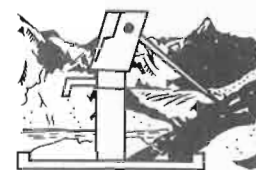




## WATER, ENVIRONMENT AND MANAGEMENT

### Community managed water supplies in Ethiopia

Michael Wood



#### INTRODUCTION

This paper will examine the various components that make up community management of rural water supply schemes, and the preconditions that are needed for these components to be effective.

The various diverse aspects of community managed water supplies will be examined with reference to a specific community in Ethiopia where the author has been working on a rural water supply project for a number of years.

#### WHY COMMUNITY MANAGEMENT?

Most project proposals for developing rural water supplies in developing countries now insist that the people those projects are intended to serve should have a major say in how the water scheme is constructed and managed.

This has come about because many rural water supplies built in the last decade are not operating anywhere near their intended capacity or are completely broken down.

For developing countries, the figure of 40% of systems not working is often quoted, but in some African countries up to 60% of schemes are not operating. (Wood, 1989).

There are many well-documented reasons for these premature failures, but one of the main reasons has been a lack of community involvement from the initial planning stage through to construction and management of the completed system.

#### WHY WERE COMMUNITIES NOT INVOLVED?

##### a) Coverage

One of the main reasons why communities were not involved was because during the International Drinking Water and Sanitation Decade, donors and governments were concerned with constructing new water schemes to serve the maximum number of people. This involved setting targets for construction which were too ambitious and unsustainable when it came to maintaining the systems.

Both donors and recipient governments were committed to this target oriented approach to rural water supply. Bilateral, large scale projects seemed particularly prone to this approach which, although

it may have been politically expedient for both donors and governments at the time, has proved in many cases to be counter-productive.

##### b) Accountability

Most bilateral water supply projects are evaluated on the basis of whether construction targets were met or not. Therefore, there was pressure on implementing agencies and local government departments to construct new systems regardless of how sustainable they would be in the long term.

##### c) The Time Factor

Another reason why communities were not fully involved is that it takes a lot of time.

Many visits to communities are necessary by project staff to establish a dialogue with community leaders in order to build up a rapport with them.

There are no short cuts to this. Meetings have to be arranged and re-arranged because not enough people show up or there is a cultural event taking place at the time.

Meetings themselves take a long time as in traditional societies it is customary to let all those who want to have their say to do so. Brevity is not a characteristic here!

##### d) Lack of Resources

In the past, the social side of rural water projects have been starved of resources including properly trained manpower. The lions share of resources went on construction.

The social side has also lacked prestige compared to high profile activities like those associated with construction.

#### WHAT IS COMMUNITY MANAGEMENT?

Community management of a water supply facility is when democratically elected representatives of the community take decisions which affect the day to day running of the scheme and accept all responsibility for the facility.

This concept is easier to achieve if the initial request for an improved system came from the community itself, when the chances of establishing a sense of ownership will be greater.

However, in most bilateral aid projects, site selection has often been done at the regional or even national level with communities being informed just before construction starts.

Community management is still possible under this scenario, however, if communities are given the opportunity to take part in decisions, such as in the siting of waterpoints and how the system is to be managed after completion.

## THE EVOLUTION OF COMMUNITY MANAGEMENT IN ETHIOPIA

The following case study shows how community management of a rural water supply system developed in the village of Dulecha in Sidamo Region which is part of an ongoing rural water and sanitation project being carried out by the Water Resources Commission of the Transitional Government of Ethiopia with support from the Canadian International Development Agency (CIDA).

### Dulecha

Dulecha is a village of about 3000 people in the Rift Valley about 25km south of the Sidamo regional capital, Awassa.

The Ethiopian Water Works Construction Authority constructed a 120m borehole there ten years ago. Community leaders had requested a borehole through the local kebele (village council) who applied to the Regional Planning Office. The request was channelled to EWWCA.

A successful borehole was drilled and a motorized pump installed. A reservoir and distribution system were also built.

A water committee was formed before construction started, consisting of seven members; two of whom were women. The chairman of the kebele was also made chairman of the water committee, in order to give the committee the necessary power to manage the water system effectively.

