



*Supporting Water and Sanitation Development*

# **Partnerships for Sustainability**

## **The Mvula Trust Experience**

**By Martin Rall**

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## 1. Background

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### 1.1 Country Context

South Africa left its shameful past behind, and became a democracy, in 1994. The legacy of our past includes over half of our rural population of 20 million people (who make up 50% of the total population) not having adequate access (25 litres/person/day within 200m) to water, and a higher proportion not having decent sanitation. It is estimated (another legacy of the past is poor statistics) that the level of unemployment in rural areas is over 60%.

Rural poverty is a reality in South Africa, although the country ranks as the 26<sup>th</sup> most wealthy in the world, with an average per capita GDP of US\$ 1,250 per year. South Africa has 40% of all the telephones installed in Africa, and consumes over 50% of all the electricity generated in the continent, ranking as the 16<sup>th</sup> in the world in terms of energy consumption. Over 50% of all homes in the country have been electrified. The annual central government budget for rural water supply and sanitation infrastructure development exceeds US\$ 100m.

The problem, as in all developing countries, is that South Africa's wealth is very unevenly distributed. The wealthiest 20% of the population (overwhelmingly white) receive 65% of all household income, while the poorest 20% (all black, and mostly rural) receive only 3%. The poorest 50% receive only 11%. South Africa consists of a poor rural "Third World" alongside, and largely marginalised by, a relatively highly developed "First World". In the latter, former "white" areas, the private sector is highly developed, including private consulting firms offering professional services of relevance to rural development. This also includes a number of NGOs which offer similar services. In terms of numbers, for example, there are over 2,000 registered civil engineers in private practice in South Africa.

In 1994, shortly after taking office, the new government set up the Community Water Supply and Sanitation (CWSS) division in the Department (Ministry) of Water Affairs and Forestry, and gave rural water supply high priority and political backing. A White Paper (policy document forming the basis for new legislation) was published later in the year. It outlined a number of progressive policies, including a commitment to demand responsiveness, community involvement and empowerment, gender sensitivity, respect for the environment, etc. However, the pressure to deliver services as soon as possible led to traditional civil engineering project implementation approaches becoming dominant: instead of being demand driven, the programme was "business as usual" for the construction industry. Over the intervening five years, however, much has changed for the better, although the approach is still essentially supply driven. Some seven million people have benefited from the CWSS programme, about half of whom did not have access to clean water before.

In this environment of a supply driven approach, which now dominates the sector, aspects of Mvula's approach have come under increasing pressure. However, evaluations have shown that the demand responsive approach and other elements of the Mvula model, are far more sustainable. The model has been refined, but the basic philosophy has not changed. In fact,

a number of elements of the model, piloted by Mvula, have been adopted by government, and Mvula has made a considerable impact on the sector, particularly with regard to raising the profile and importance of social intermediation and treating “beneficiary” households as consumers with rights, not as passive beneficiaries.

In 1996 South Africa adopted a new constitution which, amongst many other new features, provides for fundamental changes in the roles and responsibilities of the different spheres of government. Central, provincial and municipal government are no longer hierarchically dependent tiers, but autonomous *spheres* of government, with clearly defined competencies, but legally obliged to work together in a cooperative and supportive way. Municipal government is now responsible (with assistance from province and national) for providing basic services to all citizens, and for promoting integrated and people centered development. In practice, however, few rural councils have capacity as yet to take on these responsibilities in full, and DWAF is still taking the lead in funding and managing the implementation of rural water and sanitation services. The challenge for Mvula is now to develop good working relationships with rural municipal governments, so that what the organisation has learned can impact on the way services are delivered, to enhance sustainability, for the benefit of the rural poor.

The institutional environment in which Mvula operates is generally favourable, at national level. Most government departments, of which DWAF is one, are supportive of NGOs as partners in the delivery of services, and Mvula implements about 10% of DWAF’s work, through a special agreement. DWAF has had legislation passed which creates an enabling environment for rural community water supply. The National Water Act has abolished private ownership of water, including ground water, and protects the right of access of communities to water for domestic use. The Water Services Act, which provides a new legal framework for the provision of water to human settlements, makes it possible for community based organisations to be the legally recognised managers, or providers, of retail water services, through agreements with local government.

The environment in which Mvula operates at local level is not as favourable, however. The new rural local government structures, the District and Local Councils, are generally not well disposed towards NGOs, including Mvula, and see no formal role for communities in the delivery and management of their own water and sanitation services. Their approach is supply driven and their understanding of rural development and sustainability very poor, in most cases. Were Mvula to implement projects with funding from local government, it would not be able to apply its own model.

## **1.2 The Mvula Trust**

The Mvula Trust is an indigenous, South African, water and sanitation sector NGO, set up in 1993 as a short term project, to meet the specific challenges of the sector during the transition to democracy. Mvula started with an initial fund of R100m (US\$20m), provided by the European Union and the South African government. In 1996, after a positive external evaluation of the organisation, the Board of Trustees decided to change Mvula into a permanent institution.

