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Madutle village water and sanitation project

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Madutle village has a population of 842 people. Few live through subsistence farming, some are women whose men work in neighboring towns, others are elderly dependent on pensions. The people and their livestock shared water from a single source. The villagers, mostly children, had to walk 1.2 km to fetch water. The water was exposed to pollution creating an unhealthy situation aggravated by poor sanitation. The objective was the provision of easily accessible water and acceptable sanitation. There was a need to overcome the culture of non-payment for services adopted during the apartheid era which attitude is continuing. It was imperative that the community took ownership of the asset, pay for the operation and maintenance of the water system and maintain the VIPs provided.

Background
Poverty is the single greatest burden of the South African people due to the legacy of apartheid. It is not merely the lack of income that determines poverty but also very poor living conditions. The democratic government that displaced the apartheid system under its Reconstruction and Development Programme (RDP) initiated the Consolidated Municipal Infrastructure Programme (CMIP) to provide basic services to people disadvantaged under apartheid. The basic service for water is 25 litres per person per day from standpipes placed at 200-meter radius and, for sanitation, a VIP.

In the North West Province, 64% of the people live in urban informal areas, tribal areas and in villages. Madutle is one such village. The village has a population of 842 people. A few get by through subsistence farming, some are women whose husbands work in neighboring towns, and others are elderly persons depending on a meager pension. Madutle, like all villages in South Africa, is far from the centres of administration.

However, since Madutle is only 40 km from the provincial capital Mafikeng, the community was able to pressurize the Central District Municipality (CDM) to agree to provide easily accessible drinking water. This was achieved through their District Municipal representative, who was a woman. The CDM, like most municipalities in the country, was financially weak. It submitted a Business Plan (BP) on behalf of the village of Madutle to the Provincial Programme Manager (PPM) of CMIP. This BP was approved and an amount of US$27,500 was provided for the provision of two boreholes, a 50 kilolitre elevated reservoir, a diesel pump, the reticulation and the standpipes.

Objectives and strategies
The objective was the provision of basic water services to the villagers deprived of these services under the previous government. There is a tendency for District Municipalities, whose administrative offices are in urban areas, to neglect the development of villages. There is a great need for partnerships between the Municipalities and the villages as the villagers did not have confidence in the Municipalities. Further, the culture of non-payment for services, which was adopted during the apartheid era by the people as a protest, still continues. This had to be addressed so that the villagers would pay for the services and render the project sustainable. This was addressed at workshops during which it was explained to the villagers that, although water is free, the extraction and transport was costly and requires funds. The importance of maintenance and proper operation of the water system was also explained.

Establishing priorities
The objective was the provision of accessible drinking water. However, providing water does not solve the backlog of basic water services but largely depends on the sustainability of the water supply. There was the need to convince the villagers to accept ownership of the new asset. The way forward was to develop a system that would be self-sustainable by cost recovery for the operation and maintenance of the water system. The process was:

1. To engage the villagers and to explain the need for them to pay for the water; and
2. To create a partnership between the Central District Municipality and the villagers.

This was achieved by establishing a Project Steering Committee (PSC) consisting of all stakeholders, with a strong representation from the community of women and youth.
The CDM, on receiving approval for the project, appointed a consultant. The consultant was responsible for the design, project management and other project related matters, as well as making the community aware of all aspects of the project including the benefits.

The consultant, before being able to carry out his investigation in the village, had to follow protocol by arranging a meeting with the Tribal Chief of the area, the tribal elders, and the community. At this meeting, he explained his terms of reference, and the community identified members for the PSC, which had to be constituted without delay. Once this was done, the consultant contacted other stakeholders and identified persons and co-opted them into the PSC. The PSC members were recruited from the following domains:

- Councillors from CDM (1)
- Tribal Authority (1)
- Madutle RDP Committee (3)
- Madutle Water Committee (3)
- Officials from CDM (1)
- Consulting Engineer (1)

Amongst the members were three women, two men and a disabled youth from the community, and the Madutle women ward councillor.

The consultant was from the community that was disadvantaged during apartheid, could speak the local language and knew villager’s attitudes well.

The problems he faced from the outset were:

- The community was made up of two ethnic groups, Tswana and Xhosa, and there was a social split between them.
- The community could not perceive the concept of the water system to be provided.
- Poverty.

The PSC met several times, when the consultant and CDM representatives explained the design concept, the location of the water tower and pump, layout of the reticulation network, as well as the need for maintenance and proper operation of the system. The PSC members from the community went to the community with the information gathered and brought feedback from the community to the PSC gathering.

The PSC was involved in:

- Dealing with all labour issues.
- Identification of local people to be trained.
- Positioning of the standpipes.
- Negotiating and influencing the suppliers, who were reluctant to supply materials because the village was far from centers of activities, to bring materials to site.

Monthly site meetings were held with all the role players. At these meetings the following issues were discussed:

- Physical and financial progress of the project.
- Adherence to CMIP criteria such as employment of women, youth, the disabled and the use of Small, Medium & Micro Enterprises (SMMEs).
- Adherence to project Key Performance Indicators (KPIs).