As chairmen of kebeles under the former Mengistu Regime had to be members of the Workers Party of Ethiopia, water committees formed during this time became quasi political bodies.

Although the water committee received no management training, they were, however, advised on how much the water tariff should be, and told that 40% of the money collected should be returned to WSSA to offset any repair costs to the system.

### Water Tariff

The setting of a water tariff is an important part of any community managed water scheme, particularly so in the user-pay climate currently prevailing.

In Ethiopia the tariff for motorized rural water supply schemes was set by the government about ten years ago at one birr (\$US 0.50) per 1000lt.

Water committees were advised by the Water Supply and Sewerage Authority, the government body responsible for operation and maintenance of all water supplies outside the capital, that they should sell tickets to consumers to buy water at the rate of five cents (2.5 US cents) for every 20 lt. container of water.

In Dulecha all consumers were able to pay this amount, although some paid in kind in the form of maize cobs, eggs or coffee cherries which were then sold on the market by the waterpoint attendant. The money collected was forwarded to the treasurer of the water committee, who, together with the secretary, used it to buy diesel and to pay the pump operator and the attendant.

### MISMANAGEMENT

The problem with collecting money for a public utility in rural Ethiopia is that there are very few rural banks where the funds can be safely deposited. In any case, banking is not yet an accepted practice in rural communities. Consequently, water tariff money is kept in the homes of water committee members.

As the water committee chairman was chairman of the kebele he had a lot of local power. During the previous regime kebele officials, under the pretext of serving the rural masses, became corrupt and misused public funds.

Such was the case in Dulecha. But under the kebele structure people were afraid to speak out even though they knew the officials were corrupt.

However, following the debacle and overthrow of the Mengistu Regime in May 1991 by the Ethiopia Peoples Revolutionary Democratic Front (EPRDF), the Workers Party of Ethiopia and all mass organizations were dissolved. Corrupt former officials were then exposed by the people in the period of house-cleaning which followed the take-over.

### A NEW START

In Dulecha, as in many communities having a motorized water system, the corrupt members of the water committee were exposed by the community

who reported the matter to the WSSA regional office. A Community Participation Assistant was assigned to help the community to re-form the water committee.

An election was organized at which a new water committee was elected. They were then given some management training.

### **TRAINING WATER COMMITTEES**

This training was given in the village and adjacent to the pump site. It was split into two half day sessions. The rationale for this was so that women members could attend.

The training consisted off:

- a) Keeping simple but accurate financial records-relating to income from the water tariff and expenses incurred in running the system.
- b) Keeping records of maintenance carried out on various parts of the water system.
- c) Providing job descriptions for pump operators and waterpoint attendants and supplying criteria to help to identify suitable candidates.
- d) Technical training for the pump operator to carry out routine preventive maintenance tasks.
- e) Advice on keeping the area round the collection points fenced, clean and well drained.

A set of guidelines to assist the committee in managing the system was given to the chairman.

### **Back Up**

The water supply system in Dulecha is now being run by the water committee which appears to be doing an efficient job. Their main concern of late has been difficulty in getting enough diesel, and transporting it to the village now that transport costs in Ethiopia have escalated.

They are also finding it difficult to balance their books as they are obliged to abide by what many see as an outdated water tariff structure.

However, this is being addressed by WSSA and a revised tariff structure is expected this year.

A CPA from WSSA makes periodic visits to the community to help to iron out any initial problems and to check up on the financial records.

The 40% of the tariff money is not being returned to WSSA as the community has preferred to do its own maintenance, although no major breakdown has yet occurred.

### **LESSONS LEARNED**

The case of Dulecha raises some important points about community management of rural water supplies and the formation of water committees.

Some of these points are:

- a) Should water committees be quasi-political bodies?
- b) How can the collection of public funds be safeguarded?
- c) In remote rural areas should water committees be given the mandate to carry out repairs privately?
- d) What kind of training do water committees need to be able to function effectively?
- e) What role should government play in community management of water supplies?

### **Political or not?**

The issue of whether water committees should include local political leaders depends on the political system of the country and the character of the officials themselves.