In 1995 Mvula and the Department (Ministry) of Water Affairs and Forestry (DWAF) signed a cooperation agreement, in terms of which DWAF would provide funds for Mvula to implement projects in accordance with its particular model, and Mvula would collaborate with DWAF in policy development, and other tasks. DWAF is still Mvula’s main source of funding (and is represented on the Board of Trustees), although considerable diversification has occurred

over the past two years. Other funders include the European Union, Australian Aid, Irish Aid, the Provincial Government of the Eastern Cape and many others. Mvula's annual budget varies between R60m and R80m (US\$ 10-13m).

When Mvula was set up, just prior to the new government taking office, there was no government rural water supply or sanitation policy or programme. Rural community services had been the responsibility of the former "homeland/bantustan" territories. Mvula started by developing a set of policies and project rules, based on experience and current thinking elsewhere in the world, centered around the principles of "demand responsiveness", or the "bottom up" approach, in which community management of all phases of the project cycle was maximised. This model, and subsequent changes made to it, are discussed below.

Currently Mvula's project work is more or less evenly distributed between water supply projects, sanitation projects and projects involving piloting new approaches, developing policy, training and capacity building and advocacy work. The organisation no longer has access to core funds, and therefore operates on the same basis as a commercial consulting firm, charging for its services to implement projects on behalf of funders, or to do policy work, particularly for government, on commission.

Mvula has developed a good reputation as an organisation which understands the demand responsive and community management approaches, and has achieved considerable success in implementing sustainable projects. Recent sustainability evaluations indicate that Mvula has achieved a success rate which far surpasses that of any other agency in South Africa. All water projects consist of reticulated supplies with public standpipe water points, as well as some yard connections. The approach to technology is to keep the cost of O&M (and thus of water) as low as possible.

### **1.3 The Mvula approach**

Since its establishment, Mvula has approached its mission with a two-pronged strategy. On the one hand, Mvula acts as a project implementation agency, to assist poor rural South Africans to gain sustainable access to water and sanitation services. At the same time, Mvula is a learning and policy development organisation, striving to be as innovative as possible, learning from field experience and using this experience and knowledge to contribute to the development of improved approaches and policies in the sector. This includes working closely with, and supporting all spheres of government.

As explained earlier, the Mvula model of water project implementation is based on good practice elsewhere in the world, centered around the demand responsive approach and community management, adapted to the particular conditions in South Africa. The key objective is for communities to take control of the development process, acting in effect as village level local government structures and accessing the necessary resources themselves, with support from Mvula.

The assumption is that the market economy of South Africa is sufficiently developed for communities, if adequately empowered and assisted, to deal with materials and services providers as any normal client would, and that this will enhance the chances of the services which are developed to be more sustainable. This assumption is based, in turn, on the belief that remote, rural communities cannot be treated in the same way as urban communities, whose services can be provided and maintained by municipal governments in a sustainable way, without individuals having to become directly involved.

While Mvula's model takes maximum advantage of a developed market economy to provide water services and to enhance community capacity building and sustainability, this does not mean that the approach treats water as a commodity. Mvula believes that all citizens, whether they can afford to pay the full cost of water services which are provided for them, or not, have a right to enough water for healthy living, and that South Africa has the resources to ensure this. Provided that subsidies are applied in a sustainable and developmentally sound way, they are recommended to ensure that the poorest households also benefit.

Over the past seven years a number of changes have been made to the model, as a result of the lessons learnt from daily experience and from evaluations and studies carried out in 1996 and 1998. This paper seeks to explain the changes, as well as to analyse the strengths and weaknesses of the model and Mvula's implementation of it. While a broadly similar approach is taken in the implementation of household sanitation programmes, this paper will focus on the water project implementation model, where the greatest challenges lie in the quest for sustainability.

## **2. The Mvula Model**

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The three key components of the model are the project cycle, the stakeholders and their roles and responsibilities, and the contractual arrangements. They are described briefly in the sections which follow, in terms of the current model. The elements which have been changed are highlighted, and they are summarised in Appendix 1.

The design of the original model was based on certain assumptions about the specific conditions which pertain in South Africa, namely:

- Availability of sufficient technical and social intermediation services from the private sector, in terms of both quantity and quality.
- Easy access by most communities to private sector materials and spare parts suppliers.
- Availability of private sector drilling and construction contractors.
- Well developed banking system.
- Well developed telecommunications system.
- Although no sustainable support institution existed to assist communities to manage their services, it was not anticipated that this would be a problem, as communities would be able to manage their schemes without outside support.
- Rural communities could afford reticulated water supply schemes.
- Government would be willing to allow a demand responsive programme to operate alongside government programmes run along different lines.
- The advantages of the Mvula model would persuade government to adopt a similar approach, within a few years.

