



Sustainability of community water supply projects in S Africa

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THE FIRST DEMOCRATIC government in South Africa (SA) that came into power in 1994 inherited huge imbalances in terms of access to basic human services such as water and sanitation, housing, land, education and health. Access to such services was based on racial divisions. The black people were the most disadvantaged. In 1994, it was estimated that more than 12 million South Africans lacked access to clean water and 21 million were without hygienic sanitation facilities (DWAF, 1994).

To date, considerable progress has been made in addressing these imbalances. Kader Asmal, the minister of the Department of Water Affairs and Forestry (DWAF) boasts that clean potable water has been provided to about 3 million people in the past 5 years. However, there is growing concern about the sustainability¹ of recently completed projects. Emerging evidence shows that many of the new water projects only continue to function because the government is subsidising project operation and maintenance (O&M) costs. The implications of this are serious. It means that the government will not have money to start new projects to provide water to those who are still waiting.

It is against this background that it is particularly important to explore issues affecting the sustainability of projects so that lessons are learned and shared to influence future programming. The need to investigate sustainability issues is made even more urgent because of the changing institutional environment within which future projects will be implemented and operate. The newly established Water Services Act (Act 108 of 1997) makes the provision and management of existing water supply and sanitation the responsibility of local government. The danger is that local government will inherit unviable projects that will undermine their capacity to address infrastructure backlogs in their areas. These projects will drain the already limited resources of local government and further undermine the capacity of local government to deliver services to those communities who have not benefited yet (Breslin and Netshiswinzhe, 1999).

The Mvula Trust², in partnership with Australian Agency for International Development (Ausaid) has initiated a programme to evaluate recently completed projects for sustainability. The evaluations were focussed on establishing whether projects are viable in terms of cost recovery, local level financial management, O&M, water use and health issues. Areas of weaknesses identified during the evaluation were explored with community members using PHAST (Participatory Hygiene And Sanitation Transformation) to engage people in analysing their own situation

and decide on desired changes. In total 48 projects were evaluated across the country.

This paper presents main lessons from these evaluations with regard to issues that are hindering sustainability of projects. Answers to these problems are not provided, but some initial suggestions based on the findings are made.

Lessons from the field

Communication problems

Communication between the Village Water Committees (VWC), the community and other stakeholders is crucial for a project to succeed, but our evaluations have shown that this communication is poor. The information seems to stay with the VWCs, and does not filter down to the broader community. While the VWCs try to organise mass meetings, this has proven not to be a very effective way of communication as these meetings are often poorly attended. In one community, Malongwe Water project in the Eastern Cape, the evaluation shows that some community members consulted indicated that they only happened to know about the water project in their community when the helicopter came to drop the pipes. And in another, Welgelgen Water Project in the Northern Province, the scheme was linked to a bulk supply and a token system was introduced but community members did not know about it. As a result the community has not been getting water since November 1998. In many other situations, we have found that there is a great confusion with regard to the Mvula Trust's policy of 8 per cent community contribution to capital costs³. This has led to tension and mistrust within the communities, e.g. in Leokaneng Water Project, Northern Province the project came to halt because the community was accusing the VWC of mismanagement of funds when it was actually not true.

When we asked community members about what information they would like to know, there has been surprisingly similar answers within communities and across projects. According to Breslin (1999) the information requested is:

- If water stops flowing, why has this happened and when can the households expect the problem to be resolved?
- How much money is required to pay the bills in a given month?
- How much money was collected to meet these bills?
- What was the money collected used for?

The challenge is to find creative ways in which this information can be passed to people in a simple way, i.e. not

necessarily having to attend a mass meeting. Interestingly, we have found that in some villages they are beginning to develop innovative models such as using tap committees to transmit information from the VWCs to households. People who use one tap usually know each other very well and they interact on a daily basis.

Inadequacy of training programmes

Training and skills development is an important element in ensuring that communities develop capacity to manage projects on their own during and after completion. Despite huge costs of the training offered to communities, these trainings do not appear to be effective in empowering communities to manage the schemes on their own. A classical example of exorbitant costs of training is in Phiring Water Project, Northern Province where the costs of a 5 day training in basic bookkeeping and operation and maintenance stood at R65,000.00 (US \$10,569.10, 12/05/99).

