

KWALE WATER AND SANITATION PROJECT



BOMANI WATER POINT

A CASE STUDY OF A HANDED OVER HANDPUMP

TO DETERMINE ITS SUCCESS, FAILURES AND

LESSONS LEARNED:

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OCTOBER 1990

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INTRODUCTION

Sometimes Case Study writers seem to overlook the fact that we learn from what went "wrong" just as well as from what went "right". This case study has several issues that went both right and wrong directions. It has therefore success and failure stories.

The Project has by this time drilled three hundred and twenty four (324) boreholes and equipped them with handpumps. Out of this 126 (one hundred and twenty six) have been handed over to the community to operate and maintain themselves. This case is therefore one of the projects handed over handpumps. This case is trying to highlight the progress of the handed over water points. The water point under the case was handed over in early 1989 in a colourful ceremony organised by the beneficiaries and the Project. A total of 33 water points were handed over in this ceremony. It was therefore selected to serve as a model for the other similar handed over handpumps.

METHOD USED FOR COLLECTING DATA:

The information was collected using the following tools:-

1. Questionnaire
2. Personal interviews (individual interviews)
3. Group discussion. This small meeting was organised for the committee members who gave their views and suggestions.
4. Records from the Office i.e. depth of the borehole, date drilled and installed.
5. Discussion with the people (women) who collect operation and maintenance funds.
6. Discussion with the local resource persons i.e. village chairman and his Assistant, an KANU leaders.
7. Observations on people drawing water.

PURPOSE OF THE CASE

The Project has so far handed over 126 handpumps to be managed by community themselves. It has been a general bias within the project that handed over hand-pumps are well managed, functioning as intended and utilised properly. However, the Project does not have enough data to justify this.

This case is therefore trying to measure and weigh the progress and performance of handed over water points. The Project will use this case as a model to Focus its achievements and bottlenecks and other water and Sanitation related issues.

TERMS OF REFERENCE:

The following are the terms of reference for this Case Study.

1. Find out the organization of committee members and community (beneficiaries).
2. Identify any success and its contribution factors of the water point.
3. Find out the problems affecting both the community and committee.
4. What are the factors that have contributed to these problems?
5. Number of people being served by the water point.
6. Has the availability of water improved the living standard of the people?
7. What are the income generating activities done by the people.
8. What system is being used to raise operation and maintenance funds.
9. Any future plans by both committee and community.
10. What are the common water related diseases affecting the community.
11. Assess the efficiency of caretakers trained on operation and maintenance of handpumps.

THE AREA WHERE A CASE STUDY IS SITUATED*

The handpump under case study is situated at Bomani village in Msambweni location. It is a highly populated village. It is situated along Mombasa - Lunga - Lunga road about a kilometre from the junction to Msambweni Police Station. It is inhabited by mostly the Digo people. Currently it has 500 households which makes 4000 people taking an average of 8 people per household.

It is a market centre for Vingujini Sub-location. It is a busy village especially in the morning and evenings. There are very many small scale businesses like:-

- * Selling dried fish.
- * Selling "maandazi."
- * Selling cooked cassava and porridge.
- * Selling coconuts and bananas etc.

Being a meeting centre, clusters of people can be seen at lunch time and evening playing in-door games. Small groups of people can be seen chatting or sitting idle.

There are a number of premises e.g.

- * Shops
- * Hotels and "Mikahawa"
- * Butcheries.
- * Kiosks - (Mini - shops)

There is a good communication network like:-

- * Post Office (presence of telephone lines).
- * Good tarmac road.

The people of Bomani are also farmers and grow crops like.

- * Coconuts.
- * Cashew nuts
- * Mangoes
- * Cassava (for home use)
- * Rice for home use.
- * Fishing.

However, people do not take advantage of the rain in the area. Crops that can be found here are permanent crops which do not need constant rainfall. There are a lot of drop outs from school and young boys and girls can not use the education because they did not finish. The divorce rate is very high which makes many children leave school early because they do not have "strong parents" who could advise them on education issues.

There are three types of water sources. These are:-

- * piped water (although not reliable)
- * borehole (handpumps)
- * river.

The Mkurumji river is about half a kilometre from the village. It flows to the Indian Ocean. Although it is seasonal it does not dry up easily unless there is serious draught.