Not all of these assumptions turned out to be entirely valid, and this becomes clear when the problems which arose in implementing the model, are analysed. An assessment of the assumptions is made at the end of the next chapter.

### **2.1 The Project Cycle**

The project cycle is divided, both conceptually and in terms of practical, contractual arrangements, into five phases, as follows:

**a) Project Identification and Approval Phase:**

- application from community, via representative body (usually a water committee),
- feasibility study at risk by consultant, contacted by community (only for purposes of securing funding),
- social, institutional and technical appraisal by Mvula,
- approval and accessing of funding (mainly from DWAF),
- issuing funding contract between Mvula and Water Committee for Planning Phase.

The above sequence of events varies considerably from province to province. In some areas the project selection process is completely supply driven by local government, and Mvula cannot even appraise a project proposal before starting implementation. This phase can take anything up to two years, or more.

**b) Planning Phase:**

- Participatory planning down to household level, including decision making on:
  - who will be the legal Water Services Provider in terms of the Act,
  - level of service to be provided,
  - technology choice,
  - roles and responsibilities of all role players, and contractual arrangements, particularly private sector in relation to Water Committee and Mvula,
  - amount of future water tariff,
  - Reserve Fund amount and contributions schedule.
- Technical design.
- Election/confirmation of committee to manage construction.
- Preparation and approval of Project Planning Report.

This phase is usually managed directly by Mvula, and the committee does not manage the funds yet. The phase is intended to take at least six months.

**c) Construction Phase:**

- Managed by Water Committee, with assistance and training from private sector consultants, and facilitation from Mvula. Usually technical consultant handles project management, gradually giving more responsibility to Committee.
- Some tasks of consultants (technical, social facilitation and training) may be carried out through appointment by Mvula, most through contract with Committee.
- Only specialised construction tasks, e.g. borehole drilling, reservoir construction, electrical installations, contracted out to private firms. Labour managed by Committee.
- Committee handles project finances through bank account on which they are sole signatories, and into which Mvula deposits funds, mostly electronically, according to the imprest system.
- Continued funding dependent on community meeting its targets in collecting cash towards the Reserve Fund (minimum US\$ 1 700, maximum US\$ 5 000).

The duration of this phase depends on the scope of the project; most Mvula projects are for communities of between 1,000 and 5,000 people. Construction can take between six months and two years.

**d) Completion Phase:**

- Starts when scheme starts supplying water and tariffs have to be collected.
- Committee opens O&M bank account (Reserve Fund in separate account).

- Contract with Committee ends and Mvula appoints consultant directly to complete final tasks and wind up accounts.
- O&M training and mentorship continue.
- Completion Certificate produced.
- Project Opening ceremony held.

This phase is intended to take about three months.

#### e) **O&M Mentorship and Transfer Phase:**

- Negotiations between Committee and local government for Committee to be appointed as legal Water Services Provider (WSP).
- Water Services Agreement signed, specifying role and responsibilities, including local government support to WSP.
- Transfer Audit carried out by local government to ensure scheme is running properly.
- Scheme officially transferred to local government.
- Mvula provides further mentorship to both WSP and local government, until one year after the start of this phase.
- Farewell ceremony. No further Mvula involvement, unless appointed by local government as outsourced support agent to WSP.

The project now ends between 12 and 18 months after the physical infrastructure has been completed

## 2.2 Stakeholders

Figure 1 in Appendix 2 shows the different stakeholders and their relationships. The main stakeholders and their main functions are:

- **Households**, and women members in particular - making decisions (see above), providing (paid) labour during construction, making contributions to the Reserve Fund, exercising of rights as paying consumers, paying agreed tariffs. Mvula strives to ensure that consumers themselves, and not just their water committee, are as fully involved in decision making as possible.
- **Water Committee** - representing community and keeping households informed of all aspects of the project, enforcing payments, facilitating decision making, managing implementation, later managing O&M (if appointed as Water Services Provider).
- **O&M staff** - operation, repairs, tariff collection, bookkeeping.
- **Traditional leaders** - supporting Water Committee, dealing with defaulters.
- **Political groupings** - watchdog role over Committee.
- **Local Government** - as Water Services Authority, legal owner of infrastructure and responsible for ensuring that services are provided and managed, appoints Water Services Provider (not necessarily the Water Committee), provides support to WSP. Responsible for planning, implementation strategies and prioritisation.
- **The Mvula Trust** - fundraising, channeling of funding, facilitation, support to Water Committee, conflict resolution, monitoring and evaluation, policy development.
- **Consultants** - project management and support, technical design and supervision, training, facilitation.
- **Contractors, materials and spares providers** - providing goods and services, during and after construction.
- **Banks** - banking services.
- **DWAF (Government) and other funders** – overall policy framework, legislation, funding (until local authorities take over this function in a few years' time), contract management,

monitoring and quality control. Does not implement directly, but contracts this out to private sector, NGOs, water boards public sector).

