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WATER AND SANITATION FOR ALL: PARTNERSHIPS AND INNOVATIONS

Community-based O&M challenges

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THE VOLTA RURAL Water Supply and Sanitation Project is a 10 year (two phased) DANIDA supported project in the Volta Region of Ghana. It is jointly implemented by the Community Water and Sanitation Division (CWSD) of Ghana Water and Sewerage Corporation responsible for rural water supply and sanitation and COWI a Danish Engineering Consulting Company.

The project is aimed at raising the standard of living of the rural population of the region through the provision of potable water, improved affordable toilets and hygiene education. The first phase of the project ended in August 1997.

The project has its main focus of facilitating a sustainable community-based operation and maintenance (O&M) regime in line with the government's water and sanitation sector strategy. In order to achieve this, the project since its inception in March 1993 has adopted the partnership approach to facilitate project implementation. It follows that the community structure with the support from the private and public sectors will have to develop mechanisms for O&M.

The writer examines the project's partnership approach and the lessons so far in community participation in the management process.

Community-based O&M

The community-based O&M is an approach in which rural communities assume control and responsibility for the day-to-day running of their water and sanitation facilities. Routine and preventive maintenance is emphasised as contrasted to repair after break down.

The approach is a vehicle through which communities develop the capability to independently manage their facilities. It is geared towards self-reliance, local democracy and equity because it gives community members including women greater opportunity to take part in management decisions. Moreover, it provides an arena for collaboration between community members, Water and Sanitation (WATSAN) committees, NGOs, District Assemblies (DAs), public and private sector actors. A division of labour is therefore established between all partners in the design, implementation and the performance of management functions.

The partnership approach

The project recognises the fact that the best guarantee to obtain accepted and sustained water system is to involve users and other stakeholders early in the project circle. Right from the start, decisions about the type of technology, level of service, number of water points, cost sharing, location, labour services, selection of caretakers, latrine artisans, area mechanics, training of WATSAN committees, caretakers, area mechanics are jointly reached through continuous dialogue between the communities and the appropriate partners. The partnership continues after the completion of a water system, in which the focus of the co-operation is on the O&M of the system. The following are the key partners based on the experiences of the Volta RWSS Project see Figure 1.

Project participation

The project is facilitating the implementation of project activities in line with government's water and sanitation sector strategy. It is facilitating the strengthening of all partners so they could play their roles effectively. Thus its activities are directed towards planning, financial management, institution building, human resources development, monitoring and evaluation.

Technology options

The project places great value on the provision of affordable and maintainable facilities to target communities. Communities are given the chance to select the type of technology, which they can afford, manage, maintain and are appropriate to their environment.

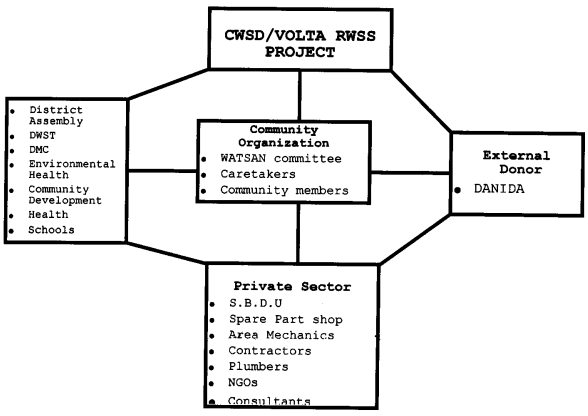


Figure 1. Community in partnership with other key players

Presently, the project provides the following water systems; hand drilled wells, handdug wells and boreholes fitted with handpumps, spring protection, piped gravity systems, electric pumping system, ferrocement rainwater catchment, GWSC pipeline connections and borehole rehabilitation. To standardize the use of hand pumps the project approves the installation of two main hand pumps; modified Indian MK II for deep wells and Nira pumps for shallow wells.

District assembly participation

The central role of the DAs in the project is to support community management as part of government's decentralisation policy. The DAs provide personnel to form the District Water and Sanitation Teams (DWSTs). The teams comprise a technical person, an environmental health officer, and a community development worker at the district level and environmental health assistants who are based in the zonal subdivisions of the districts. The Environmental Assistants are the link between the project and the communities. The DWSTs are responsible for community animation, mobilisation, hygiene education and perform contract management roles at that level. The DAs also establish District Management Committees (DMCs) as sub-committees of the DAs responsible for the effective implementation of water and sanitation activities in the districts. The DMCs monitor and supervise the activities of the district teams and ensure the proper functioning of the water facilities.