There are two major limitations with the approach to training offered. First, training does not focus on issues of sustainability. People are just trained to do basic bookkeeping (how to keep records of income and expenditure – which in most cases they stills fail to do) and how to do basic maintenance and repair (how to switch on/off the engine), and how to run meetings (chairing and taking minutes). There is no focus on key sustainability issues such as how to collect and set tariffs, how to set a systematic programme of routine maintenance and repair health and hygiene, how to communicate, and promoting community involvement.

The second limitation is that training is focussed on individuals. While the target is usually to train all members of the VWC, specific attention is paid to certain individuals, e.g. the treasurer will be trained on bookkeeping, and one/two people will be trained on O&M. The danger as we have witnessed is that when these individuals who are trained leave the community to pursue other interests, the project goes into disarray.

Levels of service

The Community Water Supply and Sanitation (CWSS) programme in SA provides for what has come to be referred to as Reconstruction and Development (RDP) Standards, i.e. communal stand pipes within 200m walking distance from a household. The results from the evaluations, in which all project were implemented according to the RDP standards, show that the vast majority of communities want or they even wanted yard connections from the beginning. In Phiring Water Project, Northern Province, for example, from the outset there was a strong request for yard connections. However, this was rejected on the basis that it was not within the policy to provide anything else, but communal stand pipes as per RDP standards.

While there is not enough evidence to link the very serious problem of non-payment to poor level of service, community members usually express sentiments such as, “I will not pay for water in the street”. The argument from the

communities is that the communal stand pipes encourage unregulated use of water, and that not only do people who have not paid for water have access to water, but people from neighbouring villages can come and steal their water at night.

It is of interest to note that when explored the issues of level of service community members, participants ended up realising that yard connections will in fact be more expensive to implement and manage. Discussions with community members were facilitated through PHAST tools, e.g. the water ladder was used in this case. The basic questions we explored with communities are what does it take to have yard connection, how much would it costs, how much would the tariffs be, and what will happen to those who cannot afford to pay or do not want to pay (as it is the situation now)? As these issues are explored, it became clear that in fact very few people could afford to pay for yard connections.

In some villages communities have “broken” the policy and have made yard connections. In one village, Mashaut-Thondoni, Northern Province the VWC has disconnected all communal stand pipes and encouraged people to install yard connections. The danger with this is that the scheme was not designed for yard connections and as water consumption increases some households may not receive water. In Mars Water Project, Northern Province the community is starting to feel the pain as a result of people who have made yard connections, i.e. water is no longer available in some sections of the community.

Poor planning in the early stages of the projects also exacerbate this problem. It is clear that what is needed is to spend enough time engaging local people (and not only the committee) on why they want a water project (health and/or income generating), what level of service and type of technology is appropriate to meet their needs, and what will be the roles and responsibilities of different stakeholders during and after project implementation.

Socio-political conflicts in the communities

“The people of Ha-Sinthumule in the Northern Province had every reason to celebrate when a multimillion rand water project was launched eight months ago by Water Affairs Minister Kader Asmal. But very few of the “pay as you-go” water taps are running today – the result of a bitter power struggle between the local tribal authority and the transitional local council” (Sunday World April 25 1999). This is just one of the many cases in which conflicts between local community structures such as VWC, Civic Associations, tribal authority, and the newly established local government has plunged projects into disarray. The conflict become so intense that these structure will mobilise their “constituency or supporters” not to pay for services, with the most common reason being that the government has to provide “free water”. The reasons for such conflicts are complicated and vary from one situation to another. To a large extent, the conflict between traditional authorities, and the newly established local government structures is

because, traditional authorities feel threatened and alienated by the local councils. Rivalries from the past can undermine projects, for example, activists who are now members of local councils sometimes fight against traditional chiefs (who were seen to be in coalition with the apartheid system) over new development resources, like water supply.

In some other situations, the conflict is between the VWC and the local chief. In the past the chiefs used to play a very crucial role in local affairs. Everything had to be done through them, for example, everyone requiring to build a house, start business or a development project had to consult the chief first. Money for community matters were paid at the traditional local council. Now the VWCs are assuming full responsibilities to manage water projects. Conflict usually arises when the chief demands that the tariffs should be paid directly to him/her and not to the VWC.