### **2.3 Contractual Relationships**

The main contract is between Mvula and the Water Committee. This contract regulates the terms under which funding is provided to the Committee, how it should be used, and the accounting procedures and reporting requirements. Mvula also signs contracts with funders.

The Water Committee contracts private sector consultants and contractors to provide a range of services. Mvula monitors these contracts closely, and must give prior approval for contracts in excess of US\$ 1,600. Mvula also appoints consultants directly, particularly during the planning phase, to carry out particular tasks. During construction, these include tasks like financial reporting and documentation preparation for Mvula, which require a high level of skill, which is not necessary for effective management of O&M, and sustainability.

After completion, the Water Committee, constituted as a Water Services Provider (ideally), signs a contract, the Water Services Agreement, with the Water Services Authority (local government). This regulates the roles and responsibilities of the two parties in managing the water service to the community. The WSP continues to use the services of private sector companies for spares and repair services. The WSA provides support and back-up to the WSP.

### **2.4 Non-contractual Relationships**

Besides formal contractual relationships, a number of informal contracts play an important role in both construction and O&M. The principal ones are between the Water Committee and the community, namely with individuals working as paid labourers and artisans during construction, and with households as consumers paying an agreed tariff for an agreed quality of service. In the many cases where O&M has been decentralised to tapstand committee level, there is an informal contract between the Water Committee and the tapstand committee. The Committee also employs staff to carry out O&M tasks, and the employment contracts are informal.

Although the contractual relationship between the Water Committee and consultants and contractors does not formally include Mvula, in practice informal agreements exist, and Mvula has considerable direct dealings with them.

During the construction phase there is also an informal agreement, or understanding, between Mvula and local government, that Mvula is acting on behalf of local government. The Council may also formally contract Mvula as a Support Agent for WSPs, after completion.

### **2.5 The Government Model**

To understand the innovative character of the Mvula model in the South African context, it is useful to compare it to the dominant model in the sector, applied by both DWAF and local government. Mvula's advocacy challenge over the next few years is to convince local government to adopt the Mvula model, or at least those elements of it which Mvula considers indispensable for sustainability. It is important to note that the government model described here is that which is applied in practice, which is somewhat different from that contained in the official guidelines. Pressure to deliver (and spend) faster causes many corners to be cut.

The key features of the government model are:

- Projects are managed by engineering consultants, appointed and paid by the Implementing Agents who are contracted by government.
- Community involvement in decision making is limited to (minority) representation on the Project Steering Committee. In practice, the community has virtually no say in the level of service provided, the contractual relationships or the management of the project.
- The Water Committee does not manage any funds, nor is it involved in procurement or management of consultants.
- Communities are not required to show any proof of demand before receiving support.
- The social consultants' role is largely limited to the social marketing of decisions taken by engineers and politicians.
- Most of the social intermediation effort is made during the construction and post construction phases.
- The success of a project is measured, in practice, by the degree of cost recovery, and little attention is paid to the amount of water consumed (except insofar as it effects the economic viability of the scheme), nor to the resulting health benefits.

### **3. How well has the model worked?**

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It took over three years for the Mvula model to be developed in detail, from the somewhat broad statement of policies and principles published in early 1994. The first detailed procedures manual, which included all the standard forms and guidelines, was only completed in 1996. On the basis of external evaluations carried out in 1996 and 1998, and Mvula's own internal evaluations and learning from experience, the model has undergone a number of changes.

There were three main factors which led to the changes in the model, namely:

- Some of the original assumptions made (described in chapter 2, above) turned out to be not entirely valid (see section 3.4, below).
- Some of the basic principles of the model, like offering genuine choices on all important aspects of project design and implementation, and insisting on proof of demand, were not properly applied. Changes were required to ensure that this was rectified.
- The establishment of local government structures in rural areas in 1995, where before there were none, and the passing of new legislation, notably the Water Services Act of 1998 and laws regulating the structure and functioning of local government, completely changed the institutional environment.

How these factors influenced the model, is discussed in this section. The model is analysed in terms of both its successes and its problems.

#### **3.1 What worked well**

There can be little doubt that the relative success of the Mvula model, in terms of the sustainability of schemes, in relation to that applied by government, is due largely to the demand responsive approach which underpins it. The success rate of Mvula projects, in terms of how many are functioning well, up to six years after completion, most of them without any outside assistance, is much better than that of government, although not as high as originally expected. A report published by DWAF in 1997, on case studies of projects

showing successful cost recovery, included amongst the rural schemes only Mvula projects, since there were no examples of government schemes with good cost recovery.

Recent evaluations of over 100 projects, out of a total of more than 200 completed, revealed a success rate in the different provinces of between 30% and 80%. Many of the reasons for project failure can be traced back to the problems discussed in this section. The selection of the 70 projects was not random, however, and many were chosen because they were known to have failed, and needed assistance. Further evaluations are underway, on a random selection of projects, and it is expected that the success rate will improve considerably.