COMMON DISEASES IN THE VILLAGE:

People were asked to list down names of diseases that are common in the area and rank them according to first and last.

After analysing the given information, the following list follows:-

- * Diarrhoea
- * Scabies
- * Dysentery
- * Anamia cases & Kwashiakor.
- * Vomiting
- * Stomacheache
- * Hookworms
- * Ringworms
- * Fever and coughing.

It is strange that the people did not mention bilhazia as a problem. According to hospital records, bilhazia is among the most serious problems of the people. It could be that people do not take it as serious because they are so used to it to the point that they do not see it as a problem.

SANITATION:

The village is very poor in terms of sanitary facilities. Many people have no latrines. For a total of 41 households visited, 27 out of them (65.8%) had no latrines while the remaining 14 (34.2%) had ordinary latrines. Considering the income of the people, it seems really expensive for somebody to put up a latrine.

Some of the reasons given for having no latrine are:-

- Lack of awareness.
- bush is plenty
- can not afford.
- using neighbours latrine.
- loose soil - pits collapse easily when dug.

Considering the low percentage of people without latrines it is likely that the common diseases mentioned above could be true. Lack of these sanitary facilities can cause the spread of diseases in the village.

THE CASE

Kwale Water and Sanitation Project (KWSP) is a community based one concerned with constructing water and Sanitary facilities. Its aim is to give or improve the quality of water and promote hygiene education. This case study is about one handpump that was constructed by the project with assistance from the local people. It is the policy of the Project to make sure that beneficiaries are able to operate and maintain water facilities at a village level without relying on the Project resources. Before handing over of these facilities, the project organises on - site training on operation and maintenance. The community are given the chance of selecting their own volunteers to be trained to take care of the facilities. This training is done free of charge. There after organization and management training starts. This kind of training, trains committee members on management skills, simple book-keeping and record keeping They are also trained on how to deal with management problems like defaulters.

When this kind of training is done and trainees are qualified, then handing over process starts. All these activities were done to Bomani water point. After that the borehole is expected to have opened bank account before handing over.

It is a true fact that many people in the village prefer using water from the borehole because it is clean, cheap and safe compared to river water. However there are few households who prefer going to tapped water to avoid the long queue at the borehole. Over 60% of the people interviewed said they prefer washing their clothes at the river. The reason is that river water is good for washing clothes. About 90% of the informants interviewed admitted the following:-

- * that both boreholes and piped water is likely to be free of pathogenic bacteria.
- * generally, it can be used without further treatment.
- * it is often most practical and economical to obtain and distribute water from the borehole.
- * Water from the borehole is not salty, it is clean and safe.
- * Borehole water is cheaper than piped water.

ORGANIZATION OF COMMITTEES:

The committee of this water point is not stable currently. There are a total of 8 committee members. Five men and three women. The committee is faced with the following problems:-

- * No meeting is being held to discuss any issues. Some members do not know how much money has been collected for operation and maintenance
- * No financial record is kept by the secretary

When the chairman of the committee felt sick, the committee decided to select a chairman without consulting the community. There is an outcry from the community because they do not know how the current chairman was elected. The current chairman was formerly a chairman of a bursary fund in the village.

He misused the money collected by the community and now the community members are not happy with his management. A meeting of the water committee was held to discuss problems affecting the community and the committees. In the discussion, it was seen that the mode of payment and handling the operation and maintenance money was different. The chairman is the one who received money after it had been collected from the water point.

The collection is usually done every Friday Every household is expected to pay Kshs.1/= per week However some households do not pay the money for more than two weeks. About 35-40 households are expected to pay money per week This makes a total collection of Kshs. 35-40/= per week. Currently, only 70 households have registered themselves with the water point.

The Treasurer is only told to record how much money has been collected by the chairman. This indicates that the distribution of roles and discharging of duties are not performed as expected. The Training section in the project which is one of KWAHO departments, had earlier organised Training on Management for the committee members. The Training covered the following topics.

- * To review past experiences and roles of water committees in Managing their water facilities.
- * To train chairman, secretaries and treasurers in leadership, simple record keeping procedures and also general organization and management of the daily activities related to their water points

- * To improve on the co-ordination amongst leaders in their respective areas and hence establish a proper chain of problem solving.

