



DEPARTMENT OF WATER AFFAIRS AND FORESTRY

**MAKHOSINI COMMUNITY BASED
WATER SERVICES PROVIDER CASE
STUDY**

**Zululand Regional Council
KwaZulu Natal**

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Prepared for the Department of Water Affairs and Forestry by

**NETWORK
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PREFACE

Network Community Development Services (NETWORK CDS) was contracted by the Department of Water Affairs and Forestry to examine Community-Based Water Services Provider institutional arrangements within a number of case studies. The purpose of the study is to:

- Document and analyse the institutional arrangements for water services provision between Water Services Authorities and selected Community-Based Water Services Providers
- Assess the performance of the different CBO WSP models
- Identify the strengths and weaknesses of the different case study examples
- Identify success factors
- Make recommendations concerning CBO WSP models
- Prepare guidelines for Water Services Authorities concerning CBO WSP models

This case was researched and written up by Davison Herbert Batidzirai and Jean de la Harpe. The research component was facilitated by the Zululand Regional Council who provided background information and introduced the researchers to the community-based water service provider in Makhosini.

ACKNOWLEDGEMENTS

The researchers would like to thank staff at the Zululand Regional Council (RC) especially Bheki Mthembu, Technical Officer for the Zululand RC who accompanied the researchers to the Makhosini Water Services Provider (WSP) office, bulk water source and provided invaluable input on project operations. The inputs of Nkosingiphile Magwaza who is the Makhosini WSP Secretary are duly acknowledged. This report is based on the interviews conducted separately with Bheki Mthembu and Nkosingiphile Magwaza.

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1 Key Institutional Lessons from this Case Study

- ◆ Committed staff, good management and organisation are pre-requisites for effective and efficient management of a water scheme.
- ◆ A stable and compact community provides an appropriate platform for the community to interact well with the committee.
- ◆ Proper infrastructure from the planning phase through to implementation ensures that maintenance is kept to a minimum during operation and maintenance phase.
- ◆ Good communication between the committee and the community as well as with the WSA is essential for success.
- ◆ A responsible and accountable committee reduces mistrust and eliminates conflicts.
- ◆ If there are no alternative sources of water, and the WSP maintains strict conditions in terms of non-payment and disconnections, cost recovery is more effective.
- ◆ A community empowerment and community management approach with good communication ensures support from the community towards making their water services sustainable.
- ◆ A CBO WSP with an efficient and skilled overall manager, good administrative, financial and cost recovery systems, a functioning WSP Committee, the necessary equipment and tools, a recognised WSP office and a community that understands their role as responsible paying customers, is able to deliver reliable and sustainable water services.
- ◆ Trust between the community and the WSP Committee is essential to the credibility of CBO WSPs.
- ◆ Dealing with defaulters firmly is critical for project sustainability. If there are no mechanisms to cut-off defaulters, cost recovery is threatened.
- ◆ A CBO WSP structure where a secretary serves on both the operations/administrative side and serves on the 'governance' committee provides for a well-informed committee and smooth operations.
- ◆ Good financial records and financial reporting on a monthly basis to the WSP Committee ensures transparency and reduces the risk of fraud.

2 Introduction

Institutional arrangements play an important and integral part towards effective and efficient management and operation of water schemes in low income communities, in particular, rural areas where the ability to pay is often compromised. This study of the Makhosini CBO WSP in the Zululand Regional Council municipal area is one in a series of cases that seek to identify different institutional arrangements operating at grassroots level with a view of learning from factors that shape efficient, effective, reliable, affordable and sustainable water services. The water scheme is run by the Makhosini Water Committee, a community-based WSP, with the Zululand Regional Council acting as the Water Service Authority and providing limited operations and maintenance support.

3 Makhosini

The Makhosini water project is situated some 80km South East of Vryheid and 30 km West of Ulundi. The area is close to a main tarred road that leads to Ulundi.

The population size of the area is estimated at 450 households (*interview with Nkosingiphile Magwaza and Bheki Mthembu*) which gives an approximate population size of 2700. The houses in the area are relatively dense, making connection much easier than in widely spaced households. No current statistics on the population size is available from the Zululand Regional Council. An estimated 80 - 85% of the population are unemployed, 60% of them depending on state pension grants. In business terms, the market size and the low-income levels of the community make it difficult to run the project successfully. However in the case of Makhosini WSP, this is not a big obstacle, since there are good relations between the WSP and the community, where the community recognises the value of the water services that are provided.

There is no bulk water supplier that sells water to the project. The scheme is essentially a stand-alone project drawing water from the Mpembeni river basin. Water is pumped 10 metres from below the river basin to a sand filtration reservoir. Pipes run from the filtration tank to the community where households are connected individually. Meters are installed at the connected households, whereby the household is responsible for paying their bills based on meter readings. The scheme supplies water to both the Makhosini and Esigodiphola communities. The Makhosini project is different from the Esigodiphola project in that the latter provides water through standpipes. This case study focusses on water services to the Makhosini Community.

The scheme was funded under RDP 1 using DWAF funds. According to Nkosingiphile, the project was constructed around 1997/1998 and commissioned in May 1998. Zululand Regional Council used an engineering consultant, Ernst Cloete Engineering for the Institutional and Social Development (ISD) component of the project.

Connected households pay a tariff of R5.00 per kilolitre of water used. According to the Secretary, this amount is reasonable and affordable to the community. Households do not receive bills since the community is compact. Instead, water meter readers go around reading meters and keep a record of the readings which is utilised by the Makhosini WSP Secretary to calculate the amount owed by each household for water services. The onus is upon each household to go to the office to enquire about its bill and make the required payment. Because there is overall coherence within the community where everyone knows each other, the system has worked fairly well.