Mvula's application, albeit imperfect, of a demand responsive approach, based on maximum community responsibility and management, has led to a heightened sense of ownership in most communities, and willingness to pay. Genuine community empowerment has been achieved on a scale not matched by any other agency in South Africa, and this new confidence and capacity has not only allowed communities to solve the problems which have arisen, but has also had further positive impact on the development of many communities.

Mvula's decision to play a facilitative role, and to involve the private sector as subcontractors to the Water Committees, has enabled a relatively large amount of work to be implemented with a relatively small compliment of Mvula staff. Each team of facilitators, consisting of an engineer and a social science specialist, manages up to 15 projects. It would not have been possible for Mvula, nor for government, to deliver as quickly, if a large organisation had to be built up to do it.

This approach also builds on and develops existing capacity in the sector, which will thus be available to be used by the WSP and local government after project completion. The general development of private sector consultants as development practitioners has also been achieved, and even equipment and materials suppliers now understand the rural market better.

Mvula's unique approach to managing project funds, which is to give exclusive authority to village committees over project bank accounts, has had its problems, but in terms of the honest use of the funds, has been a great success. Less than 0,3% of funds entrusted to communities have been fraudulently used, and one case alone accounts for nearly half of this amount. The procedures put in place to avoid fraud have clearly been effective, but it is the honesty of committees who feel a sense of ownership of the funds, which has been the main contributing factor.

In relation to the cost effectiveness of the Mvula approach, the application of a ceiling on the permissible capital cost per capita has been very successful in encouraging creative designs and more appropriate technologies. The average cost per capita of an Mvula scheme is less than a third of that of government schemes. In addition, the cost of water on Mvula schemes is much more affordable, and the complexity of their management generally lower, due to the policy of insisting on designs which ensure this. Less than 5% of schemes require chemical treatment of water, for example.

Besides the relative success of the Mvula model, in terms of those aspects already mentioned, a less quantifiable success has been the influence which Mvula has had, both through the practical application of the model, as well as through its advocacy and policy work. The far greater emphasis now given to ISD (institutional and social development) issues by DWAF, compared to five years ago, has much to do with Mvula's presence and advocacy work in the sector.

This advocacy role has been greatly facilitated by its close relationship with DWAF under the terms of the formal agreement between them. As an example of a government-NGO partnership, this can also be held up as one of the areas of Mvula's work so far which has been a great success. The agreement was renewed in 1998 for another five years, reflecting the good, mutually beneficial relations which exist. Co-operation has been in project implementation, including as DWAF's major sanitation project implementing agent, as well as policy work, for example on training approaches and methodologies, institutional arrangements between water committees and local government, and improved M&E systems, amongst others. Mvula has also taken a leading role in evaluating DWAF projects and developing an approach to returning to projects which are not sustainable, in order to rectify the defects and ensure their sustainability.

### **3.2 The Problems**

A number of problems with the Mvula model has been identified over the years, and changes introduced, not always timeously, to deal with them. The issue of timeliness is an important one, and it was only in 1998 that the serious impact of the weak M&E system employed by Mvula was realised. Many of the problems identified in the formal external evaluations could have been picked up much earlier if more qualitative information had been collected and used by managers. Although this was not a weakness inherent to the model, it had a major impact. It has now been addressed.

The use of the private sector has not been a resounding success. While quantity of delivery can be held up as a positive result of using the private sector, Mvula has learnt a lot about the problems of ensuring that quality is also achieved. The willingness and ability of private consultants to understand Mvula's philosophy and to adopt a developmental approach was grossly overestimated, with a few notable exceptions. Engineering consultants trained in the old top-down approach found it impossible to treat poorly educated rural people as clients. Social consultants generally did not understand genuine empowerment either, and neither were motivated by developmental ideals.

Both groups, with a few notable exceptions, worked with their eyes on profit, more than anything else, and Mvula was naïve to think that they would do otherwise. As a result, contractual arrangements were too loose, the incentives to work in a developmental way were inadequate and poorly thought through, and many projects failed because too much was left to consultants, with not enough supervision from Mvula staff. As in many sectors in South Africa, no amount of training of professionals on the job, by itself, will make much of a difference, unless the educational approach at colleges and universities changes, and unless incentives and management capacity are put in place to ensure that the private sector can be properly managed.

The Mvula approach of maximising community involvement in management, with the resultant weakening of Mvula control over the process, has not been without its drawbacks. It has been necessary to take a step back and return some control to Mvula, in varying degrees, depending on the circumstances on each project. The reason for this is that, where committees or consultants or Mvula supervision, or a combination of these, are weak, poor project management causes long delays in implementation.