Community participation and management

For effective community based O&M regime, some sort of organisation at the community level is important. Communities, which apply for project assistance, are assisted by the DWST to form WATSAN committees. The WATSAN committees are community representative organisations, which see to the O&M of the facilities. Furthermore, the WATSAN committees are involved in the selection of technology options, selection of site for public standposts or pumps, the location of sites for latrines, selection of caretakers and area mechanics, the organisation of hygiene and user education, community meetings, revenue generation and preparation of Facilities Management Plan (FMP).

To ensure a sustained community-based O&M system, a decentralised maintenance system is established. It has three components namely; the WATSAN committee, the area mechanic and the spare part shops.

At the community level, two caretakers per hand pump- a man and a woman- are trained and equipped with tools to carry out routine and preventive maintenance on the facilities.

In addition area mechanics are being trained on zonal basis and equipped with tools to carry out below ground repair services on the pumps.

Any sustainable community based O&M regime is based on the availability of spare parts at affordable prices and accessible to the communities. To ensure this, spare parts shops are to be established in the twelve district capitals in the region. The private sector involvement is paramount in this regard.

To date however, it has not been possible to operationalise this aspect of community-based O&M - establishment of spare parts distribution outlets in the districts. This is for the very simple reason that spare parts are not available in the designated hardware stores in the district capitals over four years of project implementation. This state of affair can be blamed on the inability of the private sector to stand up to the task. Of late, one company has been selected through competitive bidding to supply hand pumps and spare parts.

Women participation and community management

The project recognises the important role of women in O&M. The project emphasizes that at least 50 per cent of WATSAN committee members should be women and at least one of the two caretakers at every waterpoint should be a woman. Women are being encouraged to take management positions in the WATSAN committees, and also offer themselves to be trained as latrine artisans and area mechanics. Various training and communication materials (charts, posters, puppetry materials) have been developed to reverse the stereotype roles of men and women. Experiences so far indicate that women involvement in O&M is improving as a number of them are appointed as caretakers and some of them are taking management positions.

Private sector participation

A sustainable O&M system must strive on a well developed and established private sector which have the capacity to provide capacity building, construction and maintenance services to the communities. In order to achieve this objective in an efficient manner and to address deficiencies in the private sector, the project facilitated the establishment of an autonomous and private Small Business Development Unit (SBDU) in December 1994 to provide support to local contractors, artisans and hardware storekeepers in the following areas of concern: management and technical training, equipment hiring, and hire purchase.

As the project has ended its first phase in August 1997, SBDU has successfully trained 80 contractors in tendering, planning and contract management. In addition, 19 area mechanics have been trained in hand pump maintenance and repair, whilst 86 latrine artisans have been trained in 8 districts in the region. SBDU is involved in the provision hiring services to local contractors and artisans. Equipment on hire include compressors, electric generators, hand drilling equipment etc. Recently, the project through the SBDU has initiated a pilot hire purchase scheme in which different contracting equipment are given to 25

local contractors on hire purchase. The equipment include dumpers, concrete mixers, compressors and water pumps.

Partner Organisations (POs) which are local NGOs are involved in the training of WATSAN committees. The training and human resources development inputs help to prepare the WATSAN committees to manage their facilities. The training is community-based and learner-centred. Participatory methods of training are emphasized as part of the community management approach.

Hygiene education and sanitation

Hygiene and user education is given to the WATSAN committees, caretakers, women groups, community based organisations (CBOs) focusing on hygienic use of facilities, good personal hygiene and environmental sanitation practices. Hygiene education is given to school children through the project's schools health programme to ensure proper use of the facilities and practice of good hygiene behaviour. Participatory methods such as role plays, puppetry shows, story with a gap, three pile sorting card among others are used in communicating hygiene messages to the communities and school children.

Challenges to O&M at the community level

Experiences so far indicate that the majority of the communities are very enthusiastic and responsive, both to the contribution towards the capital cost of facilities, WATSAN training and for hygiene education. However, monitoring visits made by the writer revealed the following experiences with O&M in project communities.

It is noticed that a number of WATSAN committees are performing well, in terms of revenue generation and record keeping. Thus wining support from community members. While this indicate positive development for the O&M system in the region, it is noticed that the enthusiasm of many communities seem to go down once the facilities are in place. It has been observed that a majority of community members find it difficult to contribute towards recurrent cost.

Though details of the experiences in the region vary, the problems are the same. Thus a combination of socio-cultural, economic, and political factors pose challenges to community-based O&M regime. The major challenges include the following:

- *Problem of revenue collection:* The majority of communities have problem contributing towards post construction recurrent cost. Some of the reasons identified are:

  a. Unwillingness to pay because of mistrust based on earlier experiences of embezzlement and misuse of community funds.
  b. Socio-cultural factors- the communities since time immemorial have water as open access and free. The transition from non-payment to payment is a situation they are resisting. It is viewed as an external imposition.
  c. Community members feel the water system belongs to them. They have put in money, effort and time in its construction so there is no need to continue with the contribution after its construction.