Three Officials from Bomani water point attended this workshop. Now the interesting case in point is that while these Officials were trained on management issues still they have not benefited from it.

There is no co-ordination among the committee, nobody knows how much money has been collected for operation and maintenance. While this particular water point was handed over to the community, the running of this particular water point is not smooth. At the time of writing this case, the committee is faced with the following problems:-

- * Vandalism
- * Misappropriation of funds.
- * Missing to contribute by community members.
- * Committee do not meet and discuss management and water related issues.

CONTRIBUTION ON OPERATION AND MAINTENANCE:

A total of 70 households were registered to be using this particular water point. However, only about 35-40 households pay operation and maintenance funds every week. The committee and the community agreed every household to pay Kshs.1/= per week. This has proved to be difficult for some of the households. To an average one household is using 6 pails per day, per week a household will use 42 pails. Taking every household pays 1/= per week, the cost of a pail is therefore $(1/42)$ 0.02 cents. This is considerably very cheap compared to those using piped water where each pail is sold at 30 cents

The table below shows how much money is spent per week, month and per annum when different sources of water are used by different consumers. The comparison here is between piped water and borehole water.

	Kshs. Per day	Per Week	PER MONTH	PER ANNUM
Piped water	1.92	13.50	54.00	648.00
Borehole (handpump) water	0.12	0.90	3 60	43.20

Table 1. Cost of water by using two different sources per annum.

Apart from people benefiting from clean and safe water, they have also benefited by paying less money on water bills. People are now paying Kshs. 43.20 per annum on borehole water compared to Kshs. 648.00/= on piped water. From this case we also learn that the project has contributed much to uplift the standard of living of the people in the area. Although there is this benefit some communities are still using river water due to long queue at the borehole.

CREATION OF SELF-EMPLOYMENT:

Some people in Bomani village have benefited from the borehole. The borehole has created employment for some people. In this village, there are three water vendors. The water vendors distribute (sells) water to those people who have no time to go to the borehole. Others feel that it takes long to go and queue at the borehole for more than half an hour only to get one pail of water. The water vendors also contribute operation and maintenance funds to the committee.

Every water vendor pays Kshs.31/= per week. The cart carries 10 jericans each sold at Kshs.1/20 when delivered at the homestead. In average, a water vendor get Kshs.50/= per day. The table below shows how much money is used by the water vendor to buy water and how much he gets after selling water.

	Per Day	Per Week	Per Month	Per annum
Money used to buy water	0.42	3.00	12.00	144.00
Money got after selling water	50.00	350.00	1400.00	16,800.00

When the borehole does not breakdown for the whole month and his cart does not breakdown, he gets an average of Kshs. 1400.00 per month and Kshs. 16,800.00 per annum respectively.

This is one of the successes of the project. It has assisted people to help themselves. The standard of living of the community has therefore been lifted.

ACHIEVEMENT OF THE PROJECT*

1. People have benefited from getting clean and safe water.
2. The cost of water has been reduced
3. People have benefited by self-employment as a result, standard of living is lifted.
4. People are now using the time saved to concentrate more on small scale business.
5. People have learned new skills on operation and maintenance. As a result they do not have to pay anything for repairs because the caretakers are local people and volunteers.
6. The distance to the water source has been shortened.

SUGGESTIONS / RECOMMENDATIONS:

1. The organization and management of this water point is not good at the moment. Committee do not meet and discuss issues related to water and sanitation. Contribution on operation and maintenance is not good at the moment. There seemed to be a problem of who is supposed to collect operation and maintenance funds for the water point. It is therefore recommended that a new committee be formed to manage the water point. The committee should be formed with assistance from the project resources, notably the training and mobilization team.
2. The mode of collecting operation and maintenance is not professional at the moment. The money is currently being given to chairman after collection from the water point. The chairman and his committee do not inform the community (beneficiaries) on how much money has been spent and to review the mode of payment. The project community section be involved to act as a catalyst to organise this meeting.
3. The project should continue making a follow-up to individual water points even after handing over. The follow-up should review the activeness of committees, mode of payment of operation and maintenance funds and its expenditure.

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