This not only tarnishes the image of the model, and of Mvula as an effective implementing agent, but is seriously jeopardising Mvula's own financial sustainability. This is because Mvula is paid about half of its implementation fee as a fixed mark-up (10%) of project funds

spent. When there are delays, Mvula's income drops, which means that Mvula is taking a "business" risk which it has little control over, and is not adequately compensated for. Neither DWAF nor local government are sufficiently convinced of the advantages of the model to compensate financially for the risks inherent in it. This remains a major advocacy challenge for Mvula.

Another weakness in the way Mvula implemented its model, and one of the main causes of weak project and O&M management by communities, was the approach taken to training and capacity building during the first three years. Firstly, the amount of training required was grossly underestimated. Currently, up to five times as much is spent on training as was the case during the early years, and the impact of the earlier approach is evident in the failure of many of the earlier projects.

Secondly, training was provided almost exclusively during the early stages of projects, with little or no follow-up training or re-training. Needs analyses and impact monitoring were rarely carried out. Finally, little quality control was maintained over the training agencies themselves. Since these problems were picked up, Mvula itself has become much more involved in the process, screening trainers and only recommending the competent ones to communities. Much training of the trainers themselves has also occurred, and training is regularly evaluated.

In relation to the training of trainers and social consultants, much still needs to be done, as this is still a key weakness of the sector. Since little is being done about this by anyone else, Mvula is currently preparing a major initiative, for which it is seeking donor support, to improve the performance of the private sector in this field. This will include business skills development, project management and core training skills, based on modern principles of participatory adult education.

### **3.3 Changes introduced to the model**

The original Mvula model required communities to contribute 8% of the capital cost of the project. A small amount (US\$ 160) had to be contributed up-front in cash, and the rest could be in cash or as a wage sacrifice. Payment of funding tranches by Mvula was dependent on communities meeting their contribution commitments. In practice, however, the importance of this approach as a measure of demand and the ability of the committee to enforce it, was underestimated, and the policy was not strictly applied.

In addition, the concept of a wage sacrifice was not generally perceived by communities, grateful for the employment, as a sacrifice at all. On the contrary, it caused problems on many projects, with communities not understanding the concept and questioning committees about where the money had gone, as they viewed it.

To add to this problem, when Mvula began to implement projects with government funds, questions were raised about the difference between the full subsidy given to government projects, and the 92% subsidy on Mvula projects, although the source of funding was the same. As a result, in 1996 the policy was changed. Communities were no longer required to contribute to the cost of the project, but into a fund which they controlled, called the Reserve Fund, intended as a kind of insurance against future unexpectedly large equipment replacement or repair costs. The amount which has to be collected, all of it in cash, varies from project to project, depending on the technology used, and is set at between US\$ 1,600 and US\$ 5,000.

5% of the total has to be paid in advance of the project starting, and the rest during the construction phase, and continued funding is dependent on communities meeting their interim targets. The effect of this policy change has been very positive, in that, when contributions fall behind, interventions have to be made to resolve the underlying problems. A negative outcome has been the delays in project implementation which result, but these are necessary to enhance the chances for sustainability.

In order to address the problem of the ineffective application of the policy of offering communities genuine choices on all matters pertaining to their project, major changes were introduced into the planning phase. Numerous evaluations have shown that unless this phase is managed in a truly demand responsive way, and all issues are thoroughly understood and agreed to in advance, sustainability will not be achieved. This phase now takes longer and because most consultants have not proved to be capable of managing it effectively, Mvula is now much more directly involved. Much more emphasis is now also placed on involving the community as a whole, and not just the committee.

All aspects of the project are in principle negotiable, even the management of construction and the funds. The degree to which the committee, or the consultants, or turnkey contractors, and even Mvula, are involved in each task, is discussed and negotiated with the committee and the community. These changes have made the model much more flexible; its inflexibility was a significant factor in contributing to poor project management and O&M on many projects.

The major change which has been made to the model, in relation to the use of the private sector, relates to the planning phase. Previously, consultants were left to do most of the work, with guidelines from Mvula. Now Mvula manages this phase directly, doing most of the facilitation, and only outsourcing specific tasks, such as engineering design and costing, and skills training. During the construction phase as well, in order to have greater control over consultants, Mvula now appoints them directly, instead of the Committee doing it, for certain key tasks, like complicated financial management. If performance is not up to standard, Mvula has direct influence, and can withhold payment.

Another change relates to the type of contract signed with consultants. Mvula has developed outcomes based contracts, with incentives and bonuses, so that payment will only be due on delivery of a particular outcome, not on activities carried out.

The question of outcomes based contracts has also been influenced by Mvula's experience in other partnerships with the private sector, notably the so-called "BoTT (Build, operate, Train and Transfer)" contracts. These are management contracts through which DWAF outsources to private sector consortia the function of managing entire provincial water and sanitation project implementation programmes. Mvula is the only NGO in two of the private sector consortia, and has struggled in vain to assert its community based approach in an environment dominated by the profit motive.

