

# Community-level management and maintenance

by K.K. Munguti

**The Kenya Water for Health Organization (KWAHO) was founded as a direct result of the 1975 Women's Declaration Conference in Mexico concerned about the particular problems of women with the goals of the Water Decade. Since its establishment, it has channelled money from Unicef and other donor agencies to women's groups in Kenya active in local development initiatives to do with water and sanitation. As such it has been a successful NGO that truly works from the bottom up with the support of the community.**

IT IS THE declared intention of many governments and donor agencies to involve communities in the design, planning, implementation and maintenance of water and sanitation projects. On paper this is very convincing, but in each case there have been differing opinions as to what actually comprises community participation, and subsequently what technologies the communities can ably manage and maintain at their own level and within their own means.

The Kenya Water for Health Organization (KWAHO) has been involved with all these intriguing questions and stages in Kwale district, Kenya. KWAHO is an indigenous Kenyan non-governmental organization (NGO) formed and registered in 1983 with the main objective of assisting communities, especially women and children, in reducing the burden of carrying water (often contaminated) over long distances, and to achieve this with their own participation.

In April 1984, KWAHO with UNDP and Unifem funding became a party to the implementation of the then South Coast Handpumps project which was financed by UNDP and the World Bank and implemented by the Ministry of Water Development as part of the Kenyan government's contribution to the International Drinking Water Supply and Sanitation Decade. The role of KWAHO in the programme has been to execute all aspects of

community participation and training.

## **KWAHO's role in Kwale**

Since 1984 KWAHO has expanded its role in training for community participation from an initial coverage of two locations to the whole of the district (22 locations). KWAHO has also been involved since 1985 in the implementation of the Kwale Water and Sanitation project together with the central government Ministries of Water Development, Health and Culture and Social Services. This

programme has been extended to June 1990 and is funded by the Swedish International Development Agency (SIDA).

The programme is involved in the provision of water and sanitation facilities to rural communities in Kwale district. Having been planned as a logical extension of the South Coast Handpumps project, the Kwale Water and Sanitation project has followed an implementation strategy that is based on the experiences gained in that pilot project. It may help to look briefly at some of the project objectives that relate to community participation:

- Provision of assistance to organized communities that have expressed desire and shown a commitment to participate in project activities.
- Community participation in project activities — planning and design, financing, construction, maintenance and repair of point source water supplies and latrines — to the greatest extent possible.
- Innovative thinking and new approaches.

In most cases community participation is not defined; no details of the processes are given.



*Unprotected water sources are unsafe and inconvenient. KWAHO replaces these with centrally located handpumps, to be built and then maintained by the community.*

What is normally done is simply to describe what works and activities the community will do in a programme. By community members offering themselves for manual work (digging trenches, carrying pipes, moving stones for construction, etc), many implementors of programmes have reported high levels of community participation. An estimate would be given showing by how much the free labour force reduced the total costs.

Community participation is not the mere provision of free labour for projects, but a motivating idea shared by people with a common problem that affects their lives. They must know why it is a problem and why it should be eradicated. In other words the community should come to work not merely to reduce the labour expenses of the project. It should never be assumed that by working, members of the community are showing their commitment to the project. The most important aspect is the knowledge and understanding of the need, and their accepting to come to work is secondary. To achieve this object officers and donors alike must accept the democratization of public opinion in favour of local management and maintenance of the water and sanitation facilities.

### Putting the community first

This calls for the reversal of the belief that project officers (and

donor representatives) know the problems of the communities best, in favour of the practice of incorporating the community's knowledge and solutions for its own problems. In Kwale, the siting of water points is one issue that illustrates this reversal. During the early stages of the project, the hydrogeologist determined the sites from a professional point of view, with little or no regard at all to community choice. The result was that the first shallow wells were drilled on property belonging to local leaders who had appeared to have had the welfare of the other villagers at heart. However, a survey by an Amref consultant (Mr Oendo Ayuka, 1983) revealed that the community members were dissatisfied with the sites arrived at, but were not in a position to question the siting publicly.

After reconsideration, it was agreed that siting would be done by the communities with the assistance of the project hydrogeologist and the sociologist. This worked for a period but disagreements arose later as it was not clear who had the final say where the site would be.

In 1987, a reversal took place when a siting committee was formed which verified the community choice, and if professional advice was against this place, the community had to meet to agree on another site. The siting advisory committee consists of a hydrogeologist (drilling), a geologist (survey), a sociologist, a

social development officer and a public health technician. This process is cumbersome but critical for proper communication to create that state of mind necessary for successful management.