- WATSAN committee members and caretakers fear making enemies in the communities should they enforce the bye-laws rigorously.
- *Superstition:* This is also preventing the WATSAN members from carrying out their work satisfactorily. A number of caretakers and WATSAN committee members fear that should they enforce bye-laws to the letter, they will make a lot of enemies and moreover any community member could use spiritual means (juju) to harm them and their children.
- *Insult from community members:* The WATSAN members and caretakers receive insults from community members in the course of their duties. Insults like "get out of my way, since when have you become a `samasama' person" (an environmental health personnel). This is making it difficult for the caretakers and WATSAN committee members to be committed to their tasks. Those members who could not contain the insults resign their positions. This is affecting membership commitment and threaten the long term sustainability of the institution.
- *Conflict with traditional leaders:* A number of WATSAN committees especially the chairpersons are not having the desired support from their chiefs. In a few cases the chiefs feel the WATSAN committee chairpersons are usurping their powers.
- *The free rider problem:* This a major problem in any collective action. In a majority of the communities, only few community members pay for the use of the water and equally a few attend communal labour.
- Unavailability of spare parts- Four years after project implementation, not a single spare part shop has been opened.
- Non-payment of caretakers and WATSAN committee. A number of caretakers and WATSAN committee members feel they should be compensated for the work they are doing.

What can be done?

Even though the project has put in place mechanisms to ensure effective O&M system, it is becoming increasingly clear that there are some teething problems which can have serious implications for the sustainability of the O&M system. Since the majors challenges as outlined are mainly human factors and based on the experiences with the communities, one is tempted to ask: How can the commitment of WATSAN committee members and caretakers be sustained over a long period of time? Can the DAs have the capacity to give all the support needed to sustain the structures being established during the period of the project?

This question becomes important in the face of the financial difficulties facing the DAs in the region. These are critical questions any advocate of community-based O&M will have to consider.

It is because of these issues that the question "what can be done?" is relevant. The challenges identified suggest that the human factor has to be taken seriously in the development of any successful O&M regime at the local level. One can therefore say that community-based O&M is not the management of facilities but the management of human beings.

I will at this stage attempt to suggest some strategies that could be adopted to redress the issues raised.

- Trust building - the trust element in any organisation at the local level increase member's orientation towards the organisation. Corrupt practices create a crisis of confidence and trust and this will lead to community member's alienative behaviour towards the WATSAN committee. The WATSAN committee members need to be transparent in all their dealings and give period feed back to community members on their performance. The extension staff need to support the WATSAN committees so that there will be closer collaboration between them and other community structures.
- Extension staff have to facilitate the choice of committed community members to serve on the WATSAN committees. The voluntary aspect of the work need to be stressed. Furthermore community members will have to be well informed about the community management approach. The problems identified suggest that many of communities do not still understand or do not accept the community management idea.
- Development of a community based monitoring system- This system put the WATSAN committees and other selected community members in the centre of the monitoring process. It is an empowering process where the communities are encouraged to act more autonomously to observe, identify and solve problems.
- All advocates of community-based O&M have to accept that there is the need for commitment and support from government and donor. The private sector should be encouraged and supported to take up the task of the establishment of spare part shops and ensure that the parts are always available and at affordable prices. This cannot be achieved without the commitment of the government in creating the enabling environment, for example the provision of credit facilities with favourable repayment conditions. Of equal importance is that the DAs need to show commitment by giving the needed support to the DWSTs and DMCs to assist the communities.

Conclusion

It is becoming increasingly clear that community-based O&M is registering some successes and structures are being established on sustainable basis. The private sector is showing keen interest and local government structures are more integrated now than at the start of project activities.

However a lot of attention should still be paid to community sensitisation to improve the understanding of the community ownership idea and hygiene education. Support should be given to the private sector to establish spare part shops and to ensure their sustainability. Extension support and continued follow-up through the extension staff should be intensified for some years to ensure sustainability. More importantly, donor support should be continued for a least three years after the completion of projects to ensure that structures that are established are firmly rooted.

While emphasizing the need for a sustainable O&M regime, we must not lose sight of the challenges new ideas face. The transition from open and free access to payment for water, coupled with change in hygiene behaviour are the difficult challenges any O&M system should expect. The human factor is thus an important issue which need serious attention in any attempt to establish a sustainable community-based O&M regime.

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