The Zululand Regional Council identified Makhosini Water Project as a successful community-based WSP model.

4 Methodology

The methodology used in this research comprised interviews with Bheki Mthembu, representing Zululand Regional Council in their capacity as Implementing Agent, WSA and SSA and interviews with Nkosingiphile Magwaza, the Secretary and a committee member of the Makhosini WSP. Similar questions were put to the Zululand RC and the WSP. The questions focused on:

- the roles and functions of the Zululand RC (as WSA, SSA and IA), in particular the nature of support that the RC provides to Makhosini WSP
- the role, functions and structure of the Makhosini CBO WSP, how it was established, and how it fulfils its WSP responsibilities
- the relationship between the WSA and the WSP
- cost recovery
- sustainability issues (operations, maintenance, communication, health awareness, access to support, etc.)

(See questionnaire attached).

The researchers had an informal interview with the WSP at their office and thus were able to look at the financial records, resources, equipment, systems, etc. of the Makhosini WSP. The WSA was also interviewed informally in transit to and from the project as well as at the Zululand Regional Council offices.

The focus of this case study is on the Water Services Provider institutional arrangements towards ensuring sustainable water services to the Makhosini community. This study does not provide technical details of the infrastructure or details of the processes to implement the scheme as a project. Whilst cost recovery and financial management were issues included in the study, it did not conduct a detailed examination into the finances of the WSP.

4.1 Limitations

The study would have liked to carry out a documentary analysis before embarking on a field trip. This did not materialise, as there were no documents available on the

case. Due to time and budgetary constraints, it was also not possible to interview households to get their perception of the water service they are receiving. Interviews with the community could have enriched the study from a community perspective. Non payment of bills *may* be a result of some dissatisfaction related to the tariff being viewed as being too high, however non-payment does not appear to be a problem in this case.

A further limitation was that the research team did not get a representative number from the Makhosini WSP Committee. The views expressed in this report emanate from the secretary of the Makhosini WSP only. Thus the case study did not benefit from the views of the chairperson, treasurer, maintenance officer and other members.

The Technical Officer from the Zululand Regional Council, Bheki Mthembu is relatively new in his capacity having joined the Regional Council only seven months ago. Although he has familiarised himself with the project, more information could have been extracted if he had been involved in the project at its inception.

The interviews did not go into detail concerning the overall approach and methodology that was used to establish the community-based WSP nor did it inspect all the facilities at household level to determine their condition, efficiency and effectiveness. However in spite of these limitations, the rapid appraisal of the scheme can be said to be a true reflection of the services Makhosini WSP are providing and can be corroborated with other studies that might have been done or will be done in future on the project.

The interview with the Makhosini Water Project Secretary was conducted in the presence of Bheki Mthembu. His presence might have compromised the views of the respondent, for example on issues of support from the Zululand Regional Council as the WSA and Support Services Agent, and on the relationship between Makhosini WSP and the WSA.

5 Overall Assessment

The researchers are of the view that the community-based Makhosini WSP with the support of the Zululand Regional Council as SSA, is an example of a successful CBO WSP institutional arrangement delivering sustainable, reliable, efficient, effective and affordable water services. However, it should be noted that the success of Makhosini WSP is less related to the support services being received from Zululand RC than on the effective and efficient functioning of Makhosini WSP and its good relationship with the community. It could be argued that despite minimal support from the Zululand RC (as both WSA and SSA), the Makhosini WSP is functioning extremely well.

From the payment levels, it appears that the Makhosini WSP is providing a cost effective and efficient service that would have been far more costly if an alternative institutional arrangement had been put in place to service the Makhosini community. Even in urban areas where people can afford and are willing to pay for services, there are no cases of 100% payment for water services. An institutional arrangement

involving an outside agency as the WSP to provide water services to the community is unlikely to have received the support that the Makhosini CBO WSP has received. The community has been willing to participate as responsible customers, since they see themselves as 'owning the project'. The high level of trust between Makhosini WSP and the community has meant that there is no need to send bills to the households - people come freely to the Makhosini WSP office to make their payments.

Although the Zululand Regional Council has not provided the much needed support, primarily due to staff shortages, the cohesion and commitment exhibited by the community and committee has ensured that operations and services continue smoothly. The project secretary is dynamic and full of energy, providing a driving force to the WSP Committee. She is working on a full time basis and is always available to customers. Having an easily accessible and equipped office as well as a well-equipped workshop that is centrally located gives motivation to the WSP Committee to carry out its mandate. Regular meetings and consultations with the community and Zululand RC are held on a monthly bases whereby issues concerning water supply are discussed. Constant communication has thus played a role in ensuring success.

6 Decisions concerning WSP arrangements

The institutional arrangement of a CBO WSP fulfilling the WSP role for the Makhosini community was decided during project implementation, where the Zululand RC and the community jointly took this decision.

The Makhosini WSP Secretary explained that project steering committee (PSC) that was put in place during project planning and implementation was the body that operated the water services prior to the establishment of the Makhosini WSP. The community participated through the PSC in choosing the Makhosini WSP Committee. The Makhosini WSP is thus a creation or a product of the Makhosini community.