In Ethiopia, which has a history of top-down authoritarian rule, the only way water committees will have any power to act decisively is to be formed through the local kebele system whereby the chairman of the kebele becomes the chairman of the water committee.

The alternative is for the kebele chairman to devolve power to the water committee, but up to now this has been a rare occurrence.

In any case, in many rural communities, the same people tend to be on all the local committees.

The disadvantage of quasi-political committees is that if the government changes or the kebele chairman is removed from office, the water committee tends to dissolve.

### **Role of Government**

From experience in several African countries, there is a strong argument for governments to restrict themselves to a regulatory/supervisory role when it comes to construction and maintenance of rural water and sanitation services.

Bureaucratically top heavy government parastatals may not be the best vehicle to deliver such services to remote rural areas, and they are certainly not in a position to maintain these services, even if they do have that mandate. In fact many government agencies are struggling to maintain services in the urban areas, never mind the rural ones.

In many African countries there is a growing trend to involve the private sector in the construction and maintenance of rural water facilities as well as an increasing number Non Government Organizations.

### Guidelines

But what private operators and NGOs increasingly need are practical guidelines which would assist them in maintaining standards at each stage of the project cycle. Such guidelines should also contain standards designs for a variety of rural water supply applications e.g. spring protection; shallow wells; or gravity systems.

Guidelines should also stress the type of hardware that is acceptable so that standardization is eventually achieved. This would cut down on the museum of pumping equipment currently adorning the African rural landscape!

In a move designed to ensure greater sustainability of rural water supplies, WSSA in the southern regions of Ethiopia, has recently come up with the "WSSA-Community Agreement" which spells out each sides roles and responsibilities at each stage of the project cycle from pre-planning through construction to management of the completed system.

This Agreement is explained to community leaders at the pre-planning stage. They must sign it before any further action is taken. This reduces the number of surprises sprung by either side in this partnership arrangement.

### Non Government Organizations

There are about 40 NGOs operating in the rural water supply and sanitation sector in Ethiopia. (UNICEF 1991). Up until recently there have been no guidelines for these organizations to follow in the construction and management of rural water supplies. But now the Water Resources Commission is coming out with a set of guidelines for NGOs to follow. These guidelines were initiated by WSSA and have had input from the NGO community to make them more practical and not overly bureaucratic.

In many ways NGOs are in a better position than government agencies to help communities to construct water systems that they themselves can manage.

### Community Maintenance

Although in Ethiopia, as in many African countries, a government agency is mandated to repair and

maintain all rural water supplies, this is often an impossible task for reasons already mentioned.

In rural Ethiopia more communities, especially in remote areas are taking it upon themselves to repair their own pumps or pipelines by paying local artisans to do the job. Such artisans are usually able to repair most of the common above ground faults, but the WSSA maintenance crews are still required to do pump pull-outs if it is a motorized unit.

### Handpump Systems

With the advent of the Afridev handpump in Ethiopia, community management of handpumps is now a realistic concept provided the issue of spare parts availability is addressed.

In the southern regions, water committees are now being trained to manage handpump systems. An important element here is the introduction of a handpump tariff which is currently set at 25 cents (12.5 US cents) per household per month. It is left up to the water committee to figure out how this should be collected.

The problem is that those communities with relatively easy access to alternative sources, may abandon the handpump if they have to pay for using it. But there has been no problem collecting this money in areas where the handpump is much closer than traditional sources.

### CONCLUDING REMARKS

For community management of rural water supplies to succeed, the following points should apply:

- a) The community has got to **need** the system.
- b) The water committee must be allowed to run the show, including making its own mistakes (initially).
- c) Water committees must be democratically elected and properly trained on site.
- d) Outside agencies should provide adequate back-up support and then gradually withdraw.
- e) An affordable but realistic tariff structure has to be in place.
- f) Standard equipment must be installed.
- g) Pump operators must be properly trained **and** equipped with the right tools.
- h) Spare parts must be locally available at reasonable cost.
- g) There needs to be an outside agency to provide back-up repair services also at reasonable cost.

### REFERENCES

- WOOD M. 1989. Survey of Water Systems in Malawi, unpublished.  
UNICEF NGO WATSAN Survey 1991, AddisAbaba