In such an environment, Mvula has also learnt that the key to using the private sector effectively lies in properly structured, outcomes based contracts, and the capacity of the client to understand and manage these contracts. The lack of these two elements leads to more expensive and less efficient implementation than would have been possible otherwise.

Another important change introduced into the Mvula model is the introduction of post-construction support and mentorship. Even before the establishment of local government as a potentially sustainable support institution for communities, Mvula realised that the "sink or

swim" approach was not viable. Although it was originally adopted for sound reasons, namely to avoid creating a dependency on outside support, which could not be sustained, evaluations showed that committees require ongoing support and training. Currently Mvula provides this support for at least a year after the scheme starts to function, and ensures that local government effectively takes over the support role.

### 3.4 Reviewing the assumptions

As described above, the original Mvula model was based on certain assumptions. Seven years later, the validity of these assumptions can be assessed, as follows:

<b>Assumption</b>	<b>Valid?</b>
Availability of sufficient technical and social intermediation services from the private sector	In terms of quantity, yes, but in terms of quality, no.
Easy access by most communities to private sector materials and spare parts suppliers	Yes, except that few repair firms will travel out to a project unless they are paid up-front.
Availability of private sector drilling and construction contractors	Yes
Well developed banking system	Yes
Well developed telecommunications system	Generally not developed enough for the type of remote projects that Mvula concentrates on.
Although no sustainable support institution existed to assist communities to manage their services, it was not anticipated that this would be a problem, as communities would be able to manage their schemes without outside support.	No
Rural communities could afford reticulated water supply schemes	Yes, if the local level running costs alone are included in the tariff. But major repairs, replacement and outside support must be subsidised in most communities.
Government would be willing to allow a demand responsive programme to operate alongside government programmes run along different lines	DWAF has been willing, but local government is not.
The advantages of the Mvula model would persuade government to adopt a similar approach, within a few years.	No, Mvula has not yet persuaded either DWAF or local government that community management is a viable option in many areas.

## 4. Conclusion

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The ultimate test of the success of any approach to rural water supply must be the sustainability of the completed projects. Sustainability is a notoriously difficult characteristic to measure, however, and certainly can't be assessed only a few years after project completion. Mvula's case is no exception. Nevertheless, the indications so far are that Mvula is on the right track, and with the improvements introduced into the implementation model and its application over the past two years, it is reasonable to expect that a high proportion of Mvula projects will be sustainable. Certainly, in comparison with the approach taken by government and the status of its completed projects, there can be little doubt that it has been Mvula's demand responsive approach, and strong emphasis on community management and empowerment, that have made the difference.

Mvula is considering whether to commission another major external evaluation of its approach and performance for some time next year. The key issues that need to be looked at are the following:

- Success rate of completed projects, in terms of their potential sustainability, once transferred to local government.
- Factors which have contributed to sustainability.
- Reasons for project failure.
- Strengths and weaknesses of the model.
- Strengths and weaknesses of Mvula's performance.
- Financial sustainability of Mvula as an organisation.
- Impact made by Mvula on the sector, and an analysis of what its future role should be.

While many of the answers are already known, a systematic study will enhance the ability of the organisation to continue to contribute as effectively as possible to delivering sustainable services to poor rural communities. One of the organisation's major strengths is its ability to learn from its successes and failures, and to adapt and improve as a result.

The challenges are daunting, but Mvula is well placed to meet them. The most daunting challenge is that posed by local government; unless Mvula (and DWAF) can bring about a major shift in the approach taken by most local authorities to the delivery and management of rural services, rural communities will be condemned to many more years of unsustainable and/or unaffordable water supplies. The government's goal of transforming municipal governments into genuinely developmental institutions, forging effective and lasting partnerships with rural communities, is still a long way off.

For Mvula, as an organisation, the main challenge is to improve its management of the "business" risks involved in the community management approach, while at the same time convincing funders, notably government, that the risks are worth it, and that implementers like Mvula should be adequately compensated financially for taking them.