6.1 Why a Community-based WSP model for Makhosini?

The RDP's vision of providing communities with potable water has been complemented by the GEAR policy, which emphasised cost reduction and the involvement of partners in development. There has been recognition that local government does not always have the capacity to fulfil all the functions required to deliver services to their constituencies. Thus local governments have explored other options for services delivery, such as entering into municipal service partnerships. Zululand Regional Council does not have the capacity or the resources to make a presence in every rural community, including Makhosini. Delegation of the water services provision responsibilities to the lowest most appropriate level was seen as the most effective way of delivering services, hence the creation of a community based WSP. It would be impossible for Zululand RC to offer cost effective, efficient, affordable and sustainable water services given the Regional Council's financial constraints, and given the distance involved in managing the water services. The scheme was also designed to empower local people through democratic participation

and local management of their own development activities. Another pertinent factor to the choice of a CBO WSP, was the creation of employment for local community members. Whilst employment creation has been limited, it is the start of local economic development, designed to bring income to community members. Many water schemes have failed because of lack of community ownership and participation, however the Makhosini WSP is an example of successful community empowerment.

7 Institutional Arrangements

Zululand Regional Council is a category C Municipality and thus is the Water Services Authority for the Makhosini area. Makhosini WSP is the reticulation Water Services Provider to consumers. There is no Bulk Water Service Provider, since the water is pumped directly from the river. There is no tangible link between sanitation and water services in terms of institutional arrangements. Each household is responsible for its own wastewater disposal as well as sanitation facilities, which are mainly VIPs in the area.

According to Bheki Mthembu, the Zululand Regional Council gives 'Operation and Maintenance' support **only**. It does not provide ISD support.

The institutional arrangements for provision of water services to the Makhosini community can be illustrated as follows:

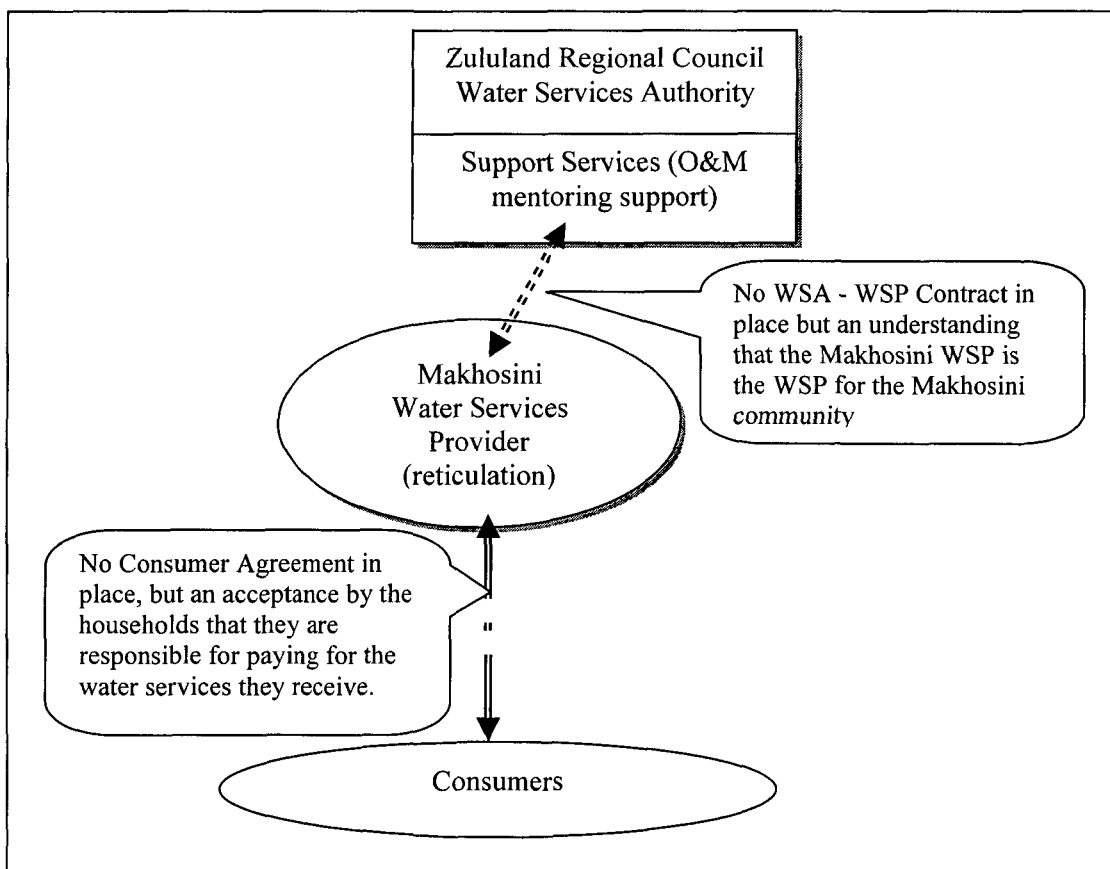


Figure1: Diagrammatic representation of the water services provision institutional arrangements for Makhosini community

8 Roles and Responsibilities of Zululand Regional Council

8.1 Zululand Regional Council as WSA

Zululand RC gives training to its technical staff, who in turn provide operations and maintenance mentoring support to the Makhosini WSP.

It is not clear what roles and responsibilities the Zululand RC fulfils as WSA for the Makhosini community, however since the Regional Council also provides support services, this mechanism allows for monitoring of the Makhosini WSP and the water services it provides. The Regional Council has also endorsed the tariff that is levied for water services to the Makhosini community. No funds (subsidies or other) flow from the Zululand RC as WSA to the Makhosini WSP. Likewise, no payments are made by the Makhosini WSP to the Zululand RC as WSA. The roles and responsibilities between Zululand RC and Makhosini WSP could be further clarified once a formal WSA-WSP contract is established.

8.2 Zululand RC as Support Services Agent (SSA)

Support from the Zululand RC is provided through visits by a technical officer to the Makhosini WSP. In addition regular communication between the Zululand RC and the Makhosini WSP facilitates problem solving and operations and maintenance mentoring.

The following support services are provided by the Zululand Regional Council to the Makhosini WSP.