All these conflicts lead to a situation where management systems breakdown. When this happens, women and children end up returning to distant, unprotected water sources. This problem in a whole also relates to poor planning from the early stages of the project. Proper planning should amongst other things allow for stakeholder analysis, and then decide on the roles and responsibilities of each party involved.

Linking water projects with health and hygiene

The basis of providing safe water and improved sanitation facilities is to bring about improvement in people's quality of life, especially in relation to health. Unfortunately the CWSS programme in SA has emphasised delivery rather than ensuring that these projects are sustainable. There is little evidence that water supply is linked to promoting good health. This is evident through the type of training given to VWCs. In all projects evaluated training focussed mainly on bookkeeping, and O&M (with its limited focus on teaching people how to operate the engine). Little effort (if any) was put into health and hygiene training. In the majority of the projects evaluated we found that water from the households was contaminated. This means that water is not used in a hygienic⁴ manner and as such the desired impact will not be achieved.

It is of great importance that health and hygiene education should be part of any water supply projects. The challenge is about changing the behaviour of people in terms of health practices. How do we convince community members that the improved water sources are better than the traditional ones? PHAST provides a number of tools that can be used to create awareness and provide knowledge on symptoms, treatment and prevention of water and sanitation related diseases. In Tweerivier, Namaqualand the result of PHAST exercise done with the community is a classical case in point of how communities can actually take action to address problems of a contaminated water source. A participatory exercise was done to allow community members to explore on their own the underlying causes

of contaminated water. Through the exercise the residents decided that they work on issues such as improving water storage, regular hand washing, cleaning of the reservoir and safe disposal of faecal matter. A follow-up water quality exercise showed that the residents have intervened effectively to address the problem. Water from the taps and household storage were clean (Breslin, 98).

Monitoring and evaluation

The sector's almost total lack of M&E has proven, to date, to be crippling. Many of the problems identified in these evaluations would have been addressed as they emerged if an effective, outcomes oriented (as opposed to targets based) M&E system was in place. The fact that so many of the identified problems have festered over time only complicate efforts to redress the sustainability issues identified during these evaluations. As it stands now, fixing these problems will be costly and time consuming.

Effective, outcomes-oriented M&E systems are a far cry from the M&E systems currently in use in the sector. Most current systems place an emphasis on monitoring cash flows and events (like did a training happen, or was a time-bound milestones met?). This actually tells the sector very little about the likelihood that the money spent will contribute to a sustainable project. The sector needs to know whether the health education component of the programme was effective, whether "tap committees" can actually fix a tap, or whether the "block committee" is actually collecting enough money to pay for the costs of running the project. If not, proactive actions must be taken to address the problem (Breslin and Netshiswinzhe, 1999).

Conclusion

The CWSS sector in SA, and elsewhere in the developing countries has to come to grips with changes that have occurred in the last decade in which government and service agencies have to change from being a direct provider of services, to be a facilitator of an enabling environment. This implies that we have to do things differently, we have to begin to use approaches that put people at the centre of development and drive the process on their own, or with support from services agencies. It is no longer doing things for people, but helping people to do things for themselves. Instead of emphasising technical knowledge and inputs only, agencies will need to focus more on ways of sharing knowledge, decision making and tasks with communities (IRC, 1991).

The Mvula Trust, with the support from Ausaid, and possible other sources of funding is going to engage in an intensive programme to provide support (social, retraining, technical and infrastructure development) to enhance communities' efforts to promote project sustainability. Lessons have been learnt, and one of them is that we need to actively engage local people themselves in analysing their own situation and decide on desired changes (what are the constraints, how can they be addressed, what will local people contribute and what external support is needed?).

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¹Sustainability is defined as to design, build and managed improved water services in such a way that they continue to function reliably and well, and the funds for keeping them functioning continue to be available (IRC, 1991).

²The Mvula Trust is a leading South African NGO which concentrates on rural water supply and environmental sanitation development.

³According to this policy, communities were required to contribute 8 per cent to capital costs of the project. The community contribution can be made either in cash or through labour, and/or a combination of both.

⁴Hygienic use of water means that drinking water from the improved water system is collected, stored and drawn in a safe manner, without risk of contamination. Also intake areas and water points are kept clean and free from polluting (IRC, 1991).

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