### Management of water facilities

For communities to prepare for the management of their facilities, it is necessary that they are involved from the planning stages, not just when physical activity starts. Clearly spelt terms of co-operation must be agreed with the communities. In order to avoid injustice and distrust, the information given to the community must be open and where necessary modified through contributions from the communities.

Where appropriate a series of steps to be followed may be a useful tool, so that the structures created can be managed as small units where consensus would prevail in making decisions.

Again, to review, when deciding the siting of water points (in this case shallow wells), the following information needs to be known and given to the intending beneficiaries.

- Thirty households or 250 persons for one water point.
- Water points to be one kilometre apart.
- Review of sites in relation to homes, i.e. acceptable, accessible, central, etc.
- Starting a water committee for organization and management.
- Voluntary trainees (five per point) for operation and maintenance.
- Proper selection confirmed in a *baraza* (public meeting).
- List of beneficiaries.
- Confirmation of sites by siting committee.

Information like the above helps communities to compare themselves against others. Management of a facility can only succeed if the community feels they got what they deserved in relation to another community or village. The acceptability of the water and sanitation committee as a governing body will only be possible if the people are satisfied that they were treated fairly; that is why the selection must be an open affair.

Experience indicates that where water points have been located by means of undue influence,  
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Classes in maintenance, use and hygiene are run by KWAHO workers for the community.

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*At town meetings — called barazas — the residents make decisions about their water supply.*

management becomes difficult as the beneficiary households have no faith in the selection of the site. In some cases, as few as 10 households may be left to run and operate the affairs of a water point. This investment would not be justified as low cost, and neither would it best serve the population as a whole.

The successful management of a water point is also manifested in the contributions to the operation and maintenance fund, the cleanliness of the pump and its surrounds and the selection and training of voluntary pump caretakers.

### **Operation and maintenance fund**

One of the goals of water projects is to use technologies that are appropriate and affordable. For a technology to be affordable, it must be within the individual or combined purchasing ability of the users. In this project, the cost of a handpump is about 8,000 Kenyan shillings (US\$500). The cost looks low by any international standard, considering it is used on average by 30 households giving an average investment cost of Ksh267 (\$16) per family, a per capita investment of Ksh32 (\$2).

Calculated this way, the cost of the pump looks very affordable to the community but because of the social and economic conditions, it

is not. Scarcity of money, and keen competition for the same money with other activities like education, transport and food, the sudden breakdown of a pump could take time to repair if the communities do not encourage the water users to make regular contributions to a pump maintenance fund — to be spent on spares and repairs.

The issue of money is a very sensitive one, and experience in other collection ventures indicates communities here do not trust the idea of money being held by

someone in their home. As a result most committees have registered themselves as legal self-help groups with the Ministry of Culture and Social Services, and have been able to open bank accounts with communal banks or the post-office savings bank which are easily accessible in the area.

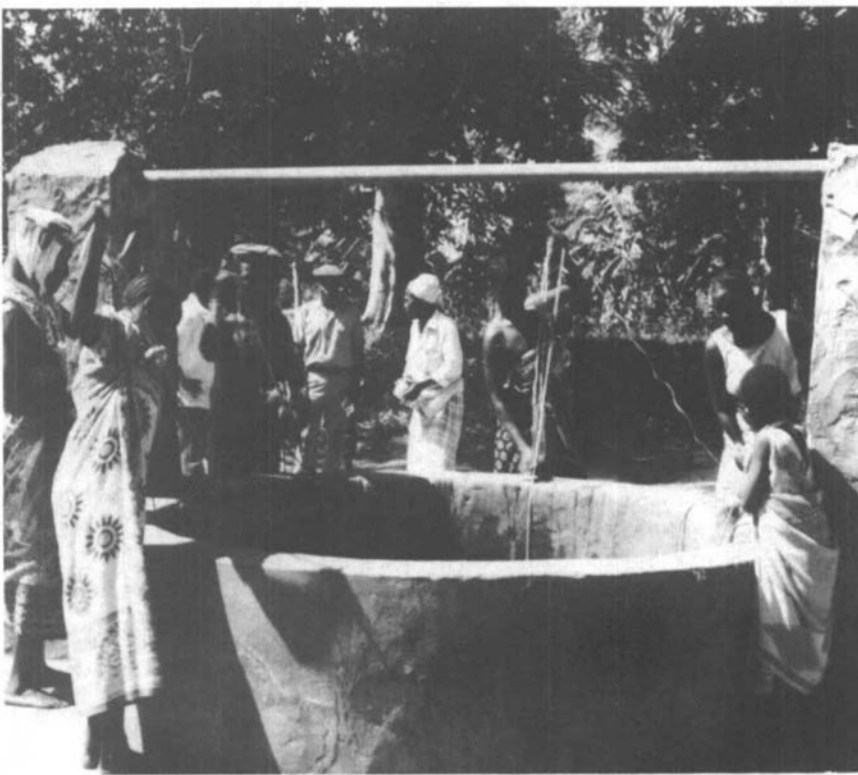
One may wonder why all the trouble to formalize savings systems while individual members may have no bank accounts. There are several reasons. The communities here are not very wealthy and depend mostly on coconuts, cashew nuts, fishing, cassava and rice-growing, all on a very small scale. This means they have to buy most of the food for domestic requirements. In fact the ordinary person does not normally buy a whole packet of maize flour, tea leaves, sugar, salt or whatever, but prefers to buy enough only for that day or meal. It would therefore be very imprudent for communities to wait and collect the money on the spot to buy spares in the event of a breakdown.