8.2.1 Technical Support

Bheki Mthembu is the Technical Officer responsible for about seven water schemes and other projects in the Zululand Regional Council municipal area. This support occurs when there is a major breakdown. According to Bheki, he is primarily responsible for work related to operation and maintenance of the water system. Since Bheki is still new, he does not have much information on the extent of technical support that should be provided. Staff shortages have also meant that very little technical support has been provided in the past. In fact, in Bheki's opinion, the Makhosini WSP should be credited for operating efficiently and effectively without much support from the Zululand Regional Council. The Makhosini WSP does not pay a fee to the Zululand Regional Council for technical support services in terms of Bheki Mthembu's time. Since major maintenance expenses have not occurred in the past, it is unclear whether the Makhosini WSP or the Zululand RC would pay for such expenses.

8.2.2 Financial Support

There is no evidence to show that there is financial monitoring support to the Makhosini WSP. Although there are monthly meetings, these do not necessarily cover financial issues since there have been no major problems with finances. Bheki

Mthembu however mentioned that the Regional Council provides support in terms of communication with the community concerning the tariff.

8.2.3 Institutional and Social Development (ISD) support

Zululand Regional Council is supposed to give ISD support to the Makhosini WSP on an ongoing basis, but because of problems such as staff shortages, budgetary constraints and the distance factor this has not happened. Elements of ISD support such as communication procedures, customer management, administrative issues, health and hygiene awareness, dealing with disputes are discussed in meetings between the Zululand RC and the Makhosini WSP that are held from time to time. However most of the support appears to come when there are problems instead of the Zululand RC empowering the WSP to prevent problems.

9 Role and Responsibilities of the Makhosini Water Services Provider

Makhosini Water Services Provider has a constitution written in isiZulu to enable everyone in the committee to understand the clauses of the constitution. An ISD Trainer from Open Classroom Training (OCT) Consultants helped the Committee with the preparation of the constitution.

Since there is no contract in place between Makhosini WSP and Zululand RC as the WSA, the responsibilities of Makhosini WSP are not recorded in writing, however Makhosini WSP is responsible for the following functions:

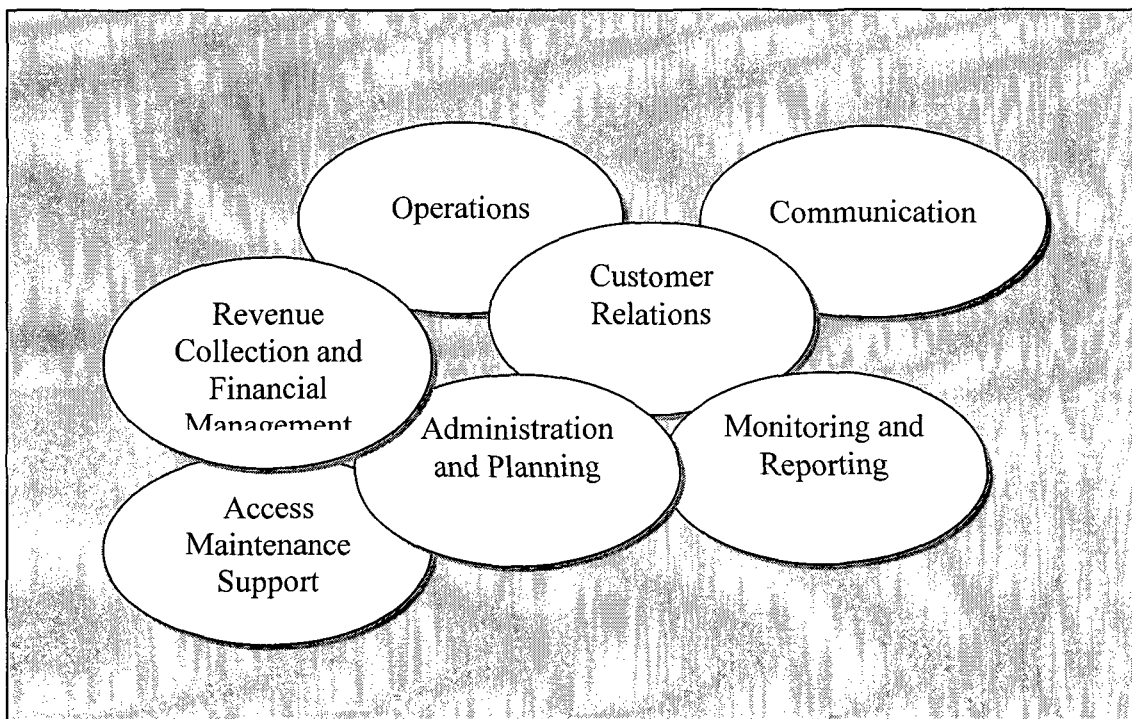


Figure 2: Functions of the Makhosini WSP

9.1 Operations and Maintenance of the Assets

Makhosini WSP has two maintenance officers that are responsible for operations and maintenance. This is however limited to minor maintenance including switching on and off of the main pump station near the river basin and preventative maintenance of the network. They ensure that the system is in working order at all the times. The WSP has a well-equipped workshop where equipment is stored. The Secretary is responsible for the upkeep of the assets that are situated next to her office. The installation and maintenance of household pipes is also a responsibility of maintenance officers. Technical support is accessed through the Technical Officer of the Zululand Regional Council.

Since the scheme is a stand-alone operation, Makhosini does not buy water from a Bulk Water Services Provider.. This water is extracted from 10 metres below the Mphembeni river basin and pumped into a reservoir nearby. The cost to Makhosini is for electricity for pumping water to the reservoir. Bheki Mthembu noted that water below the surface is clean and thus does not require treatment.