## Appendix 1: Changes to the Mvula Trust's water supply project development policies introduced in 1998

Approved by the Mvula Board of Trustees on 26 November 1998

<b>PREVIOUS POLICY</b> <b>(Version 7.0 of Nov '96)</b>	<b>NEW POLICY</b> <b>(Effective from 26 November 1998)</b>
<p><b>1. Project Identification</b>  Mvula is not involved in the pre-project phase, except to acknowledge applications and inform applicants of requirements. Applicants have to take a number of steps on their own, before Mvula will consider supporting them, including having Feasibility Studies prepared. Criteria for support are entirely decided by Mvula, including a largely random, first-come-first-served policy.</p>	<p>Due to the new role of Local Government (LG), and the planning forums that have been set up, Mvula is no longer free to choose projects alone. Within considerable variations from province to province, Mvula will support projects also supported by these structures. In some provinces this means no longer accepting applications from communities, and negotiating projects with LG instead. It may also mean appointing consultants to do Feasibility Studies, no longer at risk, or Mvula staff doing them. In some provinces, communities' choice of consultants is subject to LG approval.  Mvula will, however, always strive to ensure that significant elements of demand responsiveness are applied to project selection.</p>
<p><b>2. Contractual Arrangements</b>  Mvula contracts with the Applicant, who in turn contracts with technical and training consultants, as well as with suppliers of materials and services. No variation is possible. Mvula provides only facilitation services.</p>	<p>In order to take local conditions into account, and to offer Applicants real choices, all contractual arrangements, in principle, are negotiable. With Mvula assistance and guidance, decisions will be made based on who the Water Services Provider (WSP) will be, the capacities of the Water Cttee, of Mvula staff, of available consultants and of LG, distances from suppliers, and other considerations. Mvula may do some of the work currently done by consultants, may contract consultants directly for some services, communities may opt to use contractors for construction, etc.</p>
<p><b>3. The Planning Phase</b>  As in other phases, Mvula's role is to facilitate the interaction between the Water Cttee and its consultants, ensuring that rules and guidelines are adhered to. In practice, this phase has tended to be very technically driven, with little genuine participation in decision-making or the making of informed decisions by the Water Cttee and the community.</p>	<p>The Planning Phase will be approached as a separate, pre-project phase. It will be managed by Mvula, not by a consultant, and Mvula staff will do all or most of the work, subcontracting directly if necessary.  The initial contract will be signed between Mvula and the Applicant, but the water cttee may change, as the most appropriate people are selected during the participatory planning workshops, and a new contract will be signed for the Construction Phase.  The emphasis during the Planning Phase will be on participatory decision-making and planning, by both the Water Cttee and community, based on well informed choices around roles and responsibilities, technology, level of service, scheme design and layout, O&amp;M costs, level of community contributions, etc.</p>

## Appendix 1 (Cont.)

<b>PREVIOUS POLICY</b> <b>(Version 7.0 of Nov '96)</b>	<b>NEW POLICY</b> <b>(Effective from 26 November 1998)</b>
<p><b>4. Offering Choices</b>  Communities are offered choices on issues such as the Project Agent and the Training Agent, technology, level of service, and suppliers. In practice, however, as described in a number of evaluations, this does not happen as intended.</p>	<p>As described in item 3, above, the new approach aims to give real effect to demand responsiveness, by genuinely empowering Water Cttees and communities to make choices on all matters. This will be done mainly through a new approach to the Planning Phase, with the use of participatory methodologies, notably PHAST, greater involvement of Mvula staff, and a more dominant role for social consultants (see item 5, below).</p>
<p><b>5. Project Agent (lead consultant)</b>  The PA is an engineer. Training Agents do training only. The engineer, with assistance from the Mvula PDF, is thus effectively responsible for ISD work. Since PDFs can only visit projects once a month, ISD suffers.</p>	<p>ISD will be the dominant discipline in project implementation. Only engineers who have a proven track record in ISD will be appointed as PAs. Ideally this role should be fulfilled by a social consultant, with the engineer (Technical Consultant) doing only engineering work, as on traditional construction projects. However, the Social Consultant must have project management abilities to be able to manage without the assistance of the engineer. In most cases a partnership arrangement will have to be structured and supported by Mvula.</p>
<p><b>6. Management of O&amp;M</b>  O&amp;M is the sole responsibility of the Water Cttee.</p>	<p>The Water Services Provider, as defined by the Water Services Act of 1997, will be identified during the Planning Phase, in close consultation with and with the approval of the Water Services Authority. O&amp;M will then be a joint responsibility between the two. If the Water Cttee is not to be the WSP (which should not happen if only projects fitting the Mvula niche are supported), relatively little capacity building of the cttee will be undertaken. More attention will be focused on the WSP, particularly in the post-completion phase (see item 7, below).</p>
<p><b>7. Post Project Mentorship</b>  The Water Cttee receives no external support, and no mentorship takes place, except for the O&amp;M Bonus Incentive inspection visits on early projects..</p>	<p>A mentorship phase of 12 months will apply. The formal end of the project will thus only happen one year after the scheme starts to supply water. The first 3-6 months of this phase will focused on further training of the WSP (selected before completion of construction of the scheme) and negotiating a Water Services Agreement with the WSA, followed by the legal transfer of the assets and WSA responsibilities to the WSA. For the remainder of the period follow-up visits by Mvula staff and/or consultants will be carried out to monitor and support both the WSP and WSA. Thereafter, Mvula will no longer play any role, unless as a support agent, contracted by the WSA.</p>
<p><b>8. Role of Local Government</b>  No role for LG. In practice, however, events have over-taken policy and considerable interaction occurs, varying from province to province.</p>	<p>As described in different items, above.</p>

APPENDIX 2

**FIG 1: THE MVULA TRUST WATER PROJECT MODEL**

