the early stages when the Boards are in the process of building capacity to assume their prescribed responsibilities. In the case of the GWSC Assistance Project, the Boards are strongly linked to the District Assemblies and to the Ghana Water and Sewerage Corporation. The District Assemblies provide financial support and through time will provide some technical support. District Water and Sanitation Teams are being formed and trained to assist in the formation of community based organisations. The Project is being implemented through the Ghana Water and Sewerage Corporation which in spite of its inherent weaknesses in managing small water supply schemes, has a very significant pool of technical expertise on which the Boards can draw. Within the Corporation, a Community Water and Sanitation Division has been established to act as a facilitator in the community management process and to provide institutional support in the form of policy formulation and mobilisation of capital investment.

Management versus operation and maintenance
There should be a clear distinction between the managerial responsibilities of the Boards and the operation and maintenance functions. On the GWSC Assistance Project the constitutions of the WSDBs make this distinction by stipulating that no Board member can be an employee of the Board. Thus the Board is in effect a board of directors established to make decisions affecting the operation and maintenance of the scheme. There are three main ways in which a Board may decide to handle the operation and maintenance activities:

• The Board can hire staff directly for such functions as revenue collection, financial management, equipment operation, and maintenance.

• The Board can engage a private sector firm to operate and maintain the scheme.

• The Board can have the Ghana Water Sewerage Corporation operate and maintain the scheme.

Thus, the Board ensures that the scheme is operated in the best interest of the community but Board members are not directly involved in the actual operation and maintenance of the facilities.

Cost recovery and financial sustainability
Community based organisations assuming managerial responsibility for a water supply scheme must approach the operation and maintenance of the facilities on a full cost recovery basis. The determination of revenue requirements must take into account both the direct and indirect operating costs and the capital cost of asset replacement over time. In some cases, full cost recovery will not be practical through direct service charges (tariffs) and a certain amount subsidy will be required. However, it is important that the community based organisation identify all of the cost categories and develop a plan for ensuring that they are catered for adequately.

In the case of the GWSC Assistance Project, the principle of full recovery of operation and maintenance cost has been adopted including provision for asset replacement. Revenue generation requirements are determined accordingly and are presented to the District Assembly for ratification. An appropriate tariff is agreed with the District Assemblies and a plan for dealing with the shortfall is formulated. In general, the shortfall in operation expenses is covered through a direct subsidy by the District Assembly and the cost of asset replacement is expected come from Government subvention. However, in order to reduce dependency on government contribution to asset replacement, an Association of Water Boards has been formed. Through the Association the WSDBs have established a common reserve fund to provide a source of financing for asset replacement. At this early stage the common reserve fund is not adequate to fully cater for asset replacement but the intent is for Boards and their District Assemblies to continue building up the fund.

Transparency of financial activities
One of the major complaints from beneficiaries in the past is that they had no information on the financial management of their water supply scheme. Are funds intended for the maintenance of the facilities being diverted for other uses? They had no means of determining whether the revenues raised through the tariff were used properly. On the GWSC Assistance Project, the WSDB constitutions have been set up to ensure transparency of financial activities. This consists of making the books available for
review by community members, audit of the accounts by the District Assembly, displaying the audited accounts in a public place and convening a public forum once a year at which community member are allowed to raise questions about the management of the scheme.

**Water and sanitation linkages**
The importance of considering water supply and sanitation together is a well recognised principle in the sector. On the GWSC Assistance Project hygiene education is an integral part of the promotion of community participation in the improvement of water supply services. The WSDBs recognise the importance of linking water supply and sanitation and with the support of the Project have organised campaigns to raise public awareness of the need to improve sanitation conditions in parallel with improving water supply. A community based hygiene education programme is being established in which the District Water and Sanitation Teams will play a significant support role.

**Training**
Training is an integral part of the process of implementing a community management strategy. On the GWSC Assistance Project the entire process is considered to be a series of results based training events commencing with a training session to raise awareness of District Assemblies and community leaders about the procedures to be followed in gaining acceptance into the programme. There are training sessions related to formation of a Water and Sanitation Development Board, preparation of the Facilities Management Plan, conducting the social surveys, establishing a Board office, keeping accounts, mobilising funds to meet financial obligations, operation and maintenance of a water supply scheme, revenue collection, and procurement of spare parts. All of this training is being provided through the Project but there is a need to ensure the sustainability of training after the Project is completed. With this objective, the Project is beginning the process of institutionalising the training. The Association of Water Boards is expected to play a significant role in this regard.