9.2 Billing, Revenue Collection and Financial Management

The WSP is responsible for monthly meter readings of connected households and for maintaining accurate records of each household at the WSP office. Maintenance officers perform the meter-reading function.

The Secretary is responsible for revenue collection, maintaining books of accounts, issuing receipts and making payments for electricity, salaries, tools, equipment, spare parts and office supplies. Makhosini WSP has a bank account with First National Bank, Melmoth branch, about 35 km from Makhosini. The WSP Committee maintains a safe at the office for keeping money. Once the amount is big enough, the Secretary takes the money to the bank in Melmoth using public transport such as taxis.

9.3 Customer Management

The WSP Office is in effect a customer service point. Customers have direct access to the Makhosini WSP by visiting the office or through meetings that happen from time to time between the community and the WSP. Customer management is facilitated by the fact that the WSP Committee is representative of the community.. The Secretary indicated that although the relationship between the community and the WSP is good, the WSP does not always get a positive response from the community on various issues.

9.4 Reporting

The reporting mechanism is neither clear nor stipulated on paper. However there are monthly meetings which take place between Makhosini WSP and Zululand RC where various issues such as overall operation of the scheme, customer relations, the quality of water supplied and other specific problems experienced by the community are

discussed. There are no written reports presented to the WSA since there is no contractual obligation between Makhosini WSP and the Zululand RC. Zululand RC is supposed to ensure that there is good relationship between the two.

The secretary organises meetings once every month for the WSP Committee. The WSP also organises an annual meeting with the community providing a platform for reporting, for pooling ideas together and for raising various issues. Meetings are also called upon if there are immediate problems that warrant the attention of the WSP Committee or the community.

10 Structure of Makhosini WSP

The community at a meeting selects members of the Makhosini WSP Committee. The committee is a replica of the political model operating in the community. The structure exhibits a two-tier structure with a 'governance' committee that is *representative of the community*, and officials who are responsible for fulfilling the WSP functions. The committee appoints officials who are directly accountable to the committee. The secretary has a dual function: she serves both in the committee and as an official. Below is a diagrammatic representation of the Makhosini WSP structure:

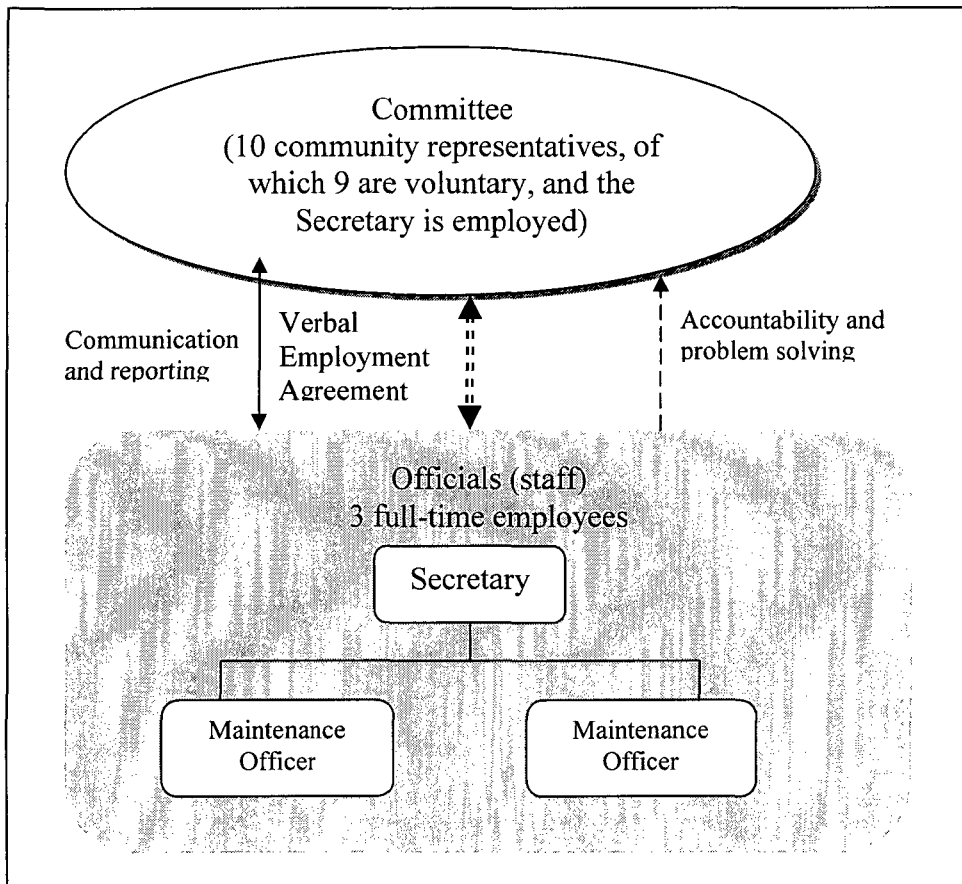


Figure 3: Structure of the Makhosini CBO WSP

The community selected the WSP Committee members at a mass meeting. The Committee members appointed the officials to carry out the water services functions. The committee is a voluntary association and thus is not paid for its services. It meets on a monthly basis whereby it reviews the work of the officials and deals with any problems raised by the officials. It also meets with the community as and when required. An annual meeting is held irrespective of whether there are problems or not. The involvement of the Induna is very important in this community which still puts great value on traditional structures. The participation of the Induna who represents the Chief, and a Councillor ensures legitimacy for the Makhosini WSP within the community and in terms of its dealings with outside organisations. The Committee takes the overall decisions of the Makhosini WSP.

10.2 The Officials

The Makhosini WSP Committee employs three full time staff, namely a Secretary, and two maintenance officers/ meter readers. All three have been orientated to their respective tasks although they require refresher courses from time to time. None of the staff have job descriptions. The Committee determines the salaries of the staff.