**Further funds**

Since the project was judged as a best practice in the province, an additional R 2 Million was made available to provide Ventilated Improved Pit (VIP) toilets to the existing households. In addition, a community centre with offices, communal baths and a communal vegetable garden, were provided.

**Ventilated improved pit latrines**

Experience has shown that de-sludging a single pit VIP is difficult and expensive and it becomes the responsibility of the Municipality. In this instance it was decided that the responsibility for the VIP’s maintenance should rest with the household. To achieve this, the VIPs were designed with double pits, when one is full the other would be used. The filled pit is then de-sludged. An NGO, in partnership with the municipality is planning to create entrepreneurship by villagers by assisting them with a sludge pump. A donkey cart will be used to transport the pump and relevant tools. The sludge in the filled toilet pit will be discharged into a pit dug adjacent to the toilet and covered. The household would pay for the service.

During the construction period, meetings were held with the community to inculcate the need for the proper use of the VIPs. Amongst others, villagers were made aware of the importance that the VIP may not be used as a means of disposal for household waste matter, as well as the need for hygiene after using the VIP.

**Community centre**

The building would accommodate at least 200 people. It had four rooms to be used as offices for:

- Water Committee
- RDP Committee
- Women Committee
- Tribal Affairs

It also had two sections, each with six shower compartments, one for women and the other for men. Hot water was provided through solar heating. Each shower had a meter similar to that fixed to the stand pipes. Any member of a household could use the token that is used for the standpipe to have a shower.

**Communal vegetable garden**

The community had an area that was used as a communal garden, but the project had been abandoned due to lack of resources and support. This area was provided with a store.
shed, overhead water tank, eight (8) stand pipes with long hosepipes. Further, the neglected pump was repaired, and the following items were given to the community: Spades, garden forks, watering cans, fertilizer and vegetable seeds.

The garden is cultivated by a group of women volunteers. There is a credit of US$ 653 in the bank. In 2003 no monies were put into the bank due to poor crop of vegetables. Money from sale of vegetables was ploughed back in to the garden. The tribal chief supervises the management of the garden. The community was informed that the government would only provide the initial, once-off assistance and that, thereafter, it would be the community’s responsibility to make it work. The signs are very positive, as the community is taking responsibility of their destiny.

Results achieved

Getting the community involved in the decision making process was no easy task. It must be remembered that, prior to 1994, non-white people were not allowed to make decisions, but decisions were made on their behalf. The result was that people, even though they are now free to decide for themselves, do not have experience in decision-making. This is particularly true of the people from rural areas. Through the establishment of the PSC, the process of decision making as a group was achieved.

The situation before the project was that people and their livestock shared water from a single source pumped from underground by a windmill. The villagers, mostly children, had to walk long distances to fetch water. Affordable drinking water has been brought closer to the community and water for livestock is provided for separately. This has created a healthy environment that has been enhanced by the provision of the VIP’s.

The culture of non-payment has been overcome through the partnership between the community and the Municipality. This can be considered as a milestone as these are people from the rural area with little or no income.

The project also employed 90% local labour, of which 33% were women, 25% youth and a disabled person. The rest were skilled tradesmen employed by the contractor. A youth is employed to take charge of the battery-operated equipment to re-validate the plastic token card given to each household to get water on payment. The money collected pays for his service, the pump operator and diesel for the generator. The collection of the monies and monitoring of equipment is regularly checked by an official of the CDM.

The completed project is community managed. The project has also capacitated women and youth and the community at large to be self-reliant and in a position to start small enterprises.

The community centre has encouraged the villagers to meet regularly to discuss village matters and also entertain themselves. The solar heated shower has enabled them to shower during the wintertime. The communal garden produces cheap fresh vegetables and is available at their doorstep.

Sustainability

The factors that affect sustainability are a lack of understanding of the need for maintenance of the infrastructure, cost of providing the service and last but not least, poverty.

Through the PSC, the villagers were convinced to buy into the project process and take ownership of the asset. The normal practice was to provide standpipes to communities who agreed to pay a nominal amount each month. This was not effective in respect of revenue collection. The community was persuaded to accept the standpipes that were fitted with pre-paid meters.

Transferability

Good, easily accessible drinking water and sanitation, is what all individuals on this planet should have. In providing basic services under CMIP, experience has shown that projects with no or minimal community support did not achieve the desired results. When planning a project it is imperative to get all the role players on board from inception.

Before replicating any other project it is imperative to take note of the physical and cultural environment. The process cannot be transferred en-masse but could be adopted to suit the situation. The success of the project depends on all role players participating right from the start of the project and working toward a common goal.

When bureaucrats deal with simple communities it is very important that explanations are simple. The communities tend to look at problems from a different perspective than the Managers.

After the project is completed it is of utmost importance that it be monitored for at least two years. Our observations are that projects that have not been monitored after completion have failed due to some small shortcoming.

Reference

Statistic South Africa, Census 2001

Notes

1. Village details gathered during the project management period

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