This does not mean all the people here are poor. There are some who by local standards are well-off. Exposure to a saving system through an institution can help a person's saving ability, and this leads to greater investment in their own advancement. Surely the aim of a project is not just to provide a service but in providing that service to improve self-reliance and individual motivation to live better lives.

In fact such a saving system must



*A KWAHO-built laundry area with handpump. Facilities like these can save huge amounts of time and effort for village women.*



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*A traditional open well in Kwale district.*

have an impact on the capital reserve in the district's economy, and hence good liquidity for branches in the rural area. There are about 300 water committees in the district who have funds which range from Ksh1,000 (\$63) to Ksh15,000 (\$940). Taking an average of Ksh3,000 — which is a common amount — the 200 committees have a combined investment of Ksh600,000 (\$37,500) in the district. This is a substantial saving by any standard for one district. Since the committee only withdraws the money in the event of a breakdown or to purchase spares for scheduled maintenance, it may be useful for the project and bankers to find a way of lending some of this money to deserving groups for income-generating activities.

### Hygiene and maintenance

Hygiene education is a very important aspect of the water project. Poor habits of letting water collect around the source, transport to the home and storage once there could contaminate otherwise clean water from the pumps. Hygienic practices are encouraged by the KWAHO staff.

The communities for their part have evolved a method of keeping the pump surrounds clean by making duty rosters indicating the days and names of people to keep the place tidy. This is a major

management aspect at the local level. Failure to keep the surrounds clean can encourage mosquito breeding — and malaria is a major killer here.

Initially a total of 24 women were trained in 1985 to take care of 90 pumps. As the project expanded it became necessary to train more caretakers. Now the practice is to select five voluntary trainees per water point, both men and women. The training has been geared towards creating local capability to respond to simple repairs and carry out scheduled maintenance. Scheduled maintenance is the practice of replacing parts that wear out regularly even if the pump is in good shape. This is based on the principle of preventive maintenance.

At the moment 260 trained pump caretakers are carrying out the operation and maintenance work on 80 pumps that have already been handed over to the communities. Training is continuing for the other pumps which are being prepared for handing over to the communities.

The project document says that once a water supply or improved latrine is constructed, a formal commissioning ceremony to mark completion of the facility and handing over to the community will be organized. The purpose of this ceremony is both symbolic and legal: to commemorate the organized community's achievements, as well as to entrust to its


members the responsibilities of ownership of the completed works.

A certificate of ownership is issued by the project to the community. Other enclosures to accompany the certificate are a land agreement between the landowner and the committee; technical, health and community organization information; a list of spare parts needed and their market prices; and a copy of the maintenance card.

The handing over of completed water points is an ongoing activity that follows satisfactory training and community organization activities. The project has installed 252 Afridev handpumps. The community's response to the handed over points has been very encouraging, and now it is possible for KWAHO training and handing over teams to move with speed and precision.

### Co-ordination with ministries

The KWAHO team has worked very closely with the three implementing Ministries of Water Development, Health and Culture and Social Services, to the extent that a visitor to the programme may not notice who works for which agency. A special tribute must be paid to all the project staff for creating an atmosphere of mutual trust and understanding. There have been no major conflicts between professions in the programme, and the technical staff have become accomplished community mobilizers and trainers, while the software services staff have mastered technical aspects of the programme.

Lastly, KWAHO's participation in this programme has clearly shown that this sort of non-governmental organization can be a real partner in the development of Kenya by supplementing the efforts of the central government with smaller community-based initiatives. NGOs are not threats or uninvited intruders to the declared Ministry efforts of achieving the goals of water for the majority of rural people, and health for all by the year 2000. 

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