The secretary/clerk is the centre pin of the Makhosini WSP, as she serves on both the committee and is a full-time employee. She acts as a manager, directing resources where required as well as managing the maintenance officers. She is responsible for monitoring, customer care, providing progress and financial reports to the Committee, and dealing with queries or problems. She is responsible for all payments and purchases as well as conducting financial transactions with the bank. She is also responsible for revenue collection, issuing of receipts to paying customers, basic bookkeeping and fulfilling secretarial functions..

The office has no phone and therefore the Secretary uses her personal cell phone for communication with the Zululand RC and to access support. She claims the cost of the WSP related calls from Makhosini WSP. The Secretary is happy with her work but feels that the salary of R400.00 per month is very little.

The maintenance officers/meter readers are responsible for the operation and maintenance function. They received technical training (basic plumbing course) to fulfil these functions, during the earlier phases of the project. They are responsible for:

- reading meters and providing this information to the Secretary
- installing new pipes and meters for new customers
- reporting any technical problems to the Secretary and fixing the problems (unless the problem requires major repairs or maintenance beyond their capacity)
- switching the pump engine on and off each day

Any problems with the pipes are addressed within one day, where in most instances problems are attended to on the same day. The maintenance officers earn R300.00 per month.

11 Makhosini WSP

11.1 Official Office

The funds that were provided by DWAF covered the building of an office as well as a workshop attached to the office. The Makhosini WSP office and workshop is situated in a fenced-off area that is conveniently situated within the community. The office consists of an administrative / payment office as well as a meeting room. There are two flush toilets within the fenced in area.

There are no telephones in the office and no accessible public phone, thus the reliance on the Secretary's private cell phone. The Makhosini WSP relies on public transport to visit the Zululand Regional Council and to access the bank and other required supplies.

The workshop is well equipped for a small community and the stock is arranged in an orderly fashion. It was not clear whether the Makhosini WSP keeps a stock and asset register for items that are in the workshop.

11.2 Customer Relations and Communication Mechanisms

Communication channels are very open in the community since the area is small and the community know each other well. The Zululand Regional Council is able to contact the Secretary at any time through her cell phone.

Ad hoc meetings are held from time to time between the community and the WSP Committee where complaints, problems, issues and recommendations are made either way. The office has an open door policy and customers can easily access it if they have any problems. The community can make appointments through the Secretary if they want to meet the Makhosini WSP Chairperson.

The meter readers also act as information gatherers by collecting information from customers as they do their job. This function is not formalised however, and should be viewed as part of the customer management process.

An annual general meeting is held between the WSP Committee and the community to report on progress and to address other issues. If the magnitude of a problem is outside the capacity of the WSP to solve, the issue is referred to the Zululand Regional Council for assistance.

Since there are no shops or other amenities within the community, the Makhosini WSP office serves as a central communication point for the community.

11.3 Staff Procurement

The WSP Committee selected the officials to work full time on the project. It is not clear whether there was a wide selection process. Those selected were trained in preparation for their respective duties.

11.4 Relationship with Zululand RC as Support Services Agent

There is a good working relationship between the Makhosini WSP and the Zululand RC, although more contact is required. There are meetings with the Council, however visits by the Zululand Regional Council to the Makhosini WSP have been infrequent. Sometimes when community members do not want to pay the tariff, the Makhosini WSP Committee approaches the Zululand RC for help where they are assisted by the technical officer. The technical officer also checks to see if the training received by the WSP Committee has sufficiently capacitated the Committee.

11.5 Financial Efficiency and Accountability

The Secretary maintains all the accounting books, which consist of the following records:

- ♣ Cash book
- ♣ Meter reading book
- ♣ Receipt book
- ♣ Deposit slips
- ♣ Purchases book

These books are sufficient in terms of keeping track of the finances and making financial reports. The Secretary keeps records of all cash and cheque payments. The overall management of the financial systems is good where the records are kept up to date.. The bank balance is healthy, with a current surplus of approximately R36 000. Each month the Secretary gives a financial report to the committee.

11.5.1 Revenue Collection

The revenue collection methodology relies on customers coming into the office to find out the amount that they owe based on meter-readings. The Secretary monitors payments and in the case where customers are in arrears, she makes verbal requests for payment to the relevant households. Verbal requests are followed-up by written notices and in the case of continued non-payment, the relevant households are disconnected.

The meter readers have a record for each household where households are identified by the family name and the water meter number. There is currently no mechanism to check the accuracy of the meter readers' records. The Secretary uses the meter reading records to prepare a record of consumption and the amount owed.

The following entries are recorded in the Secretary's record book for each household:

Ward Name.....
Household name.....
Water meter No.....
Date issuedYear.....

Month Reading	Date	Meter Reading	Consumption	Tariff	Amount Due	Remarks

Figure 4: Detail of the household records of consumption and amount due

11.5.2 Payment of Accounts

The only monthly bills payable by the Makhosini WSP are for electricity, salaries for three staff members and repairs. Payments are made by cash or through a cheque that is issued by the bank. The Secretary noted that the Makhosini WSP is up to date with all its payments. Payments are usually made on time around the 22nd/23rd of each month.

There are no bulk charges since the project generates its own bulk supply. The electricity charges for the pump station amount to approximately R1 700.00 per month.

12 Cost Recovery

Since the tariff of R5.00 per kilolitre is affordable (according to the Secretary and the Technical Officer) consumers are able to pay their monthly water bills. The current surplus of approximately R36 000 is a good indicator of sufficient cost recovery. Whilst income and expenditure varies from month to month, approximately R3600.00 to R7000.00 is generated in revenue every month.

An inspection of the revenue book, indicated that approximately 70% of the households are regularly paying their accounts.

The system is working well because there is a fear of disconnection. Those without house water connections get water from boreholes but these are far away.

12.1 Dealing with Water Services Problems

12.1.1 Non-payment and illegal connections

Since disconnection is the final outcome of continued non-payment for services, non-payment is not a major problem for the Makhosini WSP, although approximately 30% of households are not making regular payments for their services.

Illegal connections are not a problem, most likely due to the close cohesion within the community.

13 Risk

13.1 Free Water Policy

The primary risk to the Zululand Regional Council as WSA and Makhosini WSP is the potential consequences of a free water policy. Makhosini WSP is dependent upon collection of tariffs for its survival. The average consumption per household is between 2-9 kilolitres per month. Should the first 6 kilolitres be provided 'for free' to the majority of households (where 60-70% of the households are supported by pensioners and where currently 80-85% of the population of Makhosini are unemployed) there will be a dramatic decrease in Makhosini WSP's monthly income. Even if Zululand RC had sufficient funds to subsidise water services for the Makhosini community, the Regional Council currently does not have mechanisms in place towards transferring equitable share or any subsidies to the Makhosini WSP. The absence of banking services in close proximity to the Makhosini WSP further complicates the task of disseminating resources to the local level.

The 'free water' statements have already had an impact on the community whereby households are questioning why they have to continue paying for water services in light of the public statements made by the President and Minister of Water Affairs and Forestry. Whilst the Makhosini WSP has attempted to address this problem through indicating that payment is still required for the 'services' offered (operations, maintenance and management of the scheme) the future impact a free water policy is a potential risk to all stakeholders concerned (WSA, WSP and the community).

It is also anticipated by the Zululand RC and the Makhosini WSP that water consumption will increase with a free water policy and that community members will not conserve water. This will result in increased costs related to consumption and increased grey water.

13.2 Risks for Zululand RC as WSA

13.2.1 Lack of Contract with the Makhosini WSP

The Zululand RC as WSA and SSA does not carry most of the risks associated with water services for the Makhosini community, since the risks are primarily covered by the Makhosini WSP. However, should the Makhosini WSP not be able to sustain the services they are currently delivering, the overall responsibility for water services to the community still lies with the Zululand Regional Council.

The fact that there is no contract between the Zululand Regional Council and Makhosini WSP is also a risk for the WSA. Until such contract is put in place, whereby Makhosini takes contractual responsibility for the provision of water services, the Zululand Regional Council is 'de-facto' the Water Services Provider with a mere verbal understanding that Makhosini WSP fulfils the necessary day to day water services provision functions.

It is clearly within Zululand RC's interests that Makhosini WSP is able to effectively and efficiently fulfil the Water Services Provider functions as a CBO WSP for the Makhosini community, particularly since the Zululand RC does not itself have the capacity or resources to provide affordable and cost efficient services to the community. In the event that the Makhosini WSP ceases to exist, the Zululand RC would have to directly employ the necessary staff to operate, maintain and manage Makhosini water services. This is likely to be costly and is also likely to result in a lower level of community ownership and responsibility for the scheme. In addition, the Zululand RC would probably have to pay higher salaries to the local staff than what they are currently receiving which would also have an impact on the financial sustainability of the water services.

13.3 Risks for Makhosini Water Services Provider

13.3.1 Revenue management

The few number of people connected to the system poses a risk in that turnover is low and costs are escalating. This might affect the cash-flow position of the Makhosini WSP in the future. In addition, disconnections due to non-payment will also reduce income and thus the financial sustainability of the Makhosini WSP.

Whilst the current system of revenue collection (whereby customers do not receive bills but come into the office to find out how much they owe based on meter readings) is working relatively well, this may not always be the case. The system allows for lengthy delays between payments such that the Makhosini WSP is not able to fully control their cash flow. The Makhosini WSP may need to consider a more formal billing system, particular once they are formally contracted by the Zululand RC as the WSP for the Makhosini community.

Although the project has a safe to keep money in its office, transportation of funds to the bank is a weakness since there isn't proper security in place to ensure the safety of money in transit.

The lack of a coherent plan with regards to the utilization of the surplus in the bank is also a potential risk to the Makhosini WSP since there are no guidelines as to what the surplus may be used for. Whilst this is not a problem under the management of the current Secretary, it may become a problem in future. It is important that there is clarity as to how surpluses may be utilised and that surpluses are treated as 'retained income' for future maintenance costs.

13.3.2 Staff Salaries

The staff are not satisfied with the salaries they are currently receiving. This is a potential risk since the staff have been trained and may seek employment elsewhere, however the high unemployment rate currently mitigates against this. In particular the Makhosini WSP is dependent upon the skills, expertise, experience and leadership of the Secretary. The Makhosini WSP Committee needs to ensure that there are incentives for the Secretary to remain in the job, and one such incentive could be a salary increase from her current very low salary of R400.00 per month.

13.4 Consumer risks

13.4.1 Financial sustainability

The key risk faced by consumers is the financial sustainability of the Makhosini WSP. Since consumers are dependent upon Makhosini WSP for their water services, it is in their interests that Makhosini WSP remains financially viable and sustainable. Thus any threats to Makhosini WSP's ability to raise revenue, such as the free water policy, non-payment, disconnections, or utilisation of alternative sources of water, will ultimately affect the consumers. It is important that the community understands the implications of these potential threats on their future water services.

14 Success Factors

The following factors contributed to the success of the Makhosini WSP:

✓ **Operations and Maintenance Mentoring Support from Zululand RC**

Through a Technical Support Officer employed by the Zululand RC, contact visits are made to the Makhosini WSP where mentoring support is provided.

✓ **Trained staff in the WSP**

On-site training facilitated the building of skills required for the overall operation, maintenance and management of the water services.

✓ Good secretary/financial person

A committed, proactive and experienced secretary who knows the various systems and procedures required for the overall management of water services has ensured that an efficient, effective and reliable services is delivered.

✓ Good accountability and accessibility

Monthly meetings are held between the WSP and the WSA. An annual meeting with the community as well as an open door policy adopted by the WSP Committee makes them easily accessible. The residents can easily access the WSP with complaints, problems, etc.

✓ Household connections

Household connections where each household has paid for the connection, is a strong indicator for demand for water services. Household connections with individual meters also ensure that consumers 'pay for what they use'. The relatively high level of cost recovery can be attributed to the fact that the level of service meets the community's needs and that there is a mechanism for discontinuing the service when there is non-payment

✓ Representative WSP Committee.

The WSP Committee plays a key role in fulfilling an overall governance function for the Makhosini WSP, whereby the Committee addresses communication issues and any problems within the community. The committee is locally driven and is full of energy.

✓ Coherent relatively small community

Since the community is relatively small, and 'everyone knows everyone else' there is an overall 'community commitment' to the success of the water services, where 'spoilors' can be easily identified. The community plays a role as responsible customers.

✓ WSP Office and Workshop

The WSP Office and its workshop are symbols of an established credible organisation with authority to charge rates for the services it delivers. The office is sufficiently equipped and is strategically situated with easy access for the community as a whole.

✓ Community ownership and responsibility

The Makhosini WSP is seen as a structure that is collectively owned by the community, rather than being a government body. Thus there is a greater sense of responsibility within the community for the effective functioning of the Makhosini WSP and the services it delivers.

✓ Committed maintenance officers

The maintenance officers check for faults and attend to these on the same day, ensuring a reliable service

✓ Use of disconnection to those who default

The strategy of disconnection serves as an incentive for payment for water services. The lack of convenient alternative sources of water is also a deterrent in terms of non-payment

✓ Trust and good communication

The community trusts the Makhosini WSP and has good communication mechanisms with both the staff and the WSP Committee.

15 Threats

There are no major threats that can impact severely on the project in the short to medium term. However the following can be noted:

- The water engine is powered by electricity. In the event of a power failure, there is no backup in the form of diesel power. However this option can prove expensive and is not a priority.
- The scheme supplies water to another community. The water source is the same but if there are differences in tariffs this can affect payments and impact on community relations.
- Staff salaries are perceived by the staff as being too low.. This has a negative impact on the morale of staff in the long run. As the bank balance accumulates the staff are increasingly feeling that they are not being adequately rewarded for the tasks they undertake.
- Continued high rates of unemployment could affect the ability of the community to pay. In this regard water services provision should be part of a wider poverty alleviation programme whereby strategies are found to promote local economic development.
- There is a dependence upon pensions to pay for water services. Pensions are already stretched in terms of covering other priorities such as school fees, groceries and medical care.
- Conflicts could develop over the surplus amount in the bank whereby consumers may view the surplus as an indication that their tariff is too high, whilst staff view the surplus as a result of low salaries. If this issue is not addressed it could cause divisions within the Committee. The WSP Committee must ensure that the

community understands the need to retain surpluses for future maintenance, particularly as the scheme gets older and maintenance expenses increase.

16 Recommendations

It is recommended that the Zululand RC as WSA and the Makhosini WSP enter into a written water services agreement that clearly defines the responsibilities and obligations on each party. This is particularly important in terms of stipulating the support services that the Zululand Regional Council will provide and the related costs.

Similarly job descriptions for WSP staff should be provided with duties and conditions of employment clearly spelt out and agreed to by all parties. The Regional Council should also ensure that there is ongoing training and skills development for the staff, which can form part of the incentives for staff in view of their low salaries.

The Zululand Regional Council should play a greater role in monitoring the finances of Makhosini WSP and should provide support to establishing financial systems that are easier to cross-reference in terms of receipts and deposits.

Sanitation did not featured prominently in the implementation of the Makhosini project. The Zululand Regional Council should consider a sanitation promotion, health and hygiene programme towards addressing the sanitation requirements and health of the Makhosini community, linking with other sectoral departments and NGOs in the process, to ensure maximum development benefits.

16.1 Makhosini WSP as a replicable model

The Makhosini Water Services Provider is currently providing efficient, reliable and sustainable water services. Indicators such as the surplus funds, good payment rate, reliable water supply and competent staff, point to efficient and effective delivery of water services. However to gain a full understanding of the success factors, it is important to also examine the context within which the Makhosini WSP operates: there is no conflict in the community, good relations exist between the community and the WSP Committee, the community is small and cohesive, there is close proximity to the main tarred access routes, there are no convenient alternative sources of water, and the community is currently able to afford the tariff. These factors have played a key role in Makhosini WSP's overall success. Replicability of this CBO WSP model whereby there is limited operations and maintenance support from the WSA as the Support Services Agent is only likely within a similar context to that of the Makhosini community.

17 CONCLUSION

Utilising an approach where a community based WSP fulfils the water services provision functions promotes a sense of ownership and responsibility within the community. With the right incentives and support, and an appropriate policy

environment, community based WSPs can provide sustainable water services. This type of institutional arrangement has an important role to play in an environment where local authorities do not have sufficient resources and capacity to manage services in the more remote areas within their area of jurisdiction. Success of community based WSPs is dependent on the calibre of the people involved within the WSP as well as on a co-operative community. The Makhosini WSP is a good example of a 'bottom-up' approach to establishing institutional arrangements for water